TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-43220-1

Job Description: Sparrows Point Trust Offshore Investigat

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

Attention: Sanita Corum

Approved for release.
Carrie L Gamber
Senior Project Manager
5/11/2015 4:14 PM

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05/11/2015

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Qualifiers

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.
¤	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: 180-43220-1

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 04/18/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.2 C.

A Trip Blank was received with this shipment of samples. Per Sanita Corum, EA Engineering, this sample was not analyzed since no other voa samples were received.

Several analyses were canceled or placed on-hold per Sanita Corum, EA Engineering. These analyses were not analyzed or reported.

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-E01 (180-43220-1), PW-D02 (180-43220-2), and PW-C02 (180-43220-3). . Elevated reporting limits (RLs) are provided.

GENERAL CHEMISTRY
Several samples were diluted to bring the concentration of target analytes within the calibration range for hardness. Elevated reporting limits (RLs) are provided.

Detection Summary

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

TestAmerica Job ID: 180-43220-1

Client Sample ID: PW-E01 — Lab Sample ID: 180-43220-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	3.5	J	10	2.5	ug/L	1		9014	Total/NA
Hardness as calcium carbonate	1700		50	15	mg/L	1		SM 2340C	Total/NA
Dissolved Organic Carbon - Duplicate	2.1		1.0	0.14	mg/L	1		SM 5310C	Dissolved

Client Sample ID: PW-D02 — Lab Sample ID: 180-43220-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.74	J	10	0.19	ug/L	10		6020A	Total Recoverable
Zinc	22	J	50	9.6	ug/L	10		6020A	Total Recoverable
Copper	2.6	J	20	2.4	ug/L	10		6020A	Total Recoverable
Cyanide, Total	4.4	J	10	2.5	ug/L	1		9014	Total/NA
Hardness as calcium carbonate	1400		50	15	mg/L	1		SM 2340C	Total/NA
Dissolved Organic Carbon - Duplicate	1.8		1.0	0.14	mg/L	1		SM 5310C	Dissolved

Client Sample ID: PW-C02 — Lab Sample ID: 180-43220-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	1.1	J	10	1.1	ug/L	10		6020A	Total Recoverable
Lead	30		10	0.19	ug/L	10		6020A	Total Recoverable
Nickel	3.5	J	10	1.7	ug/L	10		6020A	Total Recoverable
Zinc	210		50	9.6	ug/L	10		6020A	Total Recoverable
Copper	18	J	20	2.4	ug/L	10		6020A	Total Recoverable
Mercury	0.095	J	0.20	0.078	ug/L	1		7470A	Total/NA
Hardness as calcium carbonate	920		50	15	mg/L	1		SM 2340C	Total/NA
Dissolved Organic Carbon - Duplicate	1.7		1.0	0.14	mg/L	1		SM 5310C	Dissolved

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: PW-E01
Date Collected: 04/16/15 14:15
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.19	0.018	ug/L		04/23/15 11:13	04/29/15 23:09	1
Benzo[a]anthracene	ND		0.19	0.034	ug/L		04/23/15 11:13	04/29/15 23:09	1
Benzo[b]fluoranthene	ND		0.19	0.045	ug/L		04/23/15 11:13	04/29/15 23:09	1
Benzo[k]fluoranthene	ND		0.19	0.028	ug/L		04/23/15 11:13	04/29/15 23:09	1
Benzo[g,h,i]perylene	ND		0.19	0.027	ug/L		04/23/15 11:13	04/29/15 23:09	1
Benzo[a]pyrene	ND		0.19	0.026	ug/L		04/23/15 11:13	04/29/15 23:09	1
Chrysene	ND		0.19	0.029	ug/L		04/23/15 11:13	04/29/15 23:09	1
Dibenz(a,h)anthracene	ND		0.19	0.025	ug/L		04/23/15 11:13	04/29/15 23:09	1
Fluoranthene	ND		0.19	0.020	ug/L		04/23/15 11:13	04/29/15 23:09	1
Fluorene	ND		0.19	0.022	ug/L		04/23/15 11:13	04/29/15 23:09	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.040	ug/L		04/23/15 11:13	04/29/15 23:09	1
Phenanthrene	ND		0.19	0.038	ug/L		04/23/15 11:13	04/29/15 23:09	1
Pyrene	ND		0.19	0.021	ug/L		04/23/15 11:13	04/29/15 23:09	1
Acenaphthene	ND		0.19	0.027	ug/L		04/23/15 11:13	04/29/15 23:09	1
Acenaphthylene	ND		0.19	0.020	ug/L		04/23/15 11:13	04/29/15 23:09	1
Naphthalene	ND		0.19	0.021	ug/L		04/23/15 11:13	04/29/15 23:09	1
Bis(2-ethylhexyl) phthalate	ND		1.9	0.41	ug/L		04/23/15 11:13	04/29/15 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*62*		*27 - 114*	*04/23/15 11:13*	*04/29/15 23:09*	*1*
2-Fluorobiphenyl	*64*		*28 - 109*	*04/23/15 11:13*	*04/29/15 23:09*	*1*
Terphenyl-d14 (Surr)	*56*		*20 - 118*	*04/23/15 11:13*	*04/29/15 23:09*	*1*
2-Fluorophenol (Surr)	*56*		*20 - 105*	*04/23/15 11:13*	*04/29/15 23:09*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*30 - 118*	*04/23/15 11:13*	*04/29/15 23:09*	*1*
Phenol-d5 (Surr)	*61*		*25 - 105*	*04/23/15 11:13*	*04/29/15 23:09*	*1*

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

Client Sample ID: PW-D02
Lab Sample ID: 180-43220-2
Date Collected: 04/17/15 10:50
Matrix: Water
Date Received: 04/18/15 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.19	0.018	ug/L		04/22/15 11:36	04/24/15 14:27	1
Benzo[a]anthracene	ND		0.19	0.034	ug/L		04/22/15 11:36	04/24/15 14:27	1
Benzo[b]fluoranthene	ND		0.19	0.045	ug/L		04/22/15 11:36	04/24/15 14:27	1
Benzo[k]fluoranthene	ND		0.19	0.028	ug/L		04/22/15 11:36	04/24/15 14:27	1
Benzo[g,h,i]perylene	ND		0.19	0.027	ug/L		04/22/15 11:36	04/24/15 14:27	1
Benzo[a]pyrene	ND		0.19	0.026	ug/L		04/22/15 11:36	04/24/15 14:27	1
Chrysene	ND		0.19	0.029	ug/L		04/22/15 11:36	04/24/15 14:27	1
Dibenz(a,h)anthracene	ND		0.19	0.025	ug/L		04/22/15 11:36	04/24/15 14:27	1
Fluoranthene	ND		0.19	0.020	ug/L		04/22/15 11:36	04/24/15 14:27	1
Fluorene	ND		0.19	0.022	ug/L		04/22/15 11:36	04/24/15 14:27	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.040	ug/L		04/22/15 11:36	04/24/15 14:27	1
Phenanthrene	ND		0.19	0.038	ug/L		04/22/15 11:36	04/24/15 14:27	1
Pyrene	ND		0.19	0.021	ug/L		04/22/15 11:36	04/24/15 14:27	1
Acenaphthene	ND		0.19	0.027	ug/L		04/22/15 11:36	04/24/15 14:27	1
Acenaphthylene	ND		0.19	0.020	ug/L		04/22/15 11:36	04/24/15 14:27	1
Naphthalene	ND		0.19	0.021	ug/L		04/22/15 11:36	04/24/15 14:27	1
Bis(2-ethylhexyl) phthalate	ND		1.9	0.41	ug/L		04/22/15 11:36	04/24/15 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*76*		*27 - 114*	*04/22/15 11:36*	*04/24/15 14:27*	*1*
2-Fluorobiphenyl	*78*		*28 - 109*	*04/22/15 11:36*	*04/24/15 14:27*	*1*
Terphenyl-d14 (Surr)	*66*		*20 - 118*	*04/22/15 11:36*	*04/24/15 14:27*	*1*
2-Fluorophenol (Surr)	*66*		*20 - 105*	*04/22/15 11:36*	*04/24/15 14:27*	*1*
2,4,6-Tribromophenol (Surr)	*84*		*30 - 118*	*04/22/15 11:36*	*04/24/15 14:27*	*1*
Phenol-d5 (Surr)	*67*		*25 - 105*	*04/22/15 11:36*	*04/24/15 14:27*	*1*

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

Client Sample ID: PW-E01
Lab Sample ID: 180-43220-1
Date Collected: 04/16/15 14:15
Matrix: Water
Date Received: 04/18/15 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		10	1.1	ug/L		04/21/15 12:18	04/27/15 13:20	10
Lead	ND		10	0.19	ug/L		04/21/15 12:18	04/27/15 13:20	10
Nickel	ND		10	1.7	ug/L		04/21/15 12:18	04/27/15 13:20	10
Zinc	ND		50	9.6	ug/L		04/21/15 12:18	04/27/15 13:20	10
Copper	ND		20	2.4	ug/L		04/21/15 12:18	04/27/15 13:20	10

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

Client Sample ID: PW-D02
Date Collected: 04/17/15 10:50
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		10	1.1	ug/L		04/21/15 12:18	04/27/15 13:25	10
Lead	**0.74**	**J**	10	0.19	ug/L		04/21/15 12:18	04/27/15 13:25	10
Nickel	ND		10	1.7	ug/L		04/21/15 12:18	04/27/15 13:25	10
Zinc	**22**	**J**	50	9.6	ug/L		04/21/15 12:18	04/27/15 13:25	10
Copper	**2.6**	**J**	20	2.4	ug/L		04/21/15 12:18	04/27/15 13:25	10

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

Client Sample ID: PW-C02
Date Collected: 04/17/15 13:15
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.1	J	10	1.1	ug/L		04/21/15 12:22	04/27/15 14:49	10
Lead	30		10	0.19	ug/L		04/21/15 12:22	04/27/15 14:49	10
Nickel	3.5	J	10	1.7	ug/L		04/21/15 12:22	04/27/15 14:49	10
Zinc	210		50	9.6	ug/L		04/21/15 12:22	04/27/15 14:49	10
Copper	18	J	20	2.4	ug/L		04/21/15 12:22	04/27/15 14:49	10

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

TestAmerica Job ID: 180-43220-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: PW-C02
Date Collected: 04/17/15 13:15
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.095	J	0.20	0.078	ug/L		05/01/15 08:42	05/01/15 13:50	1

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

TestAmerica Job ID: 180-43220-1

General Chemistry

Client Sample ID: PW-E01
Date Collected: 04/16/15 14:15
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	3.5	J	10	2.5	ug/L		04/29/15 12:00	04/29/15 13:51	1
Hardness as calcium carbonate	1700		50	15	mg/L			05/02/15 07:51	1

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

TestAmerica Job ID: 180-43220-1

General Chemistry

Client Sample ID: PW-D02
Date Collected: 04/17/15 10:50
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	4.4	J	10	2.5	ug/L		05/01/15 08:10	05/01/15 14:42	1
Hardness as calcium carbonate	1400		50	15	mg/L			05/02/15 07:53	1

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

TestAmerica Job ID: 180-43220-1

General Chemistry

Client Sample ID: PW-C02
Date Collected: 04/17/15 13:15
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	920		50	15	mg/L			05/02/15 07:55	1

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

TestAmerica Job ID: 180-43220-1

General Chemistry - Dissolved

Client Sample ID: PW-E01
Date Collected: 04/16/15 14:15
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Duplicate	2.1		1.0	0.14	mg/L			05/06/15 06:59	1

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

TestAmerica Job ID: 180-43220-1

General Chemistry - Dissolved

Client Sample ID: PW-D02
Date Collected: 04/17/15 10:50
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Duplicate	1.8		1.0	0.14	mg/L			05/06/15 07:12	1

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

TestAmerica Job ID: 180-43220-1

General Chemistry - Dissolved

Client Sample ID: PW-C02
Date Collected: 04/17/15 13:15
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Duplicate	1.7		1.0	0.14	mg/L			05/06/15 07:25	1

Default Detection Limits

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

TestAmerica Job ID: 180-43220-1

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

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

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

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

Method: 7470A - Mercury (CVAA)

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

General Chemistry

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

General Chemistry - Dissolved

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

Surrogate Summary

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

TestAmerica Job ID: 180-43220-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	FBP	TPH	2FP	TBP	PHL
Lab Sample ID	Client Sample ID	(27-114)	(28-109)	(20-118)	(20-105)	(30-118)	(25-105)
180-43220-1	PW-E01	62	64	56	56	73	61
180-43220-2	PW-D02	76	78	66	66	84	67
LCS 180-139286/2-A	Lab Control Sample	74	65	63	71	76	68
LCS 180-139434/2-A	Lab Control Sample	60	56	55	59	61	60
LCSD 180-139286/3-A	Lab Control Sample Dup	71	71	63	72	78	70
LCSD 180-139434/3-A	Lab Control Sample Dup	62	59	57	58	62	59
MB 180-139286/1-A	Method Blank	74	70	71	72	73	73
MB 180-139434/1-A	Method Blank	68	64	69	65	67	68

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)

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

Lab Sample ID: MB 180-139286/1-A
Matrix: Water
Analysis Batch: 139416

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 139286

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.019	ug/L		04/22/15 11:36	04/23/15 12:24	1
Benzo[a]anthracene	ND		0.20	0.037	ug/L		04/22/15 11:36	04/23/15 12:24	1
Benzo[b]fluoranthene	ND		0.20	0.049	ug/L		04/22/15 11:36	04/23/15 12:24	1
Benzo[k]fluoranthene	ND		0.20	0.030	ug/L		04/22/15 11:36	04/23/15 12:24	1
Benzo[g,h,i]perylene	ND		0.20	0.029	ug/L		04/22/15 11:36	04/23/15 12:24	1
Benzo[a]pyrene	ND		0.20	0.028	ug/L		04/22/15 11:36	04/23/15 12:24	1
Chrysene	ND		0.20	0.031	ug/L		04/22/15 11:36	04/23/15 12:24	1
Dibenz(a,h)anthracene	ND		0.20	0.027	ug/L		04/22/15 11:36	04/23/15 12:24	1
Fluoranthene	ND		0.20	0.021	ug/L		04/22/15 11:36	04/23/15 12:24	1
Fluorene	ND		0.20	0.024	ug/L		04/22/15 11:36	04/23/15 12:24	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		04/22/15 11:36	04/23/15 12:24	1
Phenanthrene	ND		0.20	0.042	ug/L		04/22/15 11:36	04/23/15 12:24	1
Pyrene	ND		0.20	0.023	ug/L		04/22/15 11:36	04/23/15 12:24	1
Acenaphthene	ND		0.20	0.029	ug/L		04/22/15 11:36	04/23/15 12:24	1
Acenaphthylene	ND		0.20	0.022	ug/L		04/22/15 11:36	04/23/15 12:24	1
Naphthalene	ND		0.20	0.023	ug/L		04/22/15 11:36	04/23/15 12:24	1
Bis(2-ethylhexyl) phthalate	ND		2.0	0.44	ug/L		04/22/15 11:36	04/23/15 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*74*		*27 - 114*	*04/22/15 11:36*	*04/23/15 12:24*	*1*
2-Fluorobiphenyl	*70*		*28 - 109*	*04/22/15 11:36*	*04/23/15 12:24*	*1*
Terphenyl-d14 (Surr)	*71*		*20 - 118*	*04/22/15 11:36*	*04/23/15 12:24*	*1*
2-Fluorophenol (Surr)	*72*		*20 - 105*	*04/22/15 11:36*	*04/23/15 12:24*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*30 - 118*	*04/22/15 11:36*	*04/23/15 12:24*	*1*
Phenol-d5 (Surr)	*73*		*25 - 105*	*04/22/15 11:36*	*04/23/15 12:24*	*1*

Lab Sample ID: LCS 180-139286/2-A
Matrix: Water
Analysis Batch: 139416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 139286

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Anthracene	20.0	14.2		ug/L		71	49 - 100
Benzo[a]anthracene	20.0	13.7		ug/L		68	50 - 100
Benzo[b]fluoranthene	20.0	13.4		ug/L		67	43 - 100
Benzo[k]fluoranthene	20.0	13.2		ug/L		66	47 - 100
Benzo[g,h,i]perylene	20.0	15.0		ug/L		75	48 - 100
Benzo[a]pyrene	20.0	13.8		ug/L		69	47 - 100
Chrysene	20.0	13.2		ug/L		66	49 - 100
Dibenz(a,h)anthracene	20.0	15.6		ug/L		78	48 - 100
Fluoranthene	20.0	14.6		ug/L		73	48 - 100
Fluorene	20.0	13.9		ug/L		70	48 - 100
Indeno[1,2,3-cd]pyrene	20.0	15.6		ug/L		78	47 - 100
Phenanthrene	20.0	14.3		ug/L		71	48 - 100
Pyrene	20.0	13.1		ug/L		65	44 - 100
Acenaphthene	20.0	13.1		ug/L		66	47 - 100
Acenaphthylene	20.0	13.3		ug/L		67	47 - 100
Naphthalene	20.0	13.3		ug/L		66	44 - 100
Bis(2-ethylhexyl) phthalate	20.0	14.0		ug/L		70	35 - 118

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	*74*		*27 - 114*
2-Fluorobiphenyl	*65*		*28 - 109*
Terphenyl-d14 (Surr)	*63*		*20 - 118*
2-Fluorophenol (Surr)	*71*		*20 - 105*
2,4,6-Tribromophenol (Surr)	*76*		*30 - 118*
Phenol-d5 (Surr)	*68*		*25 - 105*

Lab Sample ID: LCSD 180-139286/3-A
Matrix: Water
Analysis Batch: 139416

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 139286

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Anthracene			20.0	14.7		ug/L		74	49 - 100	4	20
Benzo[a]anthracene			20.0	14.1		ug/L		70	50 - 100	3	20
Benzo[b]fluoranthene			20.0	14.5		ug/L		72	43 - 100	8	22
Benzo[k]fluoranthene			20.0	13.8		ug/L		69	47 - 100	5	24
Benzo[g,h,i]perylene			20.0	15.6		ug/L		78	48 - 100	4	21
Benzo[a]pyrene			20.0	14.8		ug/L		74	47 - 100	7	22
Chrysene			20.0	13.6		ug/L		68	49 - 100	3	20
Dibenz(a,h)anthracene			20.0	16.5		ug/L		82	48 - 100	5	21
Fluoranthene			20.0	15.2		ug/L		76	48 - 100	4	20
Fluorene			20.0	15.1		ug/L		76	48 - 100	8	22
Indeno[1,2,3-cd]pyrene			20.0	16.1		ug/L		81	47 - 100	3	21
Phenanthrene			20.0	14.4		ug/L		72	48 - 100	1	20
Pyrene			20.0	13.4		ug/L		67	44 - 100	2	20
Acenaphthene			20.0	14.6		ug/L		73	47 - 100	11	25
Acenaphthylene			20.0	14.5		ug/L		72	47 - 100	8	26
Naphthalene			20.0	13.2		ug/L		66	44 - 100	1	25
Bis(2-ethylhexyl) phthalate			20.0	14.7		ug/L		74	35 - 118	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Nitrobenzene-d5 (Surr)	*71*		*27 - 114*
2-Fluorobiphenyl	*71*		*28 - 109*
Terphenyl-d14 (Surr)	*63*		*20 - 118*
2-Fluorophenol (Surr)	*72*		*20 - 105*
2,4,6-Tribromophenol (Surr)	*78*		*30 - 118*
Phenol-d5 (Surr)	*70*		*25 - 105*

Lab Sample ID: MB 180-139434/1-A
Matrix: Water
Analysis Batch: 140008

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 139434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.019	ug/L		04/23/15 11:13	04/29/15 12:52	1
Benzo[a]anthracene	ND		0.20	0.037	ug/L		04/23/15 11:13	04/29/15 12:52	1
Benzo[b]fluoranthene	ND		0.20	0.049	ug/L		04/23/15 11:13	04/29/15 12:52	1
Benzo[k]fluoranthene	ND		0.20	0.030	ug/L		04/23/15 11:13	04/29/15 12:52	1
Benzo[g,h,i]perylene	ND		0.20	0.029	ug/L		04/23/15 11:13	04/29/15 12:52	1
Benzo[a]pyrene	ND		0.20	0.028	ug/L		04/23/15 11:13	04/29/15 12:52	1
Chrysene	ND		0.20	0.031	ug/L		04/23/15 11:13	04/29/15 12:52	1
Dibenz(a,h)anthracene	ND		0.20	0.027	ug/L		04/23/15 11:13	04/29/15 12:52	1
Fluoranthene	ND		0.20	0.021	ug/L		04/23/15 11:13	04/29/15 12:52	1
Fluorene	ND		0.20	0.024	ug/L		04/23/15 11:13	04/29/15 12:52	1

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

Lab Sample ID: MB 180-139434/1-A
Matrix: Water
Analysis Batch: 140008

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 139434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		04/23/15 11:13	04/29/15 12:52	1
Phenanthrene	ND		0.20	0.042	ug/L		04/23/15 11:13	04/29/15 12:52	1
Pyrene	ND		0.20	0.023	ug/L		04/23/15 11:13	04/29/15 12:52	1
Acenaphthene	ND		0.20	0.029	ug/L		04/23/15 11:13	04/29/15 12:52	1
Acenaphthylene	ND		0.20	0.022	ug/L		04/23/15 11:13	04/29/15 12:52	1
Naphthalene	ND		0.20	0.023	ug/L		04/23/15 11:13	04/29/15 12:52	1
Bis(2-ethylhexyl) phthalate	ND		2.0	0.44	ug/L		04/23/15 11:13	04/29/15 12:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*68*		*27 - 114*	*04/23/15 11:13*	*04/29/15 12:52*	*1*
2-Fluorobiphenyl	*64*		*28 - 109*	*04/23/15 11:13*	*04/29/15 12:52*	*1*
Terphenyl-d14 (Surr)	*69*		*20 - 118*	*04/23/15 11:13*	*04/29/15 12:52*	*1*
2-Fluorophenol (Surr)	*65*		*20 - 105*	*04/23/15 11:13*	*04/29/15 12:52*	*1*
2,4,6-Tribromophenol (Surr)	*67*		*30 - 118*	*04/23/15 11:13*	*04/29/15 12:52*	*1*
Phenol-d5 (Surr)	*68*		*25 - 105*	*04/23/15 11:13*	*04/29/15 12:52*	*1*

Lab Sample ID: LCS 180-139434/2-A
Matrix: Water
Analysis Batch: 140008

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 139434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Anthracene	20.0	12.7		ug/L		63	49 - 100
Benzo[a]anthracene	20.0	12.8		ug/L		64	50 - 100
Benzo[b]fluoranthene	20.0	12.0		ug/L		60	43 - 100
Benzo[k]fluoranthene	20.0	12.9		ug/L		64	47 - 100
Benzo[g,h,i]perylene	20.0	12.7		ug/L		64	48 - 100
Benzo[a]pyrene	20.0	13.0		ug/L		65	47 - 100
Chrysene	20.0	12.7		ug/L		64	49 - 100
Dibenz(a,h)anthracene	20.0	12.9		ug/L		64	48 - 100
Fluoranthene	20.0	12.5		ug/L		62	48 - 100
Fluorene	20.0	12.7		ug/L		63	48 - 100
Indeno[1,2,3-cd]pyrene	20.0	12.9		ug/L		64	47 - 100
Phenanthrene	20.0	13.0		ug/L		65	48 - 100
Pyrene	20.0	12.8		ug/L		64	44 - 100
Acenaphthene	20.0	11.6		ug/L		58	47 - 100
Acenaphthylene	20.0	12.1		ug/L		60	47 - 100
Naphthalene	20.0	11.8		ug/L		59	44 - 100
Bis(2-ethylhexyl) phthalate	20.0	13.6		ug/L		68	35 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*60*		*27 - 114*
2-Fluorobiphenyl	*56*		*28 - 109*
Terphenyl-d14 (Surr)	*55*		*20 - 118*
2-Fluorophenol (Surr)	*59*		*20 - 105*
2,4,6-Tribromophenol (Surr)	*61*		*30 - 118*
Phenol-d5 (Surr)	*60*		*25 - 105*

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

Lab Sample ID: LCSD 180-139434/3-A
Matrix: Water
Analysis Batch: 140008

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 139434

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Anthracene	20.0	12.8		ug/L		64	49 - 100	1	20
Benzo[a]anthracene	20.0	13.2		ug/L		66	50 - 100	4	20
Benzo[b]fluoranthene	20.0	12.4		ug/L		62	43 - 100	3	22
Benzo[k]fluoranthene	20.0	13.0		ug/L		65	47 - 100	1	24
Benzo[g,h,i]perylene	20.0	13.7		ug/L		68	48 - 100	7	21
Benzo[a]pyrene	20.0	13.3		ug/L		67	47 - 100	2	22
Chrysene	20.0	13.0		ug/L		65	49 - 100	2	20
Dibenz(a,h)anthracene	20.0	13.6		ug/L		68	48 - 100	6	21
Fluoranthene	20.0	12.9		ug/L		64	48 - 100	3	20
Fluorene	20.0	13.1		ug/L		65	48 - 100	3	22
Indeno[1,2,3-cd]pyrene	20.0	13.5		ug/L		68	47 - 100	5	21
Phenanthrene	20.0	13.1		ug/L		65	48 - 100	1	20
Pyrene	20.0	13.0		ug/L		65	44 - 100	2	20
Acenaphthene	20.0	12.2		ug/L		61	47 - 100	6	25
Acenaphthylene	20.0	12.6		ug/L		63	47 - 100	4	26
Naphthalene	20.0	12.1		ug/L		61	44 - 100	3	25
Bis(2-ethylhexyl) phthalate	20.0	13.9		ug/L		70	35 - 118	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*62*		*27 - 114*
2-Fluorobiphenyl	*59*		*28 - 109*
Terphenyl-d14 (Surr)	*57*		*20 - 118*
2-Fluorophenol (Surr)	*58*		*20 - 105*
2,4,6-Tribromophenol (Surr)	*62*		*30 - 118*
Phenol-d5 (Surr)	*59*		*25 - 105*

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 180-139168/1-A
Matrix: Water
Analysis Batch: 139903

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 139168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.11	ug/L		04/21/15 12:18	04/27/15 11:34	1
Lead	ND		1.0	0.019	ug/L		04/21/15 12:18	04/27/15 11:34	1
Nickel	ND		1.0	0.17	ug/L		04/21/15 12:18	04/27/15 11:34	1
Zinc	ND		5.0	0.96	ug/L		04/21/15 12:18	04/27/15 11:34	1
Copper	ND		2.0	0.24	ug/L		04/21/15 12:18	04/27/15 11:34	1

Lab Sample ID: LCS 180-139168/2-A
Matrix: Water
Analysis Batch: 139903

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 139168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	50.0	48.1		ug/L		96	80 - 120
Lead	20.0	19.6		ug/L		98	80 - 120
Nickel	500	465		ug/L		93	80 - 120
Zinc	500	448		ug/L		90	80 - 120

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

Lab Sample ID: LCS 180-139168/2-A
Matrix: Water
Analysis Batch: 139903

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 139168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	250	232		ug/L		93	80 - 120

Lab Sample ID: MB 180-139169/1-A
Matrix: Water
Analysis Batch: 139903

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 139169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.11	ug/L		04/21/15 12:22	04/27/15 13:44	1
Lead	ND		1.0	0.019	ug/L		04/21/15 12:22	04/27/15 13:44	1
Nickel	ND		1.0	0.17	ug/L		04/21/15 12:22	04/27/15 13:44	1
Zinc	ND		5.0	0.96	ug/L		04/21/15 12:22	04/27/15 13:44	1
Copper	ND		2.0	0.24	ug/L		04/21/15 12:22	04/27/15 13:44	1

Lab Sample ID: LCS 180-139169/2-A
Matrix: Water
Analysis Batch: 139903

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 139169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	50.0	47.0		ug/L		94	80 - 120
Lead	20.0	19.7		ug/L		99	80 - 120
Nickel	500	460		ug/L		92	80 - 120
Zinc	500	452		ug/L		90	80 - 120
Copper	250	231		ug/L		92	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-140252/1-A
Matrix: Water
Analysis Batch: 140313

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140252

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.078	ug/L		05/01/15 08:42	05/01/15 13:21	1

Lab Sample ID: LCS 180-140252/2-A
Matrix: Water
Analysis Batch: 140313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 140252

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.44		ug/L		98	80 - 120

Method: 9014 - Cyanide

Lab Sample ID: MB 180-139985/4-A
Matrix: Water
Analysis Batch: 140061

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 139985

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10	2.5	ug/L		04/29/15 12:00	04/29/15 13:41	1

Method: 9014 - Cyanide (Continued)

Lab Sample ID: HLCS 180-139985/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 140061 — **Prep Batch: 139985**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	250	237		ug/L		95	90 - 110

Lab Sample ID: LCS 180-139985/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 140061 — **Prep Batch: 139985**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	200	201		ug/L		101	85 - 115

Lab Sample ID: LLCS 180-139985/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 140061 — **Prep Batch: 139985**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	50.0	50.3		ug/L		101	90 - 110

Lab Sample ID: MB 180-140242/4-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 141187 — **Prep Batch: 140242**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10	2.5	ug/L		05/01/15 08:10	05/01/15 14:40	1

Lab Sample ID: HLCS 180-140242/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 141187 — **Prep Batch: 140242**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	250	248		ug/L		99	90 - 110

Lab Sample ID: LCS 180-140242/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 141187 — **Prep Batch: 140242**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	200	196		ug/L		98	85 - 115

Lab Sample ID: LLCS 180-140242/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 141187 — **Prep Batch: 140242**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	50.0	49.4		ug/L		99	90 - 110

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

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

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

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

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

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

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

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

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

Client Sample ID: Method Blank
Prep Type: Dissolved

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

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

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

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

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

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

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

GC/MS Semi VOA

Prep Batch: 139286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-2	PW-D02	Total/NA	Water	3520C	
LCS 180-139286/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 180-139286/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 180-139286/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 139416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-139286/2-A	Lab Control Sample	Total/NA	Water	8270D LL	139286
LCSD 180-139286/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	139286
MB 180-139286/1-A	Method Blank	Total/NA	Water	8270D LL	139286

Prep Batch: 139434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-1	PW-E01	Total/NA	Water	3520C	
LCS 180-139434/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 180-139434/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 180-139434/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 139524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-2	PW-D02	Total/NA	Water	8270D LL	139286

Analysis Batch: 140008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-1	PW-E01	Total/NA	Water	8270D LL	139434
LCS 180-139434/2-A	Lab Control Sample	Total/NA	Water	8270D LL	139434
LCSD 180-139434/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	139434
MB 180-139434/1-A	Method Blank	Total/NA	Water	8270D LL	139434

Metals

Prep Batch: 139168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-1	PW-E01	Total Recoverable	Water	3005A	
180-43220-2	PW-D02	Total Recoverable	Water	3005A	
LCS 180-139168/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 180-139168/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 139169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-3	PW-C02	Total Recoverable	Water	3005A	
LCS 180-139169/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 180-139169/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 139903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-1	PW-E01	Total Recoverable	Water	6020A	139168
180-43220-2	PW-D02	Total Recoverable	Water	6020A	139168
180-43220-3	PW-C02	Total Recoverable	Water	6020A	139169
CRI 180-139903/131	DL		Water	6020A	

Metals (Continued)

Analysis Batch: 139903 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRI 180-139903/7	DL		Water	6020A	
ICSA 180-139903/8	ICS		Water	6020A	
ICSAB 180-139903/9	ICS		Water	6020A	
LCS 180-139168/2-A	Lab Control Sample	Total Recoverable	Water	6020A	139168
LCS 180-139169/2-A	Lab Control Sample	Total Recoverable	Water	6020A	139169
MB 180-139168/1-A	Method Blank	Total Recoverable	Water	6020A	139168
MB 180-139169/1-A	Method Blank	Total Recoverable	Water	6020A	139169

Prep Batch: 140252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-3	PW-C02	Total/NA	Water	7470A	
LCS 180-140252/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 180-140252/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 140288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRA 180-140288/9-A	DL		Water	7470A	

Analysis Batch: 140313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-3	PW-C02	Total/NA	Water	7470A	140252
CRA 180-140288/9-A	DL		Water	7470A	140288
LCS 180-140252/2-A	Lab Control Sample	Total/NA	Water	7470A	140252
MB 180-140252/1-A	Method Blank	Total/NA	Water	7470A	140252

General Chemistry

Prep Batch: 139985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-1	PW-E01	Total/NA	Water	9010C	
HLCS 180-139985/2-A	Lab Control Sample	Total/NA	Water	9010C	
LCS 180-139985/3-A	Lab Control Sample	Total/NA	Water	9010C	
LLCS 180-139985/1-A	Lab Control Sample	Total/NA	Water	9010C	
MB 180-139985/4-A	Method Blank	Total/NA	Water	9010C	

Analysis Batch: 140061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-1	PW-E01	Total/NA	Water	9014	139985
HLCS 180-139985/2-A	Lab Control Sample	Total/NA	Water	9014	139985
LCS 180-139985/3-A	Lab Control Sample	Total/NA	Water	9014	139985
LLCS 180-139985/1-A	Lab Control Sample	Total/NA	Water	9014	139985
MB 180-139985/4-A	Method Blank	Total/NA	Water	9014	139985

Prep Batch: 140242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-2	PW-D02	Total/NA	Water	9010C	
HLCS 180-140242/2-A	Lab Control Sample	Total/NA	Water	9010C	
LCS 180-140242/3-A	Lab Control Sample	Total/NA	Water	9010C	
LLCS 180-140242/1-A	Lab Control Sample	Total/NA	Water	9010C	
MB 180-140242/4-A	Method Blank	Total/NA	Water	9010C	

General Chemistry (Continued)

Analysis Batch: 140330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-1	PW-E01	Total/NA	Water	SM 2340C	
180-43220-2	PW-D02	Total/NA	Water	SM 2340C	
180-43220-3	PW-C02	Total/NA	Water	SM 2340C	
LCS 180-140330/1	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 180-140330/2	Method Blank	Total/NA	Water	SM 2340C	

Filtration Batch: 140559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-1	PW-E01	Dissolved	Water	FILTRATION	
180-43220-2	PW-D02	Dissolved	Water	FILTRATION	
180-43220-3	PW-C02	Dissolved	Water	FILTRATION	

Analysis Batch: 140690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-1	PW-E01	Dissolved	Water	SM 5310C	140559
180-43220-2	PW-D02	Dissolved	Water	SM 5310C	140559
180-43220-3	PW-C02	Dissolved	Water	SM 5310C	140559
LCS 180-140690/4	Lab Control Sample	Dissolved	Water	SM 5310C	
LCSD 180-140690/5	Lab Control Sample Dup	Dissolved	Water	SM 5310C	
MB 180-140690/6	Method Blank	Dissolved	Water	SM 5310C	

Analysis Batch: 141187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43220-2	PW-D02	Total/NA	Water	9014	140242
HLCS 180-140242/2-A	Lab Control Sample	Total/NA	Water	9014	140242
LCS 180-140242/3-A	Lab Control Sample	Total/NA	Water	9014	140242
LLCS 180-140242/1-A	Lab Control Sample	Total/NA	Water	9014	140242
MB 180-140242/4-A	Method Blank	Total/NA	Water	9014	140242

Client Sample ID: PW-E01

Lab Sample ID: 180-43220-1

Date Collected: 04/16/15 14:15

Matrix: Water

Date Received: 04/18/15 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			270 mL	0.25 mL	139434	04/23/15 11:13	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	270 mL	0.25 mL	140008	04/29/15 23:09	VVP	TAL PIT
	Instrument ID: CH732									
Total Recoverable	Prep	3005A			50 mL	50 mL	139168	04/21/15 12:18	AB1	TAL PIT
Total Recoverable	Analysis	6020A		10	50 mL	50 mL	139903	04/27/15 13:20	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Prep	9010C			50 mL	50 mL	139985	04/29/15 12:00	PGJ	TAL PIT
Total/NA	Analysis	9014		1	50 mL	50 mL	140061	04/29/15 13:51	PGJ	TAL PIT
	Instrument ID: SEAL2									
Total/NA	Analysis	SM 2340C		1	5 mL	50 mL	140330	05/02/15 07:51	CAK	TAL PIT
	Instrument ID: NOEQUIP									
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	140559	05/05/15 08:16	SLM	TAL PIT
Dissolved	Analysis	SM 5310C		1			140690	05/06/15 06:59	CLL	TAL PIT
	Instrument ID: TOC1030									

Client Sample ID: PW-D02

Lab Sample ID: 180-43220-2

Date Collected: 04/17/15 10:50

Matrix: Water

Date Received: 04/18/15 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			270 mL	0.25 mL	139286	04/22/15 11:36	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	270 mL	0.25 mL	139524	04/24/15 14:27	VVP	TAL PIT
	Instrument ID: CH731									
Total Recoverable	Prep	3005A			50 mL	50 mL	139168	04/21/15 12:18	AB1	TAL PIT
Total Recoverable	Analysis	6020A		10	50 mL	50 mL	139903	04/27/15 13:25	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Prep	9010C			50 mL	50 mL	140242	05/01/15 08:10	CLL	TAL PIT
Total/NA	Analysis	9014		1	50 mL	50 mL	141187	05/01/15 14:42	CMR	TAL PIT
	Instrument ID: SEAL2									
Total/NA	Analysis	SM 2340C		1	5 mL	50 mL	140330	05/02/15 07:53	CAK	TAL PIT
	Instrument ID: NOEQUIP									
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	140559	05/05/15 08:16	SLM	TAL PIT
Dissolved	Analysis	SM 5310C		1			140690	05/06/15 07:12	CLL	TAL PIT
	Instrument ID: TOC1030									

Client Sample ID: PW-C02

Lab Sample ID: 180-43220-3

Date Collected: 04/17/15 13:15

Matrix: Water

Date Received: 04/18/15 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	139169	04/21/15 12:22	AB1	TAL PIT
Total Recoverable	Analysis	6020A		10	50 mL	50 mL	139903	04/27/15 14:49	CNF	TAL PIT
	Instrument ID: X									
Total/NA	Prep	7470A			50 mL	50 mL	140252	05/01/15 08:42	MLF	TAL PIT

Lab Chronicle

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

TestAmerica Job ID: 180-43220-1

Client Sample ID: PW-C02

Date Collected: 04/17/15 13:15
Date Received: 04/18/15 09:00

Lab Sample ID: 180-43220-3

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	7470A		1	50 mL	50 mL	140313	05/01/15 13:50	MLF	TAL PIT
	Instrument ID: K									
Total/NA	Analysis	SM 2340C		1	5 mL	50 mL	140330	05/02/15 07:55	CAK	TAL PIT
	Instrument ID: NOEQUIP									
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	140559	05/05/15 08:16	SLM	TAL PIT
Dissolved	Analysis	SM 5310C		1			140690	05/06/15 07:25	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

CLL = Cheryl Loheyde

MLF = Michele Freeman

PGJ = Paul Johnson

Batch Type: Analysis

CAK = Chuck Kieda

CLL = Cheryl Loheyde

CMR = Carl Reagle

CNF = Caitlin Ferguson

MLF = Michele Freeman

PGJ = Paul Johnson

VVP = Vincent Piccolino

Certification Summary

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

TestAmerica Job ID: 180-43220-1

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	05-31-15 *
Louisiana	NELAP	6	04041	06-30-15
New Hampshire	NELAP	1	203011	04-04-16
New Jersey	NELAP	2	PA005	06-30-15
New York	NELAP	2	11182	03-31-16
North Carolina (WW/SW)	State Program	4	434	12-31-15
Pennsylvania	NELAP	3	02-00416	04-30-16
South Carolina	State Program	4	89014	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: 180-43220-1

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
9014	Cyanide	SW846	TAL PIT
SM 2340C	Hardness, Total (mg/l as CaC03)	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: 180-43220-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-43220-1	PW-E01	Water	04/16/15 14:15	04/18/15 09:00
180-43220-2	PW-D02	Water	04/17/15 10:50	04/18/15 09:00
180-43220-3	PW-C02	Water	04/17/15 13:15	04/18/15 09:00

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 128394

Lab Sample ID: IC 180-128394/3 Client Sample ID:

Date Analyzed: 12/16/14 04:19 Lab File ID: V1216003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.81	Poor chromatography	piccolinov	12/16/14 06:55
N-Nitrosodimethylamine	2.50	Poor chromatography	piccolinov	12/16/14 06:55
Pyridine	2.63	Poor chromatography	piccolinov	12/16/14 06:55
3-Nitroaniline	9.09	Poor chromatography	piccolinov	12/16/14 06:55
2,3,4,6-Tetrachlorophenol	9.44	Poor chromatography	piccolinov	12/16/14 06:55
Bis(2-ethylhexyl) phthalate	14.01	Poor chromatography	piccolinov	12/16/14 06:55
Di-n-octyl phthalate	15.31	Poor chromatography	piccolinov	12/16/14 06:55
7,12-Dimethylbenz(a)anthracene	16.17	Poor chromatography	piccolinov	12/16/14 06:55
Benzo[b]fluoranthene	16.18	Poor chromatography	piccolinov	12/16/14 06:55
Benzo[k]fluoranthene	16.24	Poor chromatography	piccolinov	12/16/14 06:55
Benzo[e]pyrene	16.77	Poor chromatography	piccolinov	12/16/14 06:55
Benzo[a]pyrene	16.89	Poor chromatography	piccolinov	12/16/14 06:55
Indeno[1,2,3-cd]pyrene	19.22	Poor chromatography	piccolinov	12/16/14 06:55
Dibenz(a,h)anthracene	19.25	Poor chromatography	piccolinov	12/16/14 06:55
Benzo[g,h,i]perylene	19.83	Poor chromatography	piccolinov	12/16/14 06:55

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 128394

Lab Sample ID: IC 180-128394/4 Client Sample ID:

Date Analyzed: 12/16/14 04:48 Lab File ID: V1216004.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosodimethylamine	2.47	Poor chromatography	piccolinov	12/16/14 06:58
Pyridine	2.57	Poor chromatography	piccolinov	12/16/14 06:58
Benzoic acid	7.21	Poor chromatography	piccolinov	12/16/14 06:58
2,3,4,6-Tetrachlorophenol	9.44	Poor chromatography	piccolinov	12/16/14 06:58
Di-n-octyl phthalate	15.31	Poor chromatography	piccolinov	12/16/14 06:58
Benzo[b]fluoranthene	16.19	Poor chromatography	piccolinov	12/16/14 06:58
Indeno[1,2,3-cd]pyrene	19.22	Poor chromatography	piccolinov	12/16/14 06:58
Dibenz(a,h)anthracene	19.27	Poor chromatography	piccolinov	12/16/14 06:58

Lab Sample ID: IC 180-128394/5 Client Sample ID:

Date Analyzed: 12/16/14 05:16 Lab File ID: V1216005.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.81	Poor chromatography	piccolinov	12/16/14 07:00
Pyridine	2.57	Poor chromatography	piccolinov	12/16/14 07:00
Benzoic acid	7.22	Poor chromatography	piccolinov	12/16/14 07:00
Dibenz(a,h)anthracene	19.27	Poor chromatography	piccolinov	12/16/14 08:48

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 128394

Lab Sample ID: IC 180-128394/7 Client Sample ID:

Date Analyzed: 12/16/14 06:12 Lab File ID: V1216007.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.24	Poor chromatography	piccolinov	12/16/14 07:03
Dibenz(a,h)anthracene	19.29	Poor chromatography	piccolinov	12/16/14 08:49

Lab Sample ID: IC 180-128394/8 Client Sample ID:

Date Analyzed: 12/16/14 06:41 Lab File ID: V1216008.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.52	Poor chromatography	piccolinov	12/16/14 07:48

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 139416

Lab Sample ID: CCVIS 180-139416/3 Client Sample ID:

Date Analyzed: 04/23/15 09:24 Lab File ID: V0423003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.55	Poor chromatography	piccolinov	04/24/15 05:06
Benzyl alcohol	6.44	Poor chromatography	piccolinov	04/23/15 12:11

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 139524

Lab Sample ID: CCVIS 180-139524/3 Client Sample ID:

Date Analyzed: 04/24/15 08:22 Lab File ID: V0424003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosodimethylamine	2.55	Poor chromatography	piccolinov	04/24/15 10:03
Benzyl alcohol	6.43	Poor chromatography	piccolinov	04/24/15 10:03

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: CH732 Analysis Batch Number: 132436

Lab 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	piccolinov	02/03/15 08:47
N-Nitrosodimethylamine	2.14	Poor chromatography	piccolinov	02/03/15 08:47
Pyridine	2.24	Poor chromatography	piccolinov	02/03/15 08:47
Benzoic acid	7.15	Poor chromatography	piccolinov	02/03/15 08:47
Indeno[1,2,3-cd]pyrene	19.79	Poor chromatography	piccolinov	02/03/15 08:47
Dibenz(a,h)anthracene	19.85	Poor chromatography	piccolinov	02/03/15 08:47
Benzo[g,h,i]perylene	20.50	Poor chromatography	piccolinov	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	piccolinov	02/03/15 08:48
Benzoic acid	7.16	Poor chromatography	piccolinov	02/03/15 08:48
Indeno[1,2,3-cd]pyrene	19.79	Poor chromatography	piccolinov	02/03/15 08:48
Dibenz(a,h)anthracene	19.84	Poor chromatography	piccolinov	02/03/15 08:48
Benzo[g,h,i]perylene	20.50	Poor chromatography	piccolinov	02/03/15 08:48

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

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.: 180-43220-1

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_00491	05/07/15	05/06/15	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00011	2 mL	Dissolved Organic Carbon - Duplicate	10 mg/L
.WTOC1000SP_00011	12/31/15	Ricca Chemical Co, Lot 2412908			(Purchased Reagent)		Dissolved Organic Carbon - Duplicate	1000 mg/L
ICV 40 PPM_00624	05/07/15	05/06/15	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00011	4 mL	Dissolved Organic Carbon - Duplicate	40 mg/L
.WTOC1000SP_00011	12/31/15	Ricca Chemical Co, Lot 2412908			(Purchased Reagent)		Dissolved Organic Carbon - Duplicate	1000 mg/L
LCS 20 PPM_00620	05/07/15	05/06/15	DI Water, Lot DIWATER	200 mg/L	WTOC1000P_00022	4 mL	Dissolved Organic Carbon - Duplicate	20 mg/L
.WTOC1000P_00022	02/26/17	Lab Chem, Lot E054-11			(Purchased Reagent)		Dissolved Organic Carbon - Duplicate	1000 mg/L
MCCV1X_00074	05/01/15	04/14/15	2% Nitric Acid, Lot 1241747	500 mL	MCALSPECAREV_00005	10 mL	Cadmium	0.1 ppm
							Copper	0.1 ppm
							Lead	0.1 ppm
							Nickel	0.1 ppm
							Zinc	0.1 ppm
.MCALSPECAREV_00005	05/01/15	Inorganic Ventures, Lot F2-MEB524026			(Purchased Reagent)		Cadmium	5 ppm
							Copper	5 ppm
							Lead	5 ppm
							Nickel	5 ppm
							Zinc	5 ppm
MCRIX_00065	05/07/15	04/07/15	HNO3, Lot 1191081	250 mL	MMSCRI-1B_00005	1 mL	Cadmium	0.001 ppm
							Copper	0.002 ppm
							Lead	0.001 ppm
							Nickel	0.001 ppm
							Zinc	0.005 ppm
.MMSCRI-1B_00005	04/01/16	Inorganic Ventures, Lot J2-MEB572092			(Purchased Reagent)		Cadmium	0.25 ppm
							Copper	0.5 ppm
							Lead	0.25 ppm
							Nickel	0.25 ppm
							Zinc	1.25 ppm
MHgworkingCal_01035	05/02/15	05/01/15	2% Nitric Acid, Lot 0000102057	100 mL	MHgIntcal_00114	1 mL	Mercury	100 ppb
.MHgIntcal_00114	05/02/15	05/01/15	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_01006	05/02/15	05/01/15	2% Nitric Acid, Lot 0000102057	100 mL	MHgIntICV_00094	1 mL	Mercury	100 ppb
.MHgIntICV_00094	05/02/15	05/01/15	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-2_00004	05/01/15	04/17/15	2% Nitric Acid, Lot J38N82	100 mL	M6020ICS-0A_00005	10 mL	Al	100 ppm
							Ca	100 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fe	100 ppm
							K	100 ppm
							Mg	100 ppm
							Mo	2 ppm
							Na	100 ppm
							Ti	2 ppm
					M6020ICS-0B-2_00003	1 mL	Ag	0.02 ppm
							As	0.02 ppm
							Cadmium	0.02 ppm
							Co	0.02 ppm
							Copper	0.02 ppm
							Cr	0.02 ppm
							Mn	0.05 ppm
							Nickel	0.02 ppm
							Zinc	0.025 ppm
					MMSICSAB-1_00007	0.2 mL	Ba	0.02 ppm
							Be	0.02 ppm
							Lead	0.02 ppm
							Sr	0.025 ppm
							Tl	0.02 ppm
							V	0.02 ppm
					MMSICSAB-2_00006	0.2 mL	Sb	0.02 ppm
							Se	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-2_00003	09/01/15	TAPITT, Lot TAPITT-AB			(Purchased Reagent)		Ag	2 ppm
							As	2 ppm
							Cadmium	2 ppm
							Co	2 ppm
							Copper	2 ppm
							Cr	2 ppm
							Mn	5 ppm
							Nickel	2 ppm
							Zinc	2.5 ppm
.MMSICSAB-1_00007	05/01/15	Inorganic Ventures, Lot F2-MEB524028			(Purchased Reagent)		Ba	10 ppm
							Be	10 ppm
							Lead	10 ppm
							Sr	12.5 ppm
							Tl	10 ppm
							V	10 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MMSICSAB-2_00006	05/01/15	Inorganic Ventures, Lot G2-MEB467043			(Purchased Reagent)		Sb	10 ppm
							Se	25 ppm
							Si	250 ppm
							Sn	50 ppm
MICSAX_00065	05/14/15	04/14/15	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00005	10 mL	Al	100 ppm
							Ca	100 ppm
							Fe	100 ppm
							K	100 ppm
							Mg	100 ppm
							Mo	2 ppm
							Na	100 ppm
							Ti	2 ppm
.M6020ICS-0A_00005	09/01/15	Inorganic Ventures, Lot G2-MEB476152MCA			(Purchased Reagent)		Al	1000 ppm
							Ca	1000 ppm
							Fe	1000 ppm
							K	1000 ppm
							Mg	1000 ppm
							Mo	20 ppm
							Na	1000 ppm
							Ti	20 ppm
MICVX_00031	05/09/15	04/09/15	2% Nitric Acid, Lot 25106	250 mg/L	MICPMSICV_00018	10 mg/L	Cadmium	0.08 mg/L
							Copper	0.08 mg/L
							Lead	0.08 mg/L
							Nickel	0.08 mg/L
							Zinc	0.08 mg/L
.MICPMSICV_00018	11/30/15	SPEX CertiPrep, Lot 7-230WL			(Purchased Reagent)		Cadmium	2 ppm
							Copper	2 ppm
							Lead	2 ppm
							Nickel	2 ppm
							Zinc	2 ppm
MSTD2X_00043	05/01/15	04/14/15	DI Water, Lot 1241717	250 mL	MCALSPECAREV_00005	10 mg/L	Cadmium	0.2 ppm
							Copper	0.2 ppm
							Lead	0.2 ppm
							Nickel	0.2 ppm
							Zinc	0.2 ppm
.MCALSPECAREV_00005	05/01/15	Inorganic Ventures, Lot F2-MEB524026			(Purchased Reagent)		Cadmium	5 ppm
							Copper	5 ppm
							Lead	5 ppm
							Nickel	5 ppm
							Zinc	5 ppm
MTAPITTICPMS_00020	07/01/15	INORGANIC VENTURES, Lot H2-MEB532047			(Purchased Reagent)		Ag	5 ug/mL
							Al	200 ug/mL
							As	4 ug/mL
							B	100 ug/mL
							Ba	200 ug/mL
							Be	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cadmium	5 ug/mL
							Co	50 ug/mL
							Copper	25 ug/mL
							Cr	20 ug/mL
							Fe	100 ug/mL
							Lead	2 ug/mL
							Mn	50 ug/mL
							Nickel	50 ug/mL
							Se	1 ug/mL
							Sr	100 ug/mL
							Tl	5 ug/mL
							V	50 ug/mL
							Zinc	50 ug/mL
MTAPITTMSA_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
MTAPITTMSC_00029	12/01/15	Inorganic Ventures, Lot H2-MEB532046			(Purchased Reagent)		Mo	100 ug/mL
							Sb	50 ug/mL
							Si	1000 ug/mL
							SiO2	2140 ug/mL
							Sn	200 ug/mL
							Ti	100 ug/mL
OPLVISPKMIX1i_00038	10/16/15	04/16/15	Methanol, Lot 0000082533	100 mL	SVLVstd1_00030	20 mL	1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dichlorophenol	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis(2-chloroethoxy)methane	200 ug/mL
							Bis(2-chloroethyl)ether	200 ug/mL
							Bis(2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Hexadecane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							Methyl Phenols,Total	400 ug/mL
							n-Decane	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							N-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
							Benzidine	200 ug/mL
.SVLVstd1_00030	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00029	11/08/15	04/08/15	Methanol, Lot b#0000049909	500 mL	SVLVSURRSPK_00011	20 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
.SVLVSURRSPK_00011	05/31/19		Restek, Lot A0103615		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
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
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	5 uL	Benzo[e]pyrene	0.2 ug/mL
							2-Naphthylamine	0.2 ug/mL
							2,3,5,6-Tetrachlorophenol	0.2 ug/mL
							2,6-Dichlorophenol	0.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.2 ug/mL
							Methyl methanesulfonate	0.2 ug/mL
							1,1'-Biphenyl	0.2 ug/mL
							1,2,4,5-Tetrachlorobenzene	0.2 ug/mL
							1,2,4-Trichlorobenzene	0.2 ug/mL
							1,2-Dichlorobenzene	0.2 ug/mL
							1,2-Diphenylhydrazine	0.2 ug/mL
							1,3-Dichlorobenzene	0.2 ug/mL
							1,3-Dinitrobenzene	0.2 ug/mL
							1,4-Dichlorobenzene	0.2 ug/mL
							1,4-Dioxane	0.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Methylnaphthalene	0.2 ug/mL
							2,2'-oxybis[1-chloropropane]	0.2 ug/mL
							2,3,4,6-Tetrachlorophenol	0.2 ug/mL
							2,4,5-Trichlorophenol	0.2 ug/mL
							2,4,6-Trichlorophenol	0.2 ug/mL
							2,4-Dichlorophenol	0.2 ug/mL
							2,4-Dimethylphenol	0.2 ug/mL
							2,4-Dinitrophenol	0.4 ug/mL
							2,4-Dinitrotoluene	0.2 ug/mL
							2,6-Dinitrotoluene	0.2 ug/mL
							2-Chloronaphthalene	0.2 ug/mL
							2-Chlorophenol	0.2 ug/mL
							2-Methylnaphthalene	0.2 ug/mL
							2-Methylphenol	0.2 ug/mL
							2-Nitroaniline	0.2 ug/mL
							2-Nitrophenol	0.2 ug/mL
							3-Nitroaniline	0.2 ug/mL
							4,6-Dinitro-2-methylphenol	0.4 ug/mL
							4-Bromophenyl phenyl ether	0.2 ug/mL
							4-Chloro-3-methylphenol	0.2 ug/mL
							4-Chloroaniline	0.2 ug/mL
							4-Chlorophenyl phenyl ether	0.2 ug/mL
							4-Methylphenol	0.2 ug/mL
							4-Nitroaniline	0.2 ug/mL
							4-Nitrophenol	0.4 ug/mL
							Acenaphthene	0.2 ug/mL
							Acenaphthylene	0.2 ug/mL
							Acetophenone	0.2 ug/mL
							Aniline	0.2 ug/mL
							Anthracene	0.2 ug/mL
							Benzo[a]anthracene	0.2 ug/mL
							Benzo[a]pyrene	0.2 ug/mL
							Benzo[b]fluoranthene	0.2 ug/mL
							Benzo[g,h,i]perylene	0.2 ug/mL
							Benzo[k]fluoranthene	0.2 ug/mL
							Benzyl alcohol	0.2 ug/mL
							Bis(2-chloroethoxy)methane	0.2 ug/mL
							Bis(2-chloroethyl)ether	0.2 ug/mL
							Bis(2-ethylhexyl) phthalate	0.2 ug/mL
							Butyl benzyl phthalate	0.2 ug/mL
							Carbazole	0.2 ug/mL
							Chrysene	0.2 ug/mL
							Di-n-butyl phthalate	0.2 ug/mL
							Di-n-octyl phthalate	0.2 ug/mL
							Dibenz(a,h)anthracene	0.2 ug/mL
							Dibenzofuran	0.2 ug/mL
							Diethyl phthalate	0.2 ug/mL
							Dimethyl phthalate	0.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	0.2 ug/mL
							Fluorene	0.2 ug/mL
							Hexachlorobenzene	0.2 ug/mL
							Hexachlorobutadiene	0.2 ug/mL
							Hexachlorocyclopentadiene	0.2 ug/mL
							Hexachloroethane	0.2 ug/mL
							Hexadecane	0.2 ug/mL
							Indeno[1,2,3-cd]pyrene	0.2 ug/mL
							Isophorone	0.2 ug/mL
							n-Decane	0.2 ug/mL
							N-Nitrosodi-n-propylamine	0.2 ug/mL
							N-Nitrosodimethylamine	0.2 ug/mL
							n-Octadecane	0.2 ug/mL
							Naphthalene	0.2 ug/mL
							Nitrobenzene	0.2 ug/mL
							Pentachlorophenol	0.4 ug/mL
							Phenanthrene	0.2 ug/mL
							Phenol	0.2 ug/mL
							Pyrene	0.2 ug/mL
							Pyridine	0.2 ug/mL
							3,3'-Dichlorobenzidine	0.2 ug/mL
							Atrazine	0.2 ug/mL
							Benzidine	0.2 ug/mL
							Caprolactam	0.2 ug/mL
							N-Nitrosodiphenylamine	0.2 ug/mL
							Benzaldehyde	0.2 ug/mL
							Benzoic acid	0.2 ug/mL
							Indene	0.2 ug/mL
							2,4,6-Tribromophenol (Surr)	0.2 ug/mL
							2-Fluorobiphenyl	0.2 ug/mL
							2-Fluorophenol (Surr)	0.2 ug/mL
							Nitrobenzene-d5 (Surr)	0.2 ug/mL
							Phenol-d5 (Surr)	0.2 ug/mL
							Terphenyl-d14 (Surr)	0.2 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					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
							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.: 180-43220-1

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.: 180-43220-1

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
SVTAPSTD10i_00082	12/19/14	12/12/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	125 uL	Benzo[e]pyrene	5 ug/mL
							2-Naphthylamine	5 ug/mL
							2,3,5,6-Tetrachlorophenol	5 ug/mL
							2,6-Dichlorophenol	5 ug/mL
							7,12-Dimethylbenz(a)anthracene	5 ug/mL
							Methyl methanesulfonate	5 ug/mL
							1,1'-Biphenyl	5 ug/mL
							1,2,4,5-Tetrachlorobenzene	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Diphenylhydrazine	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dinitrobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Methylphenol	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Acetophenone	5 ug/mL
							Aniline	5 ug/mL
							Anthracene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Benzyl alcohol	5 ug/mL
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL
							Benzaldehyde	5 ug/mL
							Benzoic acid	5 ug/mL
							Indene	5 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
							N-Nitrosopyrrolidine	5 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							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.: 180-43220-1

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.: 180-43220-1

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.: 180-43220-1

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.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Methylphenol	5 ug/mL
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Hexadecane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							n-Decane	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodimethylamine	5 ug/mL
							n-Octadecane	5 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Pyridine	5 ug/mL
							3,3'-Dichlorobenzidine	5 ug/mL
							Atrazine	5 ug/mL
							Benzidine	5 ug/mL
							Caprolactam	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00098	04/26/15	04/19/15	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	SVLVstd1_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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(Purchased Reagent)		Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Pyrene	1000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SVTAPSTD10i_00100	04/30/15	04/27/15	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	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	SVLVstd1_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
..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
							Phenanthrene	1000 ug/mL
							Pyrene	1000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	1 ug/mL
							Acenaphthylene	1 ug/mL
							Acetophenone	1 ug/mL
							Aniline	1 ug/mL
							Anthracene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	1 ug/mL
							Benzo[g,h,i]perylene	1 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Benzyl alcohol	1 ug/mL
							Bis(2-chloroethoxy)methane	1 ug/mL
							Bis(2-chloroethyl)ether	1 ug/mL
							Bis(2-ethylhexyl) phthalate	1 ug/mL
							Butyl benzyl phthalate	1 ug/mL
							Carbazole	1 ug/mL
							Chrysene	1 ug/mL
							Di-n-butyl phthalate	1 ug/mL
							Di-n-octyl phthalate	1 ug/mL
							Dibenz(a,h)anthracene	1 ug/mL
							Dibenzofuran	1 ug/mL
							Diethyl phthalate	1 ug/mL
							Dimethyl phthalate	1 ug/mL
							Fluoranthene	1 ug/mL
							Fluorene	1 ug/mL
							Hexachlorobenzene	1 ug/mL
							Hexachlorobutadiene	1 ug/mL
							Hexachlorocyclopentadiene	1 ug/mL
							Hexachloroethane	1 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	1 ug/mL
							Benzoic acid	1 ug/mL
							Indene	1 ug/mL
							2,4,6-Tribromophenol (Surr)	1 ug/mL
							2-Fluorobiphenyl	1 ug/mL
							2-Fluorophenol (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	1 ug/mL
							Phenol-d5 (Surr)	1 ug/mL
							Terphenyl-d14 (Surr)	1 ug/mL
							N-Nitrosopyrrolidine	1 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							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.: 180-43220-1

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

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.: 180-43220-1

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.: 180-43220-1

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
SVTAPSTD20i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	250 uL	Benzo[e]pyrene	10 ug/mL
							2-Naphthylamine	10 ug/mL
							2,3,5,6-Tetrachlorophenol	10 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							7,12-Dimethylbenz(a)anthracene	10 ug/mL
							Methyl methanesulfonate	10 ug/mL
							1,1'-Biphenyl	10 ug/mL
							1,2,4,5-Tetrachlorobenzene	10 ug/mL
							1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Methylnaphthalene	10 ug/mL
							2,2'-oxybis[1-chloropropane]	10 ug/mL
							2,3,4,6-Tetrachlorophenol	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Methylphenol	10 ug/mL
							4-Nitroaniline	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Hexadecane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							n-Decane	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							n-Octadecane	10 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							Pyridine	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL
							Atrazine	10 ug/mL
							Benzidine	10 ug/mL
							Caprolactam	10 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							Benzaldehyde	10 ug/mL
							Benzoic acid	10 ug/mL
							Indene	10 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
							N-Nitrosopyrrolidine	10 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					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
							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.: 180-43220-1

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.: 180-43220-1

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
SVTAPSTD4.0i_00006	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	50 uL	Benzo[e]pyrene	2 ug/mL
							2-Naphthylamine	2 ug/mL
							2,3,5,6-Tetrachlorophenol	2 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							7,12-Dimethylbenz(a)anthracene	2 ug/mL
							Methyl methanesulfonate	2 ug/mL
							1,1'-Biphenyl	2 ug/mL
							1,2,4,5-Tetrachlorobenzene	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,2-Diphenylhydrazine	2 ug/mL
							1,3-Dichlorobenzene	2 ug/mL
							1,3-Dinitrobenzene	2 ug/mL
							1,4-Dichlorobenzene	2 ug/mL
							1,4-Dioxane	2 ug/mL
							1-Methylnaphthalene	2 ug/mL
							2,2'-oxybis[1-chloropropane]	2 ug/mL
							2,3,4,6-Tetrachlorophenol	2 ug/mL
							2,4,5-Trichlorophenol	2 ug/mL
							2,4,6-Trichlorophenol	2 ug/mL
							2,4-Dichlorophenol	2 ug/mL
							2,4-Dimethylphenol	2 ug/mL
							2,4-Dinitrophenol	4 ug/mL
							2,4-Dinitrotoluene	2 ug/mL
							2,6-Dinitrotoluene	2 ug/mL
							2-Chloronaphthalene	2 ug/mL
							2-Chlorophenol	2 ug/mL
							2-Methylnaphthalene	2 ug/mL
							2-Methylphenol	2 ug/mL
							2-Nitroaniline	2 ug/mL
							2-Nitrophenol	2 ug/mL
							3-Nitroaniline	2 ug/mL
							4,6-Dinitro-2-methylphenol	4 ug/mL
							4-Bromophenyl phenyl ether	2 ug/mL
							4-Chloro-3-methylphenol	2 ug/mL
							4-Chloroaniline	2 ug/mL
							4-Chlorophenyl phenyl ether	2 ug/mL
							4-Methylphenol	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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.: 180-43220-1

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.: 180-43220-1

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.: 180-43220-1

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.: 180-43220-1

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
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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,2'-oxybis[1-chloropropane]	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Methylphenol	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Methylphenol	20 ug/mL
							4-Nitroaniline	20 ug/mL
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl phenyl ether	30 ug/mL
							4-Methylphenol	30 ug/mL
							4-Nitroaniline	30 ug/mL
							4-Nitrophenol	60 ug/mL
							Acenaphthene	30 ug/mL
							Acenaphthylene	30 ug/mL
							Acetophenone	30 ug/mL
							Aniline	30 ug/mL
							Anthracene	30 ug/mL
							Benzo[a]anthracene	30 ug/mL
							Benzo[a]pyrene	30 ug/mL
							Benzo[b]fluoranthene	30 ug/mL
							Benzo[g,h,i]perylene	30 ug/mL
							Benzo[k]fluoranthene	30 ug/mL
							Benzyl alcohol	30 ug/mL
							Bis(2-chloroethoxy)methane	30 ug/mL
							Bis(2-chloroethyl)ether	30 ug/mL
							Bis(2-ethylhexyl) phthalate	30 ug/mL
							Butyl benzyl phthalate	30 ug/mL
							Carbazole	30 ug/mL
							Chrysene	30 ug/mL
							Di-n-butyl phthalate	30 ug/mL
							Di-n-octyl phthalate	30 ug/mL
							Dibenz(a,h)anthracene	30 ug/mL
							Dibenzofuran	30 ug/mL
							Diethyl phthalate	30 ug/mL
							Dimethyl phthalate	30 ug/mL
							Fluoranthene	30 ug/mL
							Fluorene	30 ug/mL
							Hexachlorobenzene	30 ug/mL
							Hexachlorobutadiene	30 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Atrazine	30 ug/mL
							Benzidine	30 ug/mL
							Caprolactam	30 ug/mL
							N-Nitrosodiphenylamine	30 ug/mL
							Benzaldehyde	30 ug/mL
							Benzoic acid	30 ug/mL
							Indene	30 ug/mL
							2,4,6-Tribromophenol (Surr)	30 ug/mL
							2-Fluorobiphenyl	30 ug/mL
							2-Fluorophenol (Surr)	30 ug/mL
							Nitrobenzene-d5 (Surr)	30 ug/mL
							Phenol-d5 (Surr)	30 ug/mL
							Terphenyl-d14 (Surr)	30 ug/mL
							N-Nitrosopyrrolidine	30 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

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	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
							3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
WCN0.1L3_00042	04/29/15	04/29/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN10Pi_00483	1 mL	Cyanide, Total	0.1 mg/L
.WCN10Pi_00483	05/03/15	04/27/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN1000P_00024	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00024	05/20/15		LabChem Inc., Lot D322-27		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.1L3_00043	05/02/15	05/01/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN10Pi_00485	1 mL	Cyanide, Total	0.1 mg/L
.WCN10Pi_00485	05/08/15	05/01/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN1000P_00024	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00024	05/20/15		LabChem Inc., Lot D322-27		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.2ICV_00327	04/29/15	04/29/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN10Si_00486	2 mL	Cyanide, Total	0.2 mg/L
.WCN10Si_00486	05/03/15	04/27/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN1000S_00017	1 mL	Cyanide, Total	10 mg/L
..WCN1000S_00017	08/31/15		Ricca Chemical Co., Lot 4502438		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.2ICV_00328	05/02/15	05/01/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN10Si_00487	2 mL	Cyanide, Total	0.2 mg/L
.WCN10Si_00487	05/08/15	05/01/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN1000S_00017	1 mL	Cyanide, Total	10 mg/L
..WCN1000S_00017	08/31/15		Ricca Chemical Co., Lot 4502438		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.5L1_00492	04/29/15	04/29/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN10Pi_00483	5 mL	Cyanide, Total	0.5 mg/L
.WCN10Pi_00483	05/03/15	04/27/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN1000P_00024	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00024	05/20/15		LabChem Inc., Lot D322-27		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.5L1_00493	05/02/15	05/01/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN10Pi_00485	5 mL	Cyanide, Total	0.5 mg/L
.WCN10Pi_00485	05/08/15	05/01/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN1000P_00024	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00024	05/20/15		LabChem Inc., Lot D322-27		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN10Pi_00483	05/03/15	04/27/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN1000P_00024	1 mL	Cyanide, Total	10 mg/L
.WCN1000P_00024	05/20/15		LabChem Inc., Lot D322-27		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN10Pi_00485	05/08/15	05/01/15	Sodium Hyroxide, Lot 2410822	100 mL	WCN1000P_00024	1 mL	Cyanide, Total	10 mg/L
.WCN1000P_00024	05/20/15		LabChem Inc., Lot D322-27		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCNLCS_00017	05/03/15	04/27/15	Sodium Hyroxide, Lot 2410822	100 mL	WCNWSTOCK_00001	1 mL	Cyanide, Total	10 mg/L
.WCNWSTOCK_00001	11/30/15		ERA, Lot 200213		(Purchased Reagent)		Cyanide, Total	1000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WHdCaCO3P_00006	05/08/16	LabChem Inc., Lot D126-06			(Purchased Reagent)		Hardness as calcium carbonate	1000 mg/L

Reagent

M6020ICS-0A_00005

INORGANIC VENTURES™

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Christiansburg, VA 24073 USA
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tel: 800.669.6799 540.585.3030
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CERTIFICATE OF ANALYSIS

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

ACCREDITED Testing Laboratory Certificate 863.01

ACCREDITED Reference Material Producer Certificate 863.02

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

Catalog No.: 6020ICS-0A

Lot Number: **G2-MEB476152MCA**

Matrix: 1.4% HNO3(v/v)

10,000 µg/mL ea:
Chloride,

2,000 µg/mL ea:
C,

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

20 µg/mL ea:
Mo, Ti

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

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

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

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

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

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

$(\bar{x})$ = mean

x_i = individual results

n = number of measurements

2 = the coverage factor.

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

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

4.1 ASSAY INFORMATION

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

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

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

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

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

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

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

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

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

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

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

Certification Date: July 12, 2013

Expiration Date: EXPIRES 01 SEP 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician

Zachary Saunders

Certificate Approved By: Allyson Guilliams
Quality Control Supervisor

Allyson Guilliams

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MCALSPECAREV_00005

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CERTIFICATE OF ANALYSIS

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

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

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

Catalog No.: TAPITT-CAL-SPECA-REV

Lot Number: **H2-MEB524026**

Matrix: 3% HNO3(v/v)

2,500 µg/mL ea:
Ca, K, Mg, Na,

1,250 µg/mL ea:
Fe,

25 µg/mL ea:
Al, Mn,

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

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

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

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

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

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

($\bar{x}$) = mean

x_i = individual results

n = number of measurements

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

2 = the coverage factor.

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

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

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

4.1 ASSAY INFORMATION

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

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

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

$(\bar{x})$ = mean

x_i = individual results

n = number of measurements

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

2 = the coverage factor.

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

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

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

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

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

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

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

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

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

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

Certification Date: April 04, 2014

Expiration Date: EXPIRES 01 MAY 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Brenda Francis
Product Documentation Technician

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

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Reagent

MCGHG1-1_00009

1459119
1459120

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

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

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

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

Rec'd 1/8/15 RJR

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%

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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

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)

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:

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

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

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)

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.

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				

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 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 Contact:	In case of skin contact, flush with copious amounts of water. Remove contaminated clothing. Contact a physician.
Eye Contact:	In case of eye contact, flush with copious amounts of water, lifting eyelids occasionally. Contact a physician.
Ingestion:	If ingested, contact poison center immediately for recommended procedure. Contact a physician.

Section V Fire Fighting Measures

Fire and Explosion Hazard Data for Matrix

Fire Hazard: non-combustible

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

Section VI Accidental Release Measures

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

Section VII Handling and Storage

Store at Room Temperature (18-25°C)

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

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

Section VIII Exposure Controls / Personal Protection

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

Section IX Physical and Chemical Properties

Physical Data for Matrix

Melting Pt.: 0°C Boiling Pt.: 100°C Density: 1

Vapor Pressure: N/A	Vapor Density: N/A	Water Solubility: soluble
Appearance: colorless liquid	Odor: none	Flash Point: none
Auto-Ignition Temperature: N/A	LEL: N/A	UEL: N/A

Section X Stability and Reactivity

Reactivity Data for Matrix

Stability: stable

Incompatibilities: organic materials, str. reducing agents, alkalies, antimony salts

Hazardous Decomposition Products: NO2, NO3

Hazardous Effects of Polymerization: none

Section XI Toxicological Information

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

Section XII Ecological Information

No information is available.

Section XIII Disposal Considerations

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

Section XIV Transport Information

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

UN Number: UN3264 Shipping Class: 8 Packing Group: III

Section XV Regulatory Information

EU Directives Classification

R: 34

Risk Statements: Causes burns.

S: 23-26-36-45

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

Section XVI Other Information

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

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% HNO_3 / Tr. Tart. Acid / Tr. HF

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

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

Instrumental Analysis by ICP Spectrometer:

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

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

SPEX CertiPrep Reference Multi: Lot# ALL 8

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

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

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

Date of Certification: NOV 2014 Certifying Officer:

Report of Certification

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

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

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

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

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

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

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

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

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

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

SPEX CertiPrep®
Your Science is Our Passion.®
203 Norcross Ave, Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-800-LAB-SPEX • Fax: 732-603-9647

Reagent

MMSCRI-1B_00005

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

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) HNO3
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:
	Cr3, Cu,
	0.25 µg/mL ea:
	Ag, As, Be, Cd,
	Ni, Pb, Tl, V,
	0.125 µg/mL ea:
	Co

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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.

Certified Value $(\bar{X}) = \frac{\Sigma X_i}{n}$ ($\bar{X}$) = mean

x_i = individual results

n = number of measurements

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

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

4.0 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 ± 4° 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 APR 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

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inorganicventures.com

CERTIFICATE OF ANALYSIS

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info@inorganicventures.com

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

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

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

Catalog No.: TAPITT-MSICSAB-1

Lot Number: **H2-MEB524028**

Matrix: 3% HNO3(v/v)

10 µg/mL ea:

Ba, Be, Pb, Sr, Tl, V

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

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

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

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

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

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

($\bar{x}$) = mean

x_i = individual results

n = number of measurements

2 = the coverage factor.

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

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

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

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

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

4.1 ASSAY INFORMATION

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

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

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

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

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

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

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

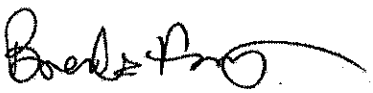
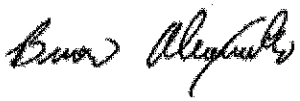
11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations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

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

Certification Date: April 04, 2014

Expiration Date: EXPIRES 01 MAY 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

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

Reagent

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CERTIFICATE OF ANALYSIS

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

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

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

Catalog No.: TAPITT-MSICSAB-2

Lot Number: **G2-MEB467043**

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

250 µg/mL ea:
Si,

50 µg/mL ea:
Sn,

25 µg/mL ea:
B, Se,

10 µg/mL ea:
Sb

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

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

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

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

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

($\bar{x}$) = mean

x_i = individual results

n = number of measurements

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

2 = the coverage factor.

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

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

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

4.1 ASSAY INFORMATION

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

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

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

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

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

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

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

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

Certification Date: March 08, 2013

Expiration Date: EXPIRES 01 MAY 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Donna Senn
Product Documentation Technician

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

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Reagent

MTAPITTICPMS_00020

1222800

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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Rec'd 6/17/14 RJR

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

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, Cr3	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	080531
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.

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

x_i = individual results

n = number of measurements

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

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

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

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 Requirments 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.

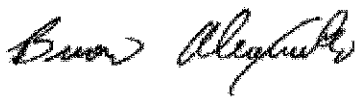
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

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

CERTIFICATE OF ANALYSIS

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

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

rec. 11/13/14 SLB

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TAPITT-MS-A
Lot Number:	H2-MEB532044
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Ca, K, Mg, Na

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
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.

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

x_i = individual results

n = number of measurements

Uncertainty (±) = $2\ [\ \Sigma(s_i)^2\ ]^{1/2}$ 2 = the coverage factor.

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

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

- N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

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 02 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

MTAPITTMSC_00029

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INORGANIC VENTURES™

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Christiansburg, VA 24073 · USA
inorganicventures.com

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

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

rec'd 11/3/14 SLB

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

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
Tl	ICP Assay	3162a	060808

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

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

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

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

- N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

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 DEC 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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

5V Benzo pyrene primary
100313

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

CERTIFIED WEIGHT REPORT

Part Number: 71016
Lot Number: 100313
Description: Benzo(e)pyrene

Expiration Date: 100318
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000

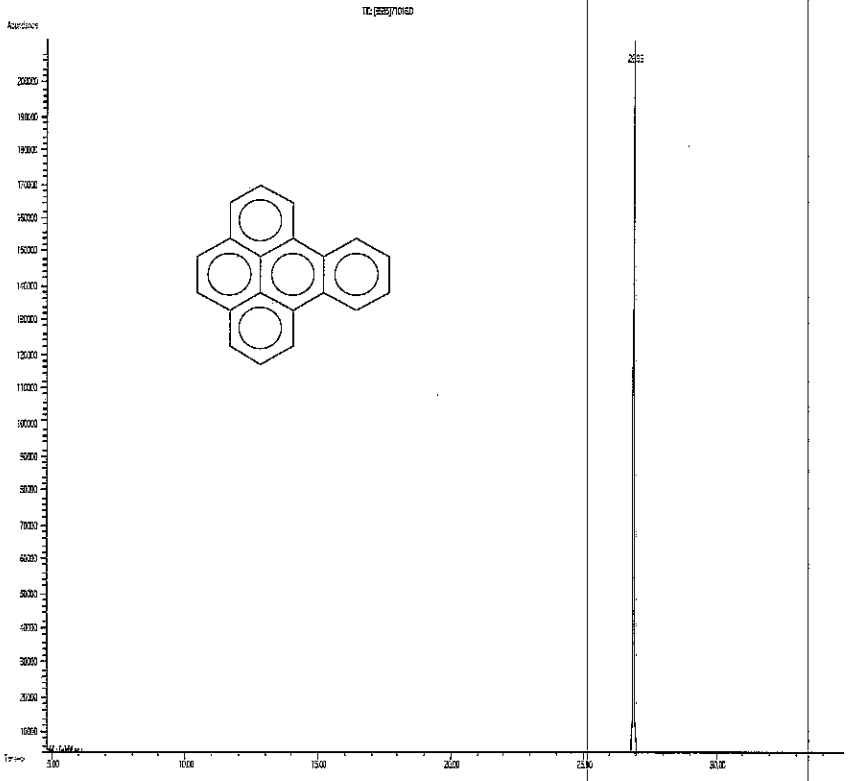
Solvent(s): Lot # 44325 Methylene chloride

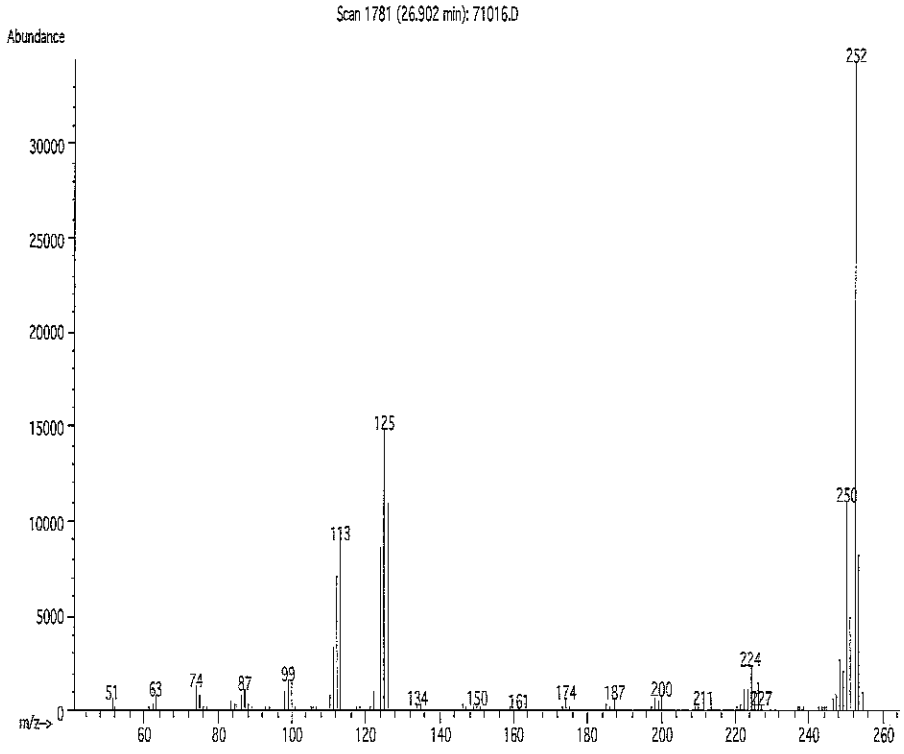
Weight(s) shown below were combined and diluted to: 100.0 5E-05 Balance Uncertainty 0.003 Flask Uncertainty

Formulated By:	Paul Barron	100313 DATE
Reviewed By:	Pedro L. Rentas	100313 DATE

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

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





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.

ACCREDITED
ISO 17025:2005 Accredited A2LA Cert. No. 0851-01
ISO 9001:2008 Registered TUV USA, Inc. Cert. No. 09-1009

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

William J. Leary
Quality Assurance Manager

Reagent

SVLVIntstd_00007

SV/VOA/SIM/Int A093676

RESTEK

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

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 567684 **Lot No.:** A093676

Description : 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul

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

Expiration Date : February 2018 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

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

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

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

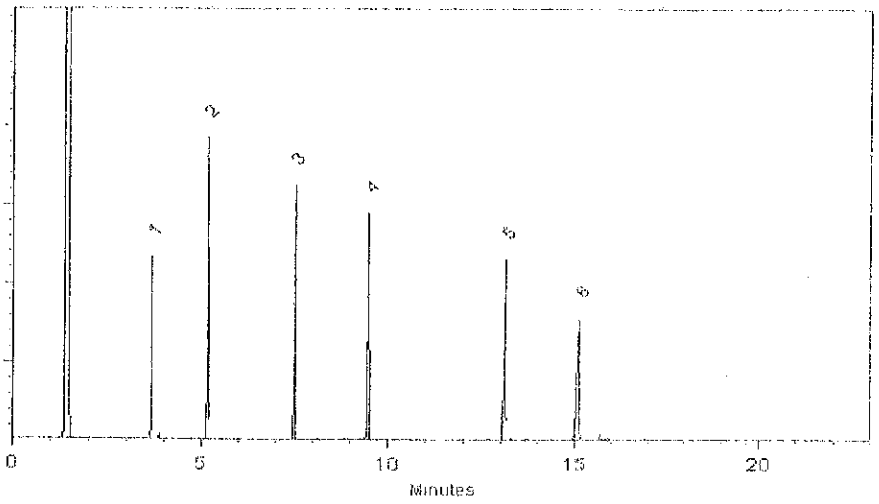
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jodi E. Breon - QA Analyst

Date Passed: 27-Feb-2013 Balance: 1128342315

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

Reagent

SVLVlist12_00002

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567679 **Lot No.:** A0102912

Description : 8270 List 2 / Std #2

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

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

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

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

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

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

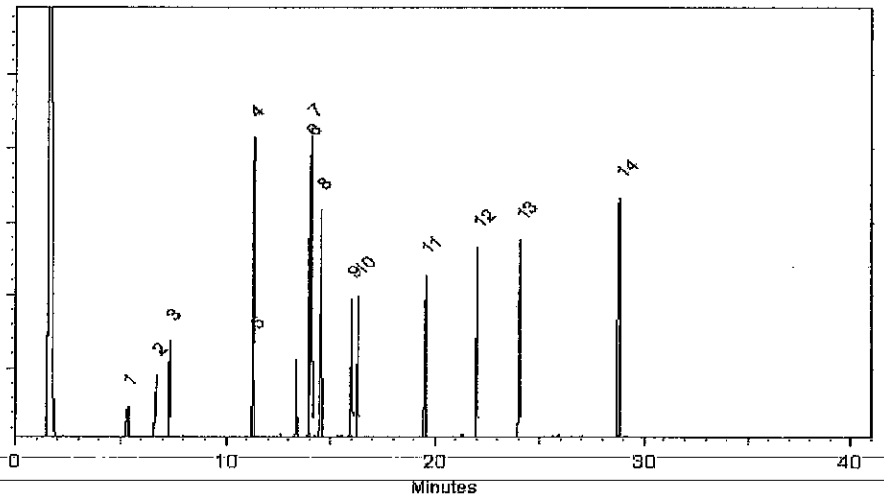
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

F. Joseph Fallon - Mix Technician **Date Mixed:** 23-Apr-2014 **Balance:** 1128360905

Jennifer L. Pollino - QC Analyst **Date Passed:** 29-Apr-2014

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

Reagent

SVLVstd1_00026

RESTEK®
110 Benner Circle
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Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567672 **Lot No.:** A0101615

Description : 8270 List 1 / Std #1 MegaMix

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

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

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

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

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

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

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

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

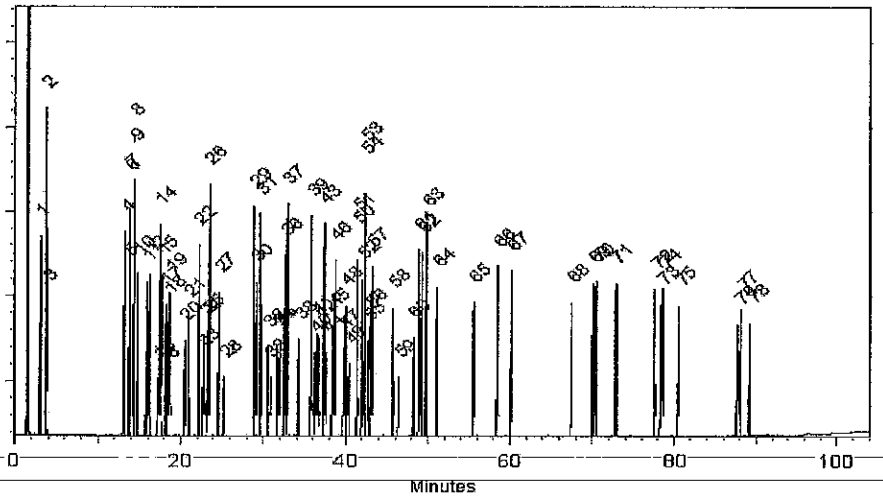
Carrier Gas:
hydrogen-constant pressure 10 psi

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

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



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

Rebecca Hauver

Date Mixed: 26-Feb-2014 **Balance:** 1128360905

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 04-Mar-2014

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

Reagent

SVLVstd1_00030

5 VV 8270 New Std #1 Mega Mix A0107399

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Certificate of Analysis

1449137 CIT 1449141 1449142 1449140 1449136 1449138

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

8	n-Decane CAS# [illegible]-18-5 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 # [illegible]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 # [illegible]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 # [illegible]50-1 Purity 99%	(Lot 68996CMV)	1,006.5 µg/mL	+/- 5.8519 +/- 11.0199 +/- 18.6915	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzyl alcohol CAS # [illegible]61-6 Purity 99%	(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 # [illegible]60-1 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 # 67-72[illegible] 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[illegible] 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 # 106-44[illegible] 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 BCBH7602V)	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		1,004.5	µg/mL	+/- 5.8402	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 317200)			+/- 10.9980	µg/mL	Unstressed
	Purity 99%				+/- 18.6544	µg/mL	Stressed
25	2,4-Dichlorophenol		1,000.0	µg/mL	+/- 5.8141	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/- 10.9487	µg/mL	Unstressed
	Purity 99%				+/- 18.5708	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.6	µg/mL	+/- 5.8176	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/- 10.9553	µg/mL	Unstressed
	Purity 99%				+/- 18.5819	µg/mL	Stressed
27	Naphthalene		1,002.3	µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/- 10.9739	µg/mL	Unstressed
	Purity 99%				+/- 18.6135	µg/mL	Stressed
28	2,6-Dichlorophenol		1,000.1	µg/mL	+/- 5.8147	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBN2776V)			+/- 10.9498	µg/mL	Unstressed
	Purity 99%				+/- 18.5726	µg/mL	Stressed
29	4-Chloroaniline		1,000.3	µg/mL	+/- 5.8157	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot 12528PH)			+/- 10.9518	µg/mL	Unstressed
	Purity 98%				+/- 18.5761	µg/mL	Stressed
30	Hexachlorobutadiene		999.9	µg/mL	+/- 5.8135	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot K22W009)			+/- 10.9475	µg/mL	Unstressed
	Purity 98%				+/- 18.5688	µg/mL	Stressed
31	2-Methylnaphthalene		998.6	µg/mL	+/- 5.8059	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/- 10.9333	µg/mL	Unstressed
	Purity 96%				+/- 18.5446	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,001.3	µg/mL	+/- 5.8216	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC0769V)			+/- 10.9629	µg/mL	Unstressed
	Purity 99%				+/- 18.5949	µg/mL	Stressed
33	1-Methylnaphthalene		1,000.0	µg/mL	+/- 5.8141	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-10)			+/- 10.9487	µg/mL	Unstressed
	Purity 99%				+/- 18.5708	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.2	µg/mL	+/- 5.8152	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 06024AIV)			+/- 10.9509	µg/mL	Unstressed
	Purity 99%				+/- 18.5745	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,002.4	µg/mL	+/- 5.8280	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 3140300)			+/- 10.9750	µg/mL	Unstressed
	Purity 99%				+/- 18.6154	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,001.4	µg/mL	+/- 5.8222	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBH7393V)			+/- 10.9640	µg/mL	Unstressed
	Purity 99%				+/- 18.5968	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,000.0	µg/mL	+/- 5.8141	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/- 10.9487	µg/mL	Unstressed
	Purity 99%				+/- 18.5708	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.0	µg/mL	+/- 5.8141	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot FIJ01)			+/- 10.9487	µg/mL	Unstressed
	Purity 99%				+/- 18.5708	µg/mL	Stressed
39	Biphenyl		1,006.1	µg/mL	+/- 5.8496	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot 1277976)			+/- 11.0155	µg/mL	Unstressed
	Purity 99%				+/- 18.6841	µg/mL	Stressed

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

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

86-306 Nitrosodiphenylamine

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

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

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

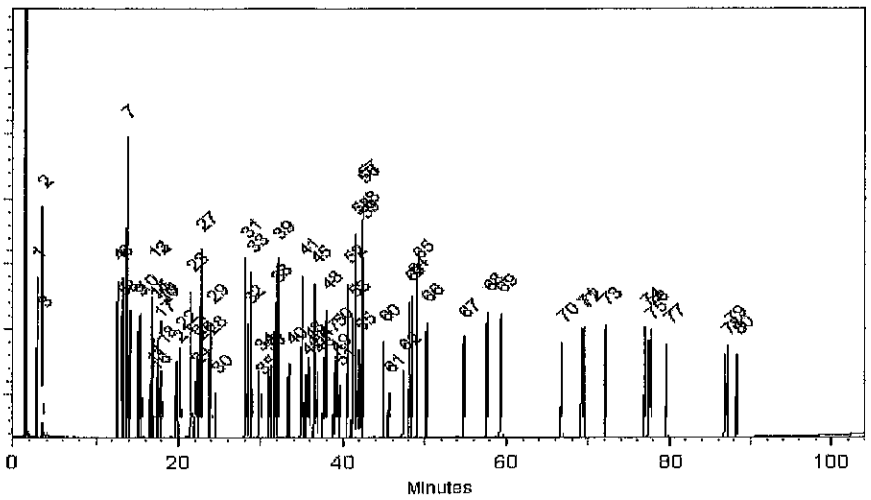
Carrier Gas:
hydrogen-constant pressure 10 psi

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 Fallon - Mix Technician

Date Mixed: 24-Nov-2014 **Balance:** 1128360905

Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)		
1	Indene		2,001.4 µg/mL	+/- 11.6363	µg/mL	Gravimetric
	CAS # 95-13-6	(Lot MKBP3098V)		+/- 22.5687	µg/mL	Unstressed
	Purity 99%			+/- 25.9700	µg/mL	Stressed
2	Benzoic acid		2,005.8 µg/mL	+/- 11.6619	µg/mL	Gravimetric
	CAS # 65-85-0	(Lot MKBL6689V)		+/- 22.6183	µg/mL	Unstressed
	Purity 99%			+/- 26.0271	µg/mL	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		+/- 11.6317	µg/mL	Gravimetric
	CAS # 100-52-7	(Lot SHBD3510V)			+/- 64.1305	µg/mL	Unstressed
	Purity 99%				+/- 74.5493	µg/mL	Stressed
2	epsilon-Caprolactam		2,001.2 µg/mL		+/- 11.6351	µg/mL	Gravimetric
	CAS # 105-60-2	(Lot I16X016)			+/- 64.1498	µg/mL	Unstressed
	Purity 99%				+/- 74.5716	µg/mL	Stressed
3	Atrazine		2,004.3 µg/mL		+/- 11.6532	µg/mL	Gravimetric
	CAS # 1912-24-9	(Lot TZ8ED)			+/- 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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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

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

Description : 8270 List 1 / Std #2 Amines

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

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

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

Handling: Contains carcinogen

CERTIFIED VALUES

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

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

Reagent

SVLVstd5(7)_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. : 568725 **Lot No.:** A0101573

Description : 8270 List 1/ Std #7 Diphenylamine

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

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

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

CERTIFIED VALUES

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

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

Specific Reference Material Notes:

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

Tech Tips:

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

Reagent

SVLVstd8_00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568724 **Lot No.:** A0103145

Description : 8270 List 1/ Std #8

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

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

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

CERTIFIED VALUES

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

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

Reagent

SVLVstd9_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. : 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 **CAS #** 92-87-5 (Lot 141208JLM) **Purity** 99%	2,006.6 µg/mL	+/- 11.6665 µg/mL +/- 21.9697 µg/mL +/- 37.2641 µg/mL	Gravimetric Unstressed Stressed
2	3,3'-Dichlorobenzidine **CAS #** 91-94-1 (Lot 141205JLM) **Purity** 99%	2,001.0 µg/mL	+/- 11.6340 µg/mL +/- 21.9083 µg/mL +/- 37.1601 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

SVLVSURRSPK_00003

708636
708635

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FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

5 VIALS SAME SPIKE

Catalog No. : 567685 **Lot No.:** A093638

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : February 2018 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

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

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

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

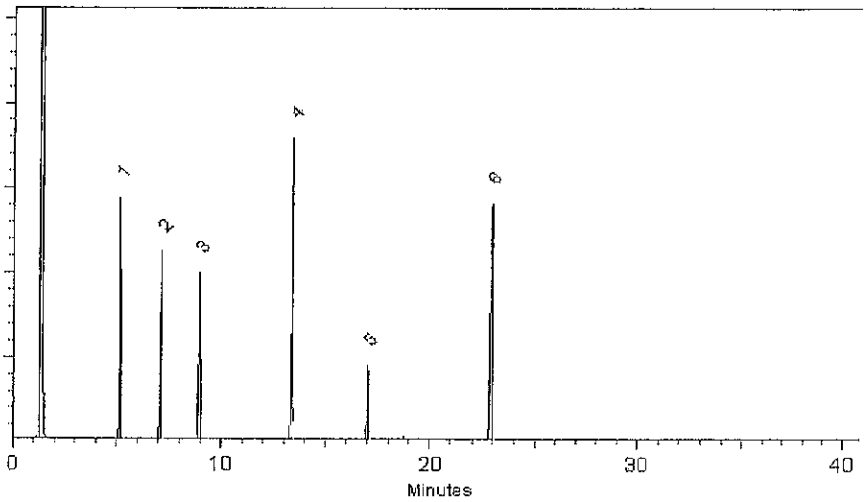
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Diane Shaffer - QAAnalyst

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

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

Reagent

SVLVSURRSPK_00011

SV 8270 SURROGATE

RESTEK® CERTIFIED REFERENCE MATERIAL

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

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

CT # 1310492

91
90
89
88

Catalog No. : 567685 **Lot No.:** A0103615

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : May 31, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBC5591V) **Purity** 99%	5,003.5 µg/mL	+/- 29.0892 µg/mL +/- 124.6713 µg/mL +/- 156.7818 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d5 **CAS #** 4165-62-2 (Lot M387P4) **Purity** 99%	5,002.9 µg/mL	+/- 29.0860 µg/mL +/- 124.6575 µg/mL +/- 156.7644 µg/mL	Gravimetric Unstressed Stressed
3	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-20474) **Purity** 99%	5,001.4 µg/mL	+/- 29.0773 µg/mL +/- 124.6201 µg/mL +/- 156.7174 µg/mL	Gravimetric Unstressed Stressed
4	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot E11Y047) **Purity** 99%	5,004.4 µg/mL	+/- 29.0947 µg/mL +/- 124.6949 µg/mL +/- 156.8114 µg/mL	Gravimetric Unstressed Stressed
5	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot 29699MJV) **Purity** 99%	5,003.9 µg/mL	+/- 29.0914 µg/mL +/- 124.6805 µg/mL +/- 156.7934 µg/mL	Gravimetric Unstressed Stressed
6	p-Terphenyl-d14 **CAS #** 1718-51-0 (Lot PR-20577) **Purity** 99%	5,007.1 µg/mL	+/- 29.1100 µg/mL +/- 124.7604 µg/mL +/- 156.8938 µg/mL	Gravimetric Unstressed Stressed

7850-1
4247-4671-32

124318

Reagent

SVNNITROPYROs_00015

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

Part Number: 70451
Lot Number: 060514
Description: N-Nitrosopyrrolidine

Expiration Date: 060517
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1000

Lot #
Solvent(s): 62418 Methylene chloride

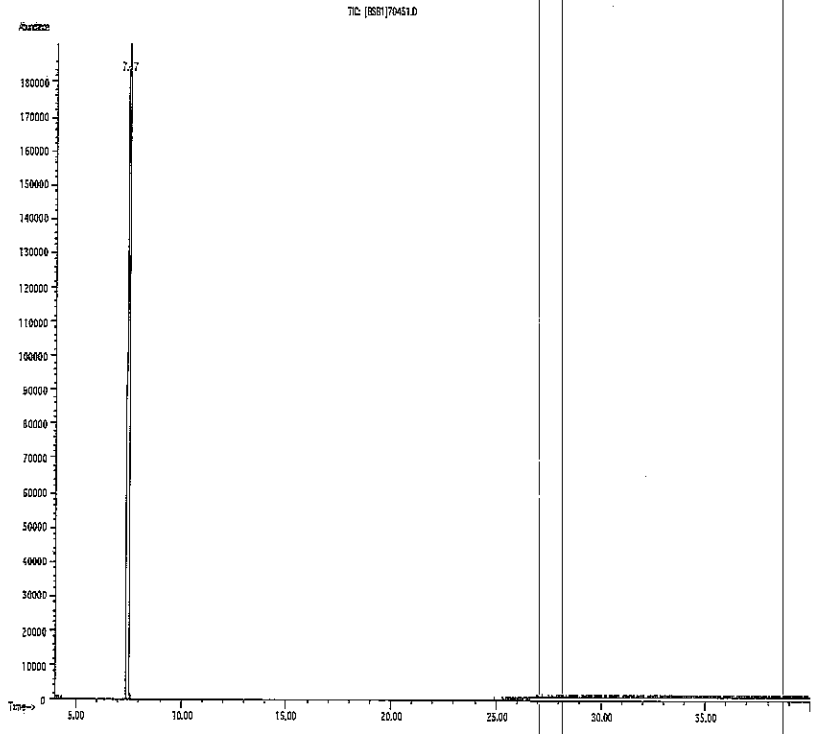
Formulated By:	Paul Barron	060514 DATE
Reviewed By:	Pedro L. Rentas	060514 DATE

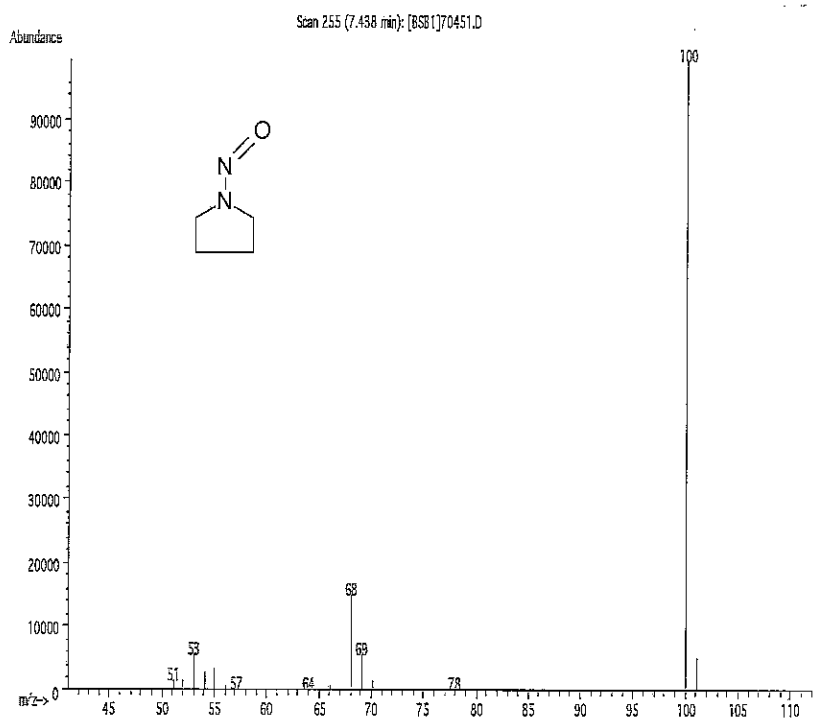
Weight(s) shown below were combined and diluted to: 25.0 5E-05 Balance Uncertainty 0.001 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. N-Nitrosopyrrolidine	451	04025BM	1000	99	0.2	0.02524	0.02530	1002.2	0.00565	00930-55-2	N/A	orl-rat 900mg/kg

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





Reagent

WCN1000P_00024

1515323
ID: WCN1000P_00024
Exp:05/20/15 Prpd:PGJ Opn:12/19/14
Cyanide 1000 ppm Primary

1515324
ID: WAvCN1000P_00017
Exp:05/20/15 Prpd:PGJ Opn:12/19/14
Available Cyanide 1000 pp

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

CERTIFICATE OF ANALYSIS

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

Mfg. Date: 11/20/2014

Catalog Number: LC13545

Exp. Date: 05/20/2015

Lot Number: D322-27

ANALYTICAL SECTION

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

Submitted by: Greg Albright, Chemist Supervisor

Greg Albright

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

03/26/2015 2:29 PM

Reagent

WCN1000S_00017

RICC 1508131 ID: WCN1000S_00017 Exp:08/31/15 Prpd:PGJ Opn:03/19/15 Cyanide 1000 ppm Secondar ICAL (1508132 ID: WAvCN1000S_00018 Exp:08/31/15 Prpd:PGJ Opn:03/19/15 Avaliable Cyanide 1000 Se JY

Arlington, TX 76012
Pocomoke City, MD 21851
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Cyanide Standard, 1000 ppm CN

Lot Number: 4502438 **Product Number:** 2543

Manufacture Date: FEB 13, 2015
Expiration Date: AUG 2015

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.

Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225 % (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

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

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

Specification	Reference
Stock Standard Cyanide Solution	APHA (4500-CN- F)
Stock Cyanide Solution	APHA (4500-CN- E)
Stock Cyanide Solution	APHA (4500-CN- K)
Stock Cyanide Solution	APHA (4500-CN- H)
Cyanide Reference Solution (1000 mg/L)	EPA (SW-846) (7.3.3.2)
Cyanide Calibration Stock Solution (1,000 mg/L CN-)	EPA (SW-846) (9213)
Stock Cyanide Solution	EPA (335.3)
Stock Cyanide Solution	EPA (335.2)
Cyanide Solution Stock	ASTM (D 4282)
Simple Cyanide Solution, Stock (1.0 g/L CN)	ASTM (D 4374)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

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

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

Katie Schnur

Katie Schnur
Quality Control Manager

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

Reagent

WCNWSTOCK_00001

ERA
A Waters Company

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

1456021
ID: WCNWSTOCK_00001
Exp:11/30/15 Prpd: Opn:01/05/15
Total Cyanide Water LCS 1

Rcvd 10-21-14 TSK

Certificate of Analysis

PRODUCT:	1000 mg/L Complex Cyanide
CATALOG NUMBER:	049 – 125 mL; 998 – 500 mL
LOT NUMBER:	200213
ISSUE DATE:	March 29, 2013
REVISION DATE:	May 8, 2014
STARTING MATERIAL:	Potassium Ferrocyanide 3-Hydrate ($K_4Fe(CN)_6$-$3H_2O$)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	1.0%
MATRIX:	18 megohm deionized water and 0.5% (v/v) NaOH
DENSITY:	1.0083 ± 0.0008 g/mL at 20.5°C and 767 mm Hg
TRACEABILITY[3]:	NA
NIST/SRM:	NA
VERIFICATION METHOD:	Spectrophotometry
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability Recovery = ((% Recovery certified standard)/(% Recovery NIST SRM))*100.

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

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

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

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

Certifying Officer: Tom Widera

ISO/IEC GUIDE 34:2009
ACCREDITED
REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005
ACCREDITED
CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

Reagent

WTOC1000SP_00011

RICCA CHEMICAL COMPANY

Arlington, TX 76012
Pocomoke City, MD 21851
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

1457491
ID: WTOC1000SP_00011
Exp: 12/31/15 Pipd: CLL
1000 ppm TOC standard

Certificate of Analysis

Organic Carbon Standard, 1000 ppm C

Lot Number: 2412908 **Product Number:** 1847

Manufacture Date: DEC 24, 2014
Expiration Date: DEC 2015

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

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

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

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

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container
1847-2.5	10 L Cubitainer®	12 months
1847-4	120 mL amber glass	12 months
1847-32	1 L amber glass	12 months
1847-5	20 L Cubitainer®	12 months
1847-8	250 mL amber glass	12 months
1847-1	4 L amber glass	12 months
1847-16	500 mL amber glass	12 months

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

LaNelle Ohlhausen
Quality Assurance

1-8-15 CL

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.: 180-43220-1

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-E01	180-43220-1	56	61	62	64	73	56
PW-D02	180-43220-2	66	67	76	78	84	66
	MB 180-139286/1-A	72	73	74	70	73	71
	MB 180-139434/1-A	65	68	68	64	67	69
	LCS 180-139286/2-A	71	68	74	65	76	63
	LCS 180-139434/2-A	59	60	60	56	61	55
	LCSD 180-139286/3-A	72	70	71	71	78	63
	LCSD 180-139434/3-A	58	59	62	59	62	57

	QC LIMITS
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 II 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V0423017.D

Lab ID: LCS 180-139286/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Anthracene	20.0	14.2	71	49-100	
Benzo[a]anthracene	20.0	13.7	68	50-100	
Benzo[b]fluoranthene	20.0	13.4	67	43-100	
Benzo[k]fluoranthene	20.0	13.2	66	47-100	
Benzo[g,h,i]perylene	20.0	15.0	75	48-100	
Benzo[a]pyrene	20.0	13.8	69	47-100	
Chrysene	20.0	13.2	66	49-100	
Dibenz(a,h)anthracene	20.0	15.6	78	48-100	
Fluoranthene	20.0	14.6	73	48-100	
Fluorene	20.0	13.9	70	48-100	
Indeno[1,2,3-cd]pyrene	20.0	15.6	78	47-100	
Phenanthrene	20.0	14.3	71	48-100	
Pyrene	20.0	13.1	65	44-100	
Acenaphthene	20.0	13.1	66	47-100	
Acenaphthylene	20.0	13.3	67	47-100	
Naphthalene	20.0	13.3	66	44-100	
Bis(2-ethylhexyl) phthalate	20.0	14.0	70	35-118	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D0429012.D

Lab ID: LCS 180-139434/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Anthracene	20.0	12.7	63	49-100	
Benzo[a]anthracene	20.0	12.8	64	50-100	
Benzo[b]fluoranthene	20.0	12.0	60	43-100	
Benzo[k]fluoranthene	20.0	12.9	64	47-100	
Benzo[g,h,i]perylene	20.0	12.7	64	48-100	
Benzo[a]pyrene	20.0	13.0	65	47-100	
Chrysene	20.0	12.7	64	49-100	
Dibenz(a,h)anthracene	20.0	12.9	64	48-100	
Fluoranthene	20.0	12.5	62	48-100	
Fluorene	20.0	12.7	63	48-100	
Indeno[1,2,3-cd]pyrene	20.0	12.9	64	47-100	
Phenanthrene	20.0	13.0	65	48-100	
Pyrene	20.0	12.8	64	44-100	
Acenaphthene	20.0	11.6	58	47-100	
Acenaphthylene	20.0	12.1	60	47-100	
Naphthalene	20.0	11.8	59	44-100	
Bis(2-ethylhexyl) phthalate	20.0	13.6	68	35-118	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V0423018.D

Lab ID: LCSD 180-139286/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Anthracene	20.0	14.7	74	4	20	49-100	
Benzo[a]anthracene	20.0	14.1	70	3	20	50-100	
Benzo[b]fluoranthene	20.0	14.5	72	8	22	43-100	
Benzo[k]fluoranthene	20.0	13.8	69	5	24	47-100	
Benzo[g,h,i]perylene	20.0	15.6	78	4	21	48-100	
Benzo[a]pyrene	20.0	14.8	74	7	22	47-100	
Chrysene	20.0	13.6	68	3	20	49-100	
Dibenz(a,h)anthracene	20.0	16.5	82	5	21	48-100	
Fluoranthene	20.0	15.2	76	4	20	48-100	
Fluorene	20.0	15.1	76	8	22	48-100	
Indeno[1,2,3-cd]pyrene	20.0	16.1	81	3	21	47-100	
Phenanthrene	20.0	14.4	72	1	20	48-100	
Pyrene	20.0	13.4	67	2	20	44-100	
Acenaphthene	20.0	14.6	73	11	25	47-100	
Acenaphthylene	20.0	14.5	72	8	26	47-100	
Naphthalene	20.0	13.2	66	1	25	44-100	
Bis(2-ethylhexyl) phthalate	20.0	14.7	74	5	35	35-118	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D0429013.D

Lab ID: LCSD 180-139434/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Anthracene	20.0	12.8	64	1	20	49-100	
Benzo[a]anthracene	20.0	13.2	66	4	20	50-100	
Benzo[b]fluoranthene	20.0	12.4	62	3	22	43-100	
Benzo[k]fluoranthene	20.0	13.0	65	1	24	47-100	
Benzo[g,h,i]perylene	20.0	13.7	68	7	21	48-100	
Benzo[a]pyrene	20.0	13.3	67	2	22	47-100	
Chrysene	20.0	13.0	65	2	20	49-100	
Dibenz(a,h)anthracene	20.0	13.6	68	6	21	48-100	
Fluoranthene	20.0	12.9	64	3	20	48-100	
Fluorene	20.0	13.1	65	3	22	48-100	
Indeno[1,2,3-cd]pyrene	20.0	13.5	68	5	21	47-100	
Phenanthrene	20.0	13.1	65	1	20	48-100	
Pyrene	20.0	13.0	65	2	20	44-100	
Acenaphthene	20.0	12.2	61	6	25	47-100	
Acenaphthylene	20.0	12.6	63	4	26	47-100	
Naphthalene	20.0	12.1	61	3	25	44-100	
Bis(2-ethylhexyl) phthalate	20.0	13.9	70	2	35	35-118	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab File ID: V0423015.D Lab Sample ID: MB 180-139286/1-A

Matrix: Water Date Extracted: 04/22/2015 11:36

Instrument ID: CH731 Date Analyzed: 04/23/2015 12:24

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-139286/2-A	V0423017.D	04/23/2015 13:21
	LCSD 180-139286/3-A	V0423018.D	04/23/2015 13:50
PW-D02	180-43220-2	V0424017.D	04/24/2015 14:27

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab File ID: D0429006.D Lab Sample ID: MB 180-139434/1-A

Matrix: Water Date Extracted: 04/23/2015 11:13

Instrument ID: CH732 Date Analyzed: 04/29/2015 12:52

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-139434/2-A	D0429012.D	04/29/2015 15:41
	LCSD 180-139434/3-A	D0429013.D	04/29/2015 16:09
PW-E01	180-43220-1	D0429028.D	04/29/2015 23:09

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab File ID: V1216002.D DFTPP Injection Date: 12/16/2014

Instrument ID: CH731 DFTPP Injection Time: 04:02

Analysis Batch No.: 128394

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	41.1	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	56.3	
70	Less than 2.0 % of mass 69	0.2	(0.3)1
127	40.0 - 60.0 % of mass 198	42.0	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.1	
275	10.0 - 30.0 % of mass 198	25.0	
365	Greater than 1.0 % of mass 198	2.2	
441	Present but less than mass 443	8.1	(61.8)3
442	Greater than 40.0 % of mass 198	59.4	
443	17.0 - 23.0 % of mass 442	13.2	(22.2)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-128394/3	V1216003.D	12/16/2014	04:19
	IC 180-128394/4	V1216004.D	12/16/2014	04:48
	IC 180-128394/5	V1216005.D	12/16/2014	05:16
	ICIS 180-128394/6	V1216006.D	12/16/2014	05:44
	IC 180-128394/7	V1216007.D	12/16/2014	06:12
	IC 180-128394/8	V1216008.D	12/16/2014	06:41
	IC 180-128394/9	V1216009.D	12/16/2014	07:09
	IC 180-128394/10	V1216010.D	12/16/2014	07:37

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab File ID: V0423002.D DFTPP Injection Date: 04/23/2015

Instrument ID: CH731 DFTPP Injection Time: 09:06

Analysis Batch No.: 139416

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	42.6	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	56.1	
70	Less than 2.0 % of mass 69	0.2	(0.4)1
127	40.0 - 60.0 % of mass 198	44.5	
197	Less than 1.0 % of mass 198	1.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.9	
275	10.0 - 30.0 % of mass 198	26.3	
365	Greater than 1.0 % of mass 198	2.7	
441	Present but less than mass 443	9.6	(83.4)3
442	Greater than 40.0 % of mass 198	51.5	
443	17.0 - 23.0 % of mass 442	11.5	(22.3)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 180-139416/3	V0423003.D	04/23/2015	09:24
	MB 180-139286/1-A	V0423015.D	04/23/2015	12:24
	LCS 180-139286/2-A	V0423017.D	04/23/2015	13:21
	LCSD 180-139286/3-A	V0423018.D	04/23/2015	13:50

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab File ID: V0424002.D DFTPP Injection Date: 04/24/2015

Instrument ID: CH731 DFTPP Injection Time: 08:03

Analysis Batch No.: 139524

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	38.7	
68	Less than 2.0 % of mass 69	0.6	(1.1)1
69	Mass 69 relative abundance	54.8	
70	Less than 2.0 % of mass 69	0.5	(0.9)1
127	40.0 - 60.0 % of mass 198	40.6	
197	Less than 1.0 % of mass 198	0.7	
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	24.4	
365	Greater than 1.0 % of mass 198	2.0	
441	Present but less than mass 443	9.1	(82.4)3
442	Greater than 40.0 % of mass 198	50.7	
443	17.0 - 23.0 % of mass 442	11.0	(21.8)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 180-139524/3	V0424003.D	04/24/2015	08:22
PW-D02	180-43220-2	V0424017.D	04/24/2015	14:27

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

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.: 180-43220-1

SDG No.:

Lab File ID: D0429002.D DFTPP Injection Date: 04/29/2015

Instrument ID: CH732 DFTPP Injection Time: 11:13

Analysis Batch No.: 140008

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	51.6	
68	Less than 2.0 % of mass 69	0.2	(0.6)1
69	Mass 69 relative abundance	42.7	
70	Less than 2.0 % of mass 69	0.3	(0.8)1
127	40.0 - 60.0 % of mass 198	53.7	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.9	
275	10.0 - 30.0 % of mass 198	20.6	
365	Greater than 1.0 % of mass 198	2.7	
441	Present but less than mass 443	8.0	(80.6)3
442	Greater than 40.0 % of mass 198	51.8	
443	17.0 - 23.0 % of mass 442	9.9	(19.1)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 180-140008/3	D0429003.D	04/29/2015	11:29
	MB 180-139434/1-A	D0429006.D	04/29/2015	12:52
	LCS 180-139434/2-A	D0429012.D	04/29/2015	15:41
	LCSD 180-139434/3-A	D0429013.D	04/29/2015	16:09
PW-E01	180-43220-1	D0429028.D	04/29/2015	23:09

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Sample No.: CCVIS 180-139416/3 Date Analyzed: 04/23/2015 09:24

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): V0423003.D Heated Purge: (Y/N) N

Calibration ID: 20963

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		97902	6.30	326986	7.51	228967	9.14
UPPER LIMIT		195804	6.80	653972	8.01	457934	9.64
LOWER LIMIT		48951	5.80	163493	7.01	114484	8.64
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-139286/1-A		89650	6.30	315097	7.51	227196	9.14
LCS 180-139286/2-A		81914	6.30	269518	7.51	200359	9.13
LCSD 180-139286/3-A		79685	6.30	280125	7.51	188953	9.14

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

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

Column used to flag values outside QC limits

FORM VIII 8270D LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Sample No.: CCVIS 180-139416/3 Date Analyzed: 04/23/2015 09:24

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): V0423003.D Heated Purge: (Y/N) N

Calibration ID: 20963

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		432618	10.52	520788	14.07	484233	17.03
UPPER LIMIT		865236	11.02	1041576	14.57	968466	17.53
LOWER LIMIT		216309	10.02	260394	13.57	242117	16.53
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-139286/1-A		421219	10.51	466507	14.05	437418	17.00
LCS 180-139286/2-A		388414	10.51	490403	14.05	455464	17.00
LCSD 180-139286/3-A		384799	10.51	488603	14.05	431013	16.99

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

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

Column used to flag values outside QC limits

FORM VIII 8270D LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Sample No.: CCVIS 180-139524/3 Date Analyzed: 04/24/2015 08:22

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): V0424003.D Heated Purge: (Y/N) N

Calibration ID: 20963

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		128996	6.30	430509	7.51	290715	9.13
UPPER LIMIT		257992	6.80	861018	8.01	581430	9.63
LOWER LIMIT		64498	5.80	215255	7.01	145358	8.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
180-43220-2	PW-D02	95189	6.29	325951	7.50	206698	9.12

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

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

Column used to flag values outside QC limits

FORM VIII 8270D LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Sample No.: CCVIS 180-139524/3 Date Analyzed: 04/24/2015 08:22

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): V0424003.D Heated Purge: (Y/N) N

Calibration ID: 20963

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		525672	10.51	519520	14.04	436233	16.99
UPPER LIMIT		1051344	11.01	1039040	14.54	872466	17.49
LOWER LIMIT		262836	10.01	259760	13.54	218117	16.49
LAB SAMPLE ID	CLIENT SAMPLE ID						
180-43220-2	PW-D02	370814	10.49	381585	14.01	380378	16.94

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

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

Column used to flag values outside QC limits

FORM VIII 8270D LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Sample No.: CCVIS 180-140008/3 Date Analyzed: 04/29/2015 11:29

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): D0429003.D Heated Purge: (Y/N) N

Calibration ID: 21642

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		140179	6.18	641983	7.45	426980	9.15
UPPER LIMIT		280358	6.68	1283966	7.95	853960	9.65
LOWER LIMIT		70090	5.68	320992	6.95	213490	8.65
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-139434/1-A		124200	6.17	600581	7.45	404986	9.15
LCS 180-139434/2-A		122022	6.16	595878	7.45	416749	9.15
LCSD 180-139434/3-A		114534	6.17	528637	7.45	342193	9.16
180-43220-1	PW-E01	103516	6.17	478704	7.46	298671	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 8270D LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Sample No.: CCVIS 180-140008/3 Date Analyzed: 04/29/2015 11:29

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): D0429003.D Heated Purge: (Y/N) N

Calibration ID: 21642

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		748640	10.58	683020	14.30	617019	17.19
UPPER LIMIT		1497280	11.08	1366040	14.80	1234038	17.69
LOWER LIMIT		374320	10.08	341510	13.80	308510	16.69
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-139434/1-A		720764	10.59	638162	14.32	564071	17.20
LCS 180-139434/2-A		721033	10.59	671533	14.32	563660	17.21
LCSD 180-139434/3-A		589650	10.60	555727	14.34	495582	17.23
180-43220-1	PW-E01	523520	10.61	488779	14.36	459595	17.26

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

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

Column used to flag values outside QC limits

FORM VIII 8270D LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43220-1

SDG No.:

Client Sample ID: PW-E01 | Lab Sample ID: 180-43220-1

Matrix: Water | Lab File ID: D0429028.D

Analysis Method: 8270D LL | Date Collected: 04/16/2015 14:15

Extract. Method: 3520C | Date Extracted: 04/23/2015 11:13

Sample wt/vol: 270(mL) | Date Analyzed: 04/29/2015 23:09

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 140008 | Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	62		27-114
321-60-8	2-Fluorobiphenyl	64		28-109
1718-51-0	Terphenyl-d14 (Surr)	56		20-118
367-12-4	2-Fluorophenol (Surr)	56		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	73		30-118
4165-62-2	Phenol-d5 (Surr)	61		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429028.D
Lims ID: 180-43220-A-1-A Lab Sample ID: 180-43220-1
Client ID: PW-E01
Sample Type: Client
Inject. Date: 29-Apr-2015 23:09:30 ALS Bottle#: 27 Worklist Smp#: 28
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006684-028
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20150429-6684.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Apr-2015 06:33:43 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: XAWRK003

First Level Reviewer: piccolinov Date: 30-Apr-2015 06:31:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.169	6.175	-0.006	97	103516	8.00	
* 2 Naphthalene-d8	136	7.457	7.446	0.011	100	478704	8.00	
* 3 Acenaphthene-d10	164	9.166	9.145	0.021	93	298671	8.00	
* 4 Phenanthrene-d10	188	10.609	10.582	0.027	97	523520	8.00	
* 5 Chrysene-d12	240	14.359	14.300	0.059	97	488779	8.00	
* 6 Perylene-d12	264	17.260	17.185	0.075	95	459595	8.00	
$ 7 2-Fluorophenol	112	4.738	4.759	-0.021	92	302871	22.6	
$ 8 Phenol-d5	99	5.806	5.817	-0.011	93	443310	24.5	
$ 9 Nitrobenzene-d5	82	6.736	6.730	0.006	94	498566	24.8	
$ 10 2-Fluorobiphenyl	172	8.499	8.483	0.016	99	1255693	25.6	
$ 11 2,4,6-Tribromophenol	330	9.925	9.898	0.027	89	167631	29.1	
$ 12 Terphenyl-d14	244	12.532	12.479	0.053	99	1186183	22.3	
58 Naphthalene	128		7.468				ND	
85 Acenaphthylene	152		9.011				ND	
88 Acenaphthene	153		9.177				ND	
103 Fluorene	166		9.669				ND	
121 Phenanthrene	178		10.603				ND	
122 Anthracene	178		10.657				ND	
131 Fluoranthene	202		11.992				ND	
133 Pyrene	202		12.308				ND	
145 Bis(2-ethylhexyl) phthalat	149		14.252				ND	
146 Benzo[a]anthracene	228		14.284				ND	
147 Chrysene	228		14.354				ND	
152 Benzo[b]fluoranthene	252		16.410				ND	
153 Benzo[k]fluoranthene	252		16.464				ND	
154 Benzo[a]pyrene	252		17.068				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.514				ND	
158 Dibenz(a,h)anthracene	278		19.546				ND	
159 Benzo[g,h,i]perylene	276		20.187				ND	

Reagents:

SVTAPITINTRNi_00007 Amount Added: 1.00 Units: uL Run Reagent

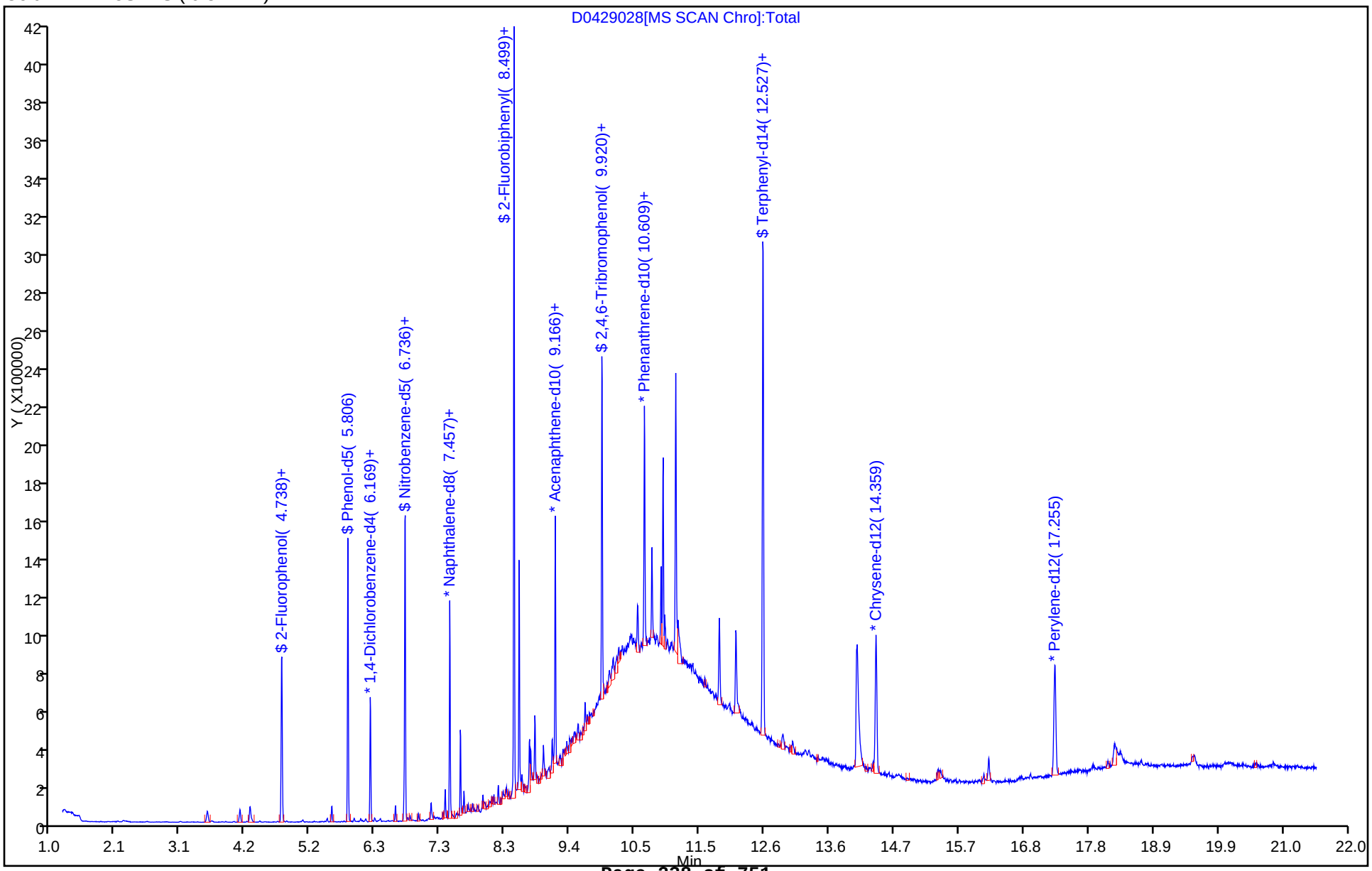
Report Date: 30-Apr-2015 06:34:14 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429028.D

Injection Date:	29-Apr-2015 23:09:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	180-43220-A-1-A	Lab Sample ID:	180-43220-1	Worklist Smp#:	28
Client ID:	PW-E01				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43220-1

SDG No.:

Client Sample ID: PW-D02 | Lab Sample ID: 180-43220-2

Matrix: Water | Lab File ID: V0424017.D

Analysis Method: 8270D LL | Date Collected: 04/17/2015 10:50

Extract. Method: 3520C | Date Extracted: 04/22/2015 11:36

Sample wt/vol: 270(mL) | Date Analyzed: 04/24/2015 14:27

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 139524 | Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	76		27-114
321-60-8	2-Fluorobiphenyl	78		28-109
1718-51-0	Terphenyl-d14 (Surr)	66		20-118
367-12-4	2-Fluorophenol (Surr)	66		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	84		30-118
4165-62-2	Phenol-d5 (Surr)	67		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424017.D
Lims ID: 180-43220-A-2-A Lab Sample ID: 180-43220-2
Client ID: PW-D02
Sample Type: Client
Inject. Date: 24-Apr-2015 14:27:30 ALS Bottle#: 16 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006616-017
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20150424-6616.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 27-Apr-2015 05:32:58 Calib Date: 05-Feb-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20150205-5565.b\V0205010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: piccolinov Date: 27-Apr-2015 05:24:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.293	6.303	-0.010	89	95189	8.00	
* 2 Naphthalene-d8	136	7.495	7.505	-0.010	98	325951	8.00	
* 3 Acenaphthene-d10	164	9.119	9.129	-0.010	91	206698	8.00	
* 4 Phenanthrene-d10	188	10.487	10.508	-0.021	96	370814	8.00	
* 5 Chrysene-d12	240	14.007	14.039	-0.032	96	381585	8.00	
* 6 Perylene-d12	264	16.940	16.993	-0.053	97	380378	8.00	
$ 7 2-Fluorophenol	112	4.979	4.984	-0.005	90	360533	26.2	
$ 8 Phenol-d5	99	5.962	5.961	0.001	86	454376	26.9	
$ 9 Nitrobenzene-d5	82	6.816	6.827	-0.011	91	589090	30.2	
$ 10 2-Fluorobiphenyl	172	8.478	8.488	-0.010	99	1182200	31.2	
$ 11 2,4,6-Tribromophenol	330	9.845	9.856	-0.011	93	155101	33.4	
$ 12 Terphenyl-d14	244	12.249	12.276	-0.027	99	1023107	26.4	
60 Naphthalene	128		7.527				ND	
89 Acenaphthylene	152		9.001				ND	
91 Acenaphthene	153		9.161				ND	
106 Fluorene	166		9.631				ND	
126 Phenanthrene	178		10.529				ND	
128 Anthracene	178		10.577				ND	
137 Fluoranthene	202		11.822				ND	
139 Pyrene	202		12.121				ND	
151 Bis(2-ethylhexyl) phthalat	149	13.938	13.969	-0.031	87	16363	0.6077	
152 Benzo[a]anthracene	228		14.023				ND	
153 Chrysene	228		14.087				ND	
158 Benzo[b]fluoranthene	252		16.181				ND	
159 Benzo[k]fluoranthene	252		16.234				ND	
160 Benzo[a]pyrene	252		16.875				ND	
163 Indeno[1,2,3-cd]pyrene	276		19.231				ND	
164 Dibenz(a,h)anthracene	278		19.263				ND	
165 Benzo[g,h,i]perylene	276		19.835				ND	

Reagents:

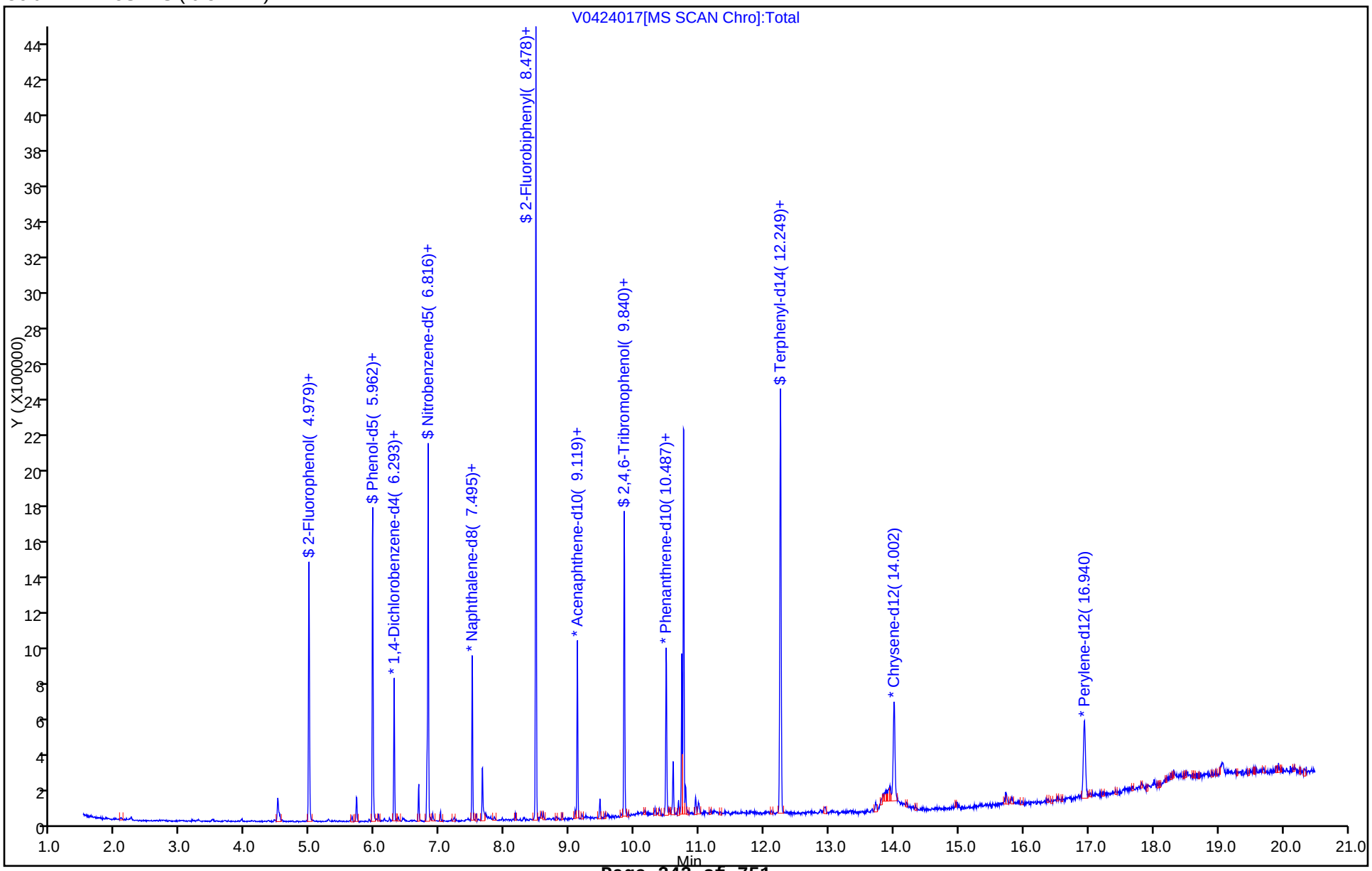
SVTAPITINTRNi_00007 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 27-Apr-2015 05:33:14 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20150424-6616.b\V0424017.D				
Injection Date:	24-Apr-2015 14:27:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	180-43220-A-2-A	Lab Sample ID:	180-43220-2	Worklist Smp#:	17
Client ID:	PW-D02				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-128394/3	V1216003.D
Level 2	IC 180-128394/4	V1216004.D
Level 3	IC 180-128394/5	V1216005.D
Level 4	ICIS 180-128394/6	V1216006.D
Level 5	IC 180-128394/7	V1216007.D
Level 6	IC 180-128394/8	V1216008.D
Level 7	IC 180-128394/9	V1216009.D
Level 8	IC 180-128394/10	V1216010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.4416 0.5185	0.5185 0.5412	0.5446 0.4868	0.5208	0.4923	Ave		0.5080			0.0100	6.6		20.0			
N-Nitrosodimethylamine	0.6770 0.7335	0.6984 0.7308	0.7081 0.7024	0.7271	0.7171	Ave		0.7118			0.0100	2.7		20.0			
Pyridine	1.3047 1.2877	1.3333 1.2478	1.2890 1.2131	1.1278	1.2415	Ave		1.2556			0.0100	5.1		20.0			
Methyl methanesulfonate	1.0828 0.9245	0.8868 0.9609	1.0149 0.8796	0.9060	0.9248	Ave		0.9475			0.0100	7.4		20.0			
Benzaldehyde	0.6298 0.9527	0.7505 0.9305	0.7498 0.7979	0.7879	0.8580	Ave		0.8071			0.0100	13.0		20.0			
Phenol	1.4858 1.7286	1.6138 1.8157	1.7657 1.6332	1.6016	1.7141	Ave		1.6698			0.8000	6.4		20.0			
Aniline	1.5802 1.8639	1.6072 1.9486	1.8940 1.8370	1.7809	1.9118	Ave		1.8030			0.0100	7.7		20.0			
Bis(2-chloroethyl)ether	1.3302 1.0842	1.1368 1.1384	1.1220 1.0321	1.0441	1.0908	Ave		1.1223			0.7000	8.3		20.0			
2-Chlorophenol	0.9958 1.2206	1.0903 1.3278	1.2915 1.1988	1.1579	1.2246	Ave		1.1884			0.8000	9.0		20.0			
n-Decane	1.1076 0.9809	1.0105 1.0661	1.1215 1.0149	0.9551	0.9944	Ave		1.0314				5.9		20.0			
1,3-Dichlorobenzene	1.3320 1.5877	1.5342 1.6265	1.6056 1.4944	1.5897	1.5318	Ave		1.5377			0.0100	6.1		20.0			
1,4-Dichlorobenzene	1.5877 1.5640	1.6405 1.6578	1.6297 1.5294	1.5143	1.6169	Ave		1.5925			0.0100	3.3		20.0			
Benzyl alcohol	0.5493 0.8060	0.7408 0.8865	0.7601 0.8202	0.7642	0.7810	Ave		0.7635			0.0100	13.0		20.0			
1,2-Dichlorobenzene	1.4628 1.4640	1.5499 1.5791	1.6148 1.4227	1.5073	1.4748	Ave		1.5094			0.0100	4.4		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Methylphenol	1.1103 1.2293	1.0246 1.3025	1.2012 1.2156	1.0992	1.1694	Ave		1.1690			0.7000	7.5		20.0			
Indene	1.5930 2.1645	1.8797 2.3917	2.1301 2.1716	2.1047	2.1539	Ave		2.0736			0.0100	12.0		20.0			
2,2'-oxybis[1-chloropropane]	1.1805 1.0657	1.2454 1.1234	1.1147 1.0558	1.0461	1.0914	Ave		1.1154			0.0100	6.1		20.0			
N-Nitrosopyrrolidine	0.3530 0.5303	0.4512 0.5680	0.4552 0.5112	0.5012	0.5265	Ave		0.4870			0.0100	14.0		20.0			
Methylphenol, 3 & 4	1.1152 1.3304	1.2736 1.4238	1.2749 1.3325	1.1789	1.3140	Ave		1.2804			0.6000	7.5		20.0			
N-Nitrosodi-n-propylamine	1.0377 1.1368	1.0558 1.2052	1.0762 1.0999	1.0529	1.1697	Ave		1.1043			0.5000	5.5		20.0			
Acetophenone	1.6165 1.9836	1.8807 2.0880	2.0482 1.9252	2.0129	2.0161	Ave		1.9464			0.0100	7.6		20.0			
Hexachloroethane	0.5973 0.6748	0.7283 0.7284	0.7920 0.6674	0.6576	0.7190	Ave		0.6956			0.3000	8.5		20.0			
Nitrobenzene	0.4628 0.5133	0.5096 0.4850	0.5176 0.4967	0.5172	0.4987	Ave		0.5001			0.2000	3.8		20.0			
Isophorone	0.5856 0.7896	0.6505 0.7996	0.6940 0.8201	0.7636	0.7711	Ave		0.7343			0.4000	11.0		20.0			
2-Nitrophenol	0.1315 0.2065	0.1764 0.2067	0.1727 0.2139	0.1979	0.2014	Ave		0.1884			0.1000	14.0		20.0			
2,4-Dimethylphenol	0.3311 0.4441	0.4006 0.4463	0.4503 0.4449	0.4613	0.4374	Ave		0.4270			0.2000	10.0		20.0			
Benzoic acid	+++++ 0.1852	+++++ 0.1977	0.0977 0.1949	0.1299	0.1570	Lin2	-0.413	0.1917			0.0100				0.9920		0.9900
Bis(2-chloroethoxy)methane	0.3546 0.3929	0.3923 0.4076	0.3944 0.4119	0.4031	0.3836	Ave		0.3925			0.3000	4.5		20.0			
2,4-Dichlorophenol	0.2238 0.3516	0.3173 0.3675	0.3607 0.3682	0.3450	0.3507	Ave		0.3356			0.2000	14.0		20.0			
1,2,4-Trichlorobenzene	0.4762 0.4351	0.4306 0.4498	0.4584 0.4494	0.4512	0.4480	Ave		0.4498			0.0100	3.1		20.0			
Naphthalene	1.1541 1.0762	1.0137 1.1027	1.0991 1.1261	1.0933	1.0553	Ave		1.0901			0.7000	3.9		20.0			
4-Chloroaniline	0.3733 0.4584	0.4414 0.4605	0.4301 0.4781	0.4401	0.4416	Ave		0.4404			0.0100	7.1		20.0			
2,6-Dichlorophenol	0.3027 0.3537	0.3162 0.3530	0.3697 0.3679	0.3467	0.3495	Ave		0.3449			0.0100	6.9		20.0			
Hexachlorobutadiene	0.3028 0.3064	0.3715 0.3079	0.2971 0.3027	0.3142	0.3089	Ave		0.3139			0.0100	7.6		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.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Caprolactam	+++++ 0.1048	0.0561 0.1074	0.0831 0.1128	0.0938	0.0976	Lin2	-0.104	0.1079			0.0100				0.9980		0.9900
4-Chloro-3-methylphenol	0.3142 0.3893	0.3338 0.4029	0.3561 0.3977	0.3792	0.3768	Ave		0.3687			0.2000	8.5		20.0			
2-Methylnaphthalene	0.7079 0.7828	0.7578 0.7987	0.7431 0.8135	0.7834	0.7865	Ave		0.7717			0.4000	4.4		20.0			
1-Methylnaphthalene	0.7439 0.7234	0.6717 0.7467	0.6631 0.7610	0.7290	0.7228	Ave		0.7202			0.0100	4.9		20.0			
Hexachlorocyclopentadiene	0.3963 0.5105	0.4642 0.4968	0.4462 0.5149	0.4873	0.4949	Ave		0.4764			0.0500	8.3		20.0			
1,2,4,5-Tetrachlorobenzene	0.7240 0.6758	0.7181 0.6774	0.7541 0.6632	0.6759	0.7056	Ave		0.6993			0.0100	4.5		20.0			
2,4,6-Trichlorophenol	0.2786 0.4327	0.3543 0.4330	0.3984 0.4413	0.4114	0.4127	Ave		0.3953			0.2000	14.0		20.0			
2,4,5-Trichlorophenol	0.4021 0.4641	0.3864 0.4593	0.4465 0.4670	0.4397	0.4577	Ave		0.4404			0.2000	6.8		20.0			
1,1'-Biphenyl	1.3865 1.3825	1.4692 1.4103	1.5179 1.4526	1.3874	1.3720	Ave		1.4223			0.0100	3.7		20.0			
2-Chloronaphthalene	1.2964 1.1676	1.1524 1.1598	1.2251 1.3046	1.1937	1.2095	Ave		1.2136			0.8000	4.9		20.0			
2-Nitroaniline	+++++ 0.4034	0.3564 0.3923	0.3354 0.3856	0.3818	0.3836	Ave		0.3769			0.0100	6.2		20.0			
Dimethyl phthalate	1.3071 1.3749	1.3292 1.3698	1.3407 1.4024	1.2948	1.3450	Ave		1.3455			0.0100	2.7		20.0			
1,3-Dinitrobenzene	+++++ 0.2250	0.1402 0.2164	0.2085 0.2329	0.2160	0.2190	Ave		0.2083			0.0100	15.0		20.0			
2,6-Dinitrotoluene	0.2047 0.3051	0.2593 0.3000	0.3041 0.3069	0.3027	0.2951	Ave		0.2847			0.2000	13.0		20.0			
Acenaphthylene	1.4587 1.7943	1.6325 1.7841	1.7329 1.8394	1.6563	1.7793	Ave		1.7097			0.9000	7.2		20.0			
3-Nitroaniline	+++++ 0.3049	0.2368 0.3084	0.2765 0.3079	0.2811	0.2970	Ave		0.2875			0.0100	9.0		20.0			
2,4-Dinitrophenol	+++++ 0.2495	0.1078 0.2514	0.1396 0.2582	0.1783	0.2216	Lin1	-0.830	0.2575			0.0100				0.9970		0.9900
Acenaphthene	1.1500 1.1418	1.1731 1.1428	1.2034 1.1704	1.1195	1.1240	Ave		1.1531			0.9000	2.4		20.0			
4-Nitrophenol	+++++ 0.2988	0.2233 0.2886	0.2755 0.2939	0.2644	0.2750	Ave		0.2742			0.0100	9.3		20.0			
2,4-Dinitrotoluene	0.2805 0.4466	0.3725 0.4370	0.3820 0.4528	0.4003	0.4212	Ave		0.3991			0.2000	14.0		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibenzofuran	1.6959 1.8057	1.7802 1.8204	1.8071 1.8379	1.6968	1.7652	Ave		1.7761			0.8000	3.0		20.0			
2,3,5,6-Tetrachlorophenol	+++++ 0.4161	0.3166 0.4129	0.3309 0.4294	0.3796	0.3960	Ave		0.3831			0.0100	11.0		20.0			
2,3,4,6-Tetrachlorophenol	0.2700 0.4054	0.3225 0.4135	0.3748 0.4285	0.3792	0.3884	Ave		0.3728			0.0100	14.0		20.0			
2-Naphthylamine	+++++ 1.1352	0.8457 1.1000	1.0344 1.1418	1.0400	1.0660	Ave		1.0519			0.0100	9.5		20.0			
Diethyl phthalate	1.3092 1.4427	1.3843 1.4359	1.4096 1.4766	1.3615	1.4021	Ave		1.4027			0.0100	3.7		20.0			
Hexadecane	0.3200 0.4367	0.3892 0.4579	0.3885 0.4734	0.3985	0.4193	Ave		0.4104				12.0		20.0			
4-Chlorophenyl phenyl ether	0.7381 0.8372	0.7623 0.8253	0.8590 0.8542	0.7916	0.8033	Ave		0.8089			0.4000	5.4		20.0			
4-Nitroaniline	+++++ 0.3316	0.2523 0.3351	0.2924 0.3343	0.2858	0.3141	Ave		0.3065			0.0100	10.0		20.0			
Fluorene	1.1969 1.3614	1.3027 1.3464	1.3092 1.3995	1.3020	1.3417	Ave		1.3200			0.9000	4.5		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1561	0.0837 0.1625	0.1112 0.1602	0.1449	0.1511	Lin2	-0.325	0.1607			0.0100				0.9990		0.9900
N-Nitrosodiphenylamine	0.4555 0.5343	0.5096 0.5342	0.5315 0.5197	0.5440	0.5186	Ave		0.5184			0.0100	5.3		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.7120 0.7923	0.7911 0.7736	0.8518 0.7390	0.8385	0.7892	Ave		0.7859			0.0100	5.9		20.0			
4-Bromophenyl phenyl ether	0.2230 0.2302	0.1960 0.2259	0.2299 0.2209	0.2253	0.2241	Ave		0.2219			0.1000	4.9		20.0			
Hexachlorobenzene	0.1992 0.2441	0.2522 0.2433	0.2675 0.2326	0.2393	0.2371	Ave		0.2394			0.1000	8.1		20.0			
Atrazine	0.1374 0.2012	0.1462 0.1912	0.1816 0.1883	0.1807	0.1905	Ave		0.1771			0.0100	13.0		20.0			
Pentachlorophenol	0.1227 0.1793	0.1299 0.1773	0.1387 0.1716	0.1518	0.1620	Ave		0.1542			0.0500	14.0		20.0			
n-Octadecane	1.2795 1.6578	1.4681 1.8402	1.4966 +++++	1.4740	1.6443	Ave		1.5515				12.0		20.0			
Phenanthrene	1.0370 1.1234	1.0930 1.1445	1.1102 1.1111	1.1208	1.0894	Ave		1.1037			0.7000	2.9		20.0			
Anthracene	0.9059 1.1728	1.1361 1.1786	1.1220 1.1741	1.1773	1.1461	Ave		1.1266			0.7000	8.1		20.0			
Carbazole	0.7963 1.0331	0.9763 1.0401	0.9974 1.0299	1.0289	1.0012	Ave		0.9879			0.0100	8.1		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Di-n-butyl phthalate	0.8207 1.1906	0.9536 1.2144	1.0688 1.1601	1.1246	1.1543	Ave		1.0859			0.0100	12.0		20.0			
Fluoranthene	1.0224 1.3898	1.2170 1.3570	1.3119 1.3320	1.3136	1.3121	Ave		1.2820			0.6000	9.0		20.0			
Benzidine	+++++ 0.5154	+++++ 0.5062	0.2039 0.4937	0.3005	0.3771	Lin1	-1.604	0.5209			0.0100				0.9940		0.9900
Pyrene	1.0680 1.2533	1.1569 1.2025	1.2288 1.2225	1.2103	1.2144	Ave		1.1946			0.6000	4.9		20.0			
Butyl benzyl phthalate	+++++ 0.4679	0.3398 0.4627	0.3823 0.4645	0.4151	0.4375	Ave		0.4243			0.0100	11.0		20.0			
3,3'-Dichlorobenzidine	+++++ 0.4152	0.2363 0.4087	0.2747 0.4002	0.3283	0.3625	Ave		0.3466			0.0100	20.0		20.0			
Bis(2-ethylhexyl) phthalate	+++++ 0.6461	0.3861 0.6377	0.4876 0.6475	0.5535	0.5934	Ave		0.5645			0.0100	17.0		20.0			
Benzo[a]anthracene	1.0368 1.2115	1.0728 1.1665	1.1731 1.1840	1.1527	1.1222	Ave		1.1400			0.8000	5.2		20.0			
Chrysene	1.0096 1.1622	1.1293 1.1400	1.1170 1.1533	1.0856	1.0902	Ave		1.1109			0.7000	4.4		20.0			
Di-n-octyl phthalate	+++++ 1.1255	0.6189 1.1022	0.7572 1.1305	0.9362	1.0720	Lin2	-1.084	1.1110			0.0100				0.9970		0.9900
7,12-Dimethylbenz(a)anthracene	0.4793 0.5692	0.4902 0.5547	0.5158 0.5423	0.5743	0.5828	Ave		0.5386			0.0100	7.3		20.0			
Benzo[b]fluoranthene	0.8683 1.2421	1.0650 1.2036	1.2696 1.1916	1.2257	1.3468	Ave		1.1766			0.7000	13.0		20.0			
Benzo[k]fluoranthene	1.0765 1.2813	1.2905 1.2873	1.3650 1.2775	1.3776	1.2830	Ave		1.2798			0.7000	7.1		20.0			
Benzo[e]pyrene	0.9625 1.1496	1.1521 1.1421	1.1428 1.1394	1.1721	1.2040	Ave		1.1331			0.0100	6.4		20.0			
Benzo[a]pyrene	0.7783 1.1988	0.9963 1.1844	1.0978 1.1991	1.1584	1.1864	Ave		1.0999			0.7000	13.0		20.0			
Indeno[1,2,3-cd]pyrene	0.8996 1.3614	1.1199 1.3313	1.2094 1.3373	1.2621	1.3247	Ave		1.2307			0.5000	13.0		20.0			
Dibenz(a,h)anthracene	0.7173 1.1660	0.9121 1.1695	1.0450 1.1752	1.0673	1.1472	Ave		1.0500			0.4000	15.0		20.0			
Benzo[g,h,i]perylene	0.9452 1.1688	0.8576 1.1608	1.0599 1.1612	1.1099	1.1513	Ave		1.0768			0.5000	11.0		20.0			
2-Fluorophenol (Surr)	0.9771 1.1781	1.1685 1.2827	1.1647 1.1656	1.0919	1.2063	Ave		1.1544				7.7		20.0			
Phenol-d5 (Surr)	1.1025 1.5084	1.3907 1.5978	1.4185 1.4579	1.3817	1.5076	Ave		1.4206				10.0		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Nitrobenzene-d5 (Surr)	0.3718 0.4934	0.4929 0.4943	0.4686 0.5006	0.4999	0.5061	Ave		0.4784				9.3		20.0			
2-Fluorobiphenyl	1.6071 1.4412	1.4738 1.4488	1.4502 1.4462	1.4329	1.4271	Ave		1.4659				4.0		20.0			
2,4,6-Tribromophenol (Surr)	+++++ 0.1080	0.0701 0.1141	0.0920 0.1151	0.1031	0.0982	Ave		0.1001			0.0100	16.0		20.0			
Terphenyl-d14 (Surr)	0.6840 0.8563	0.7659 0.8404	0.8190 0.8494	0.8590	0.8234	Ave		0.8122				7.4		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-128394/3	V1216003.D
Level 2	IC 180-128394/4	V1216004.D
Level 3	IC 180-128394/5	V1216005.D
Level 4	ICIS 180-128394/6	V1216006.D
Level 5	IC 180-128394/7	V1216007.D
Level 6	IC 180-128394/8	V1216008.D
Level 7	IC 180-128394/9	V1216009.D
Level 8	IC 180-128394/10	V1216010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCB	Ave	3205 321521	16985 490945	34502 653681	89613	155805	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCB	Ave	4914 454855	22880 662888	44861 943143	125105	226926	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCB	Ave	9470 798574	43677 1131883	81665 1628782	194049	392892	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methyl methanesulfonate	DCB	Ave	7859 573342	29050 871678	64300 1181042	155884	292650	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCB	Ave	4571 590795	24586 844039	47503 1071312	135561	271514	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCB	Ave	10784 1071988	52866 1647071	111870 2192881	275563	542434	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCB	Ave	11469 1155895	52650 1767570	119998 2466533	306421	605014	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCB	Ave	9655 672351	37239 1032644	71089 1385827	179638	345190	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCB	Ave	7228 756976	35717 1204472	81827 1609545	199216	387544	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCB	Ave	8039 608286	33104 967043	71054 1362709	164336	314700	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	9668 984601	50258 1475381	101726 2006476	273510	484746	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	11524 969893	53739 1503785	103252 2053443	260540	511679	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCB	Ave	3987 499867	24269 804109	48155 1101222	131486	247139	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	10617 907889	50772 1432450	102309 1910238	259330	466706	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCB	Ave	8059 762348	33563 1181474	76103 1632214	189131	370071	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.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

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	11562 1342332	61576 2169535	134955 2915718	362127	681624	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,2'-oxybis[1-chloropropane]	DCB	Ave	8568 660871	40798 1019003	70626 1417547	179990	345392	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosopyrrolidine	DCB	Ave	2562 328863	14779 515212	28837 686341	86226	166607	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCB	Ave	8094 825060	41720 1291515	80772 1789089	202833	415838	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodi-n-propylamine	DCB	Ave	7532 704975	34586 1093238	68187 1476778	181157	370149	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acetophenone	DCB	Ave	11733 1230093	61608 1894087	129767 2584958	346326	638000	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCB	Ave	4335 418459	23858 660774	50176 896112	113135	227526	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	11360 1123989	58221 1631491	118741 2231060	298745	562270	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	14375 1729042	74316 2689710	159223 3684067	441058	869382	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	3229 452222	20159 695317	39623 960718	114291	227025	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	8128 972323	45772 1501296	103310 1998360	266430	493152	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Lin2	+++++ 405600	+++++ 664913	22406 875487	75017	177008	+++++ 40.0	+++++ 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethoxy)methane	NPT	Ave	8706 860311	44820 1371144	90484 1850147	232827	432445	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dichlorophenol	NPT	Ave	5494 769785	36256 1236000	82755 1653805	199294	395421	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	11690 952650	49197 1513060	105169 2018647	260647	505148	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	28331 2356528	115818 3709182	252154 5058620	631514	1189861	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	9164 1003638	50434 1549005	98670 2147523	254218	497903	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	7430 774471	36130 1187491	84823 1652702	200240	394040	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	7433 670870	42441 1035720	68153 1359593	181496	348300	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Lin2	+++++ 229439	6406 361248	19063 506683	54162	110004	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	7713 852433	38142 1355085	81684 1786377	219039	424853	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.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

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	17377 1713967	86576 2686689	170474 3654225	452528	886708	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1-Methylnaphthalene	NPT	Ave	18262 1584070	76741 2511584	152121 3418471	421066	814980	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	6703 809179	37120 1247976	70769 1725997	202581	402142	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	12246 1071336	57426 1701616	119611 2223080	280973	573312	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	4712 685914	28333 1087681	63199 1479266	171011	335317	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	6801 735763	30901 1153849	70817 1565556	182776	371915	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	23451 2191504	117496 3542644	240763 4869270	576720	1114750	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	21928 1850944	92163 2913304	194324 4373049	496204	982764	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	+++++ 639543	28500 985344	53201 1292456	158731	311692	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	22109 2179576	106297 3440833	212656 4700991	538254	1092840	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dinitrobenzene	ANT	Ave	+++++ 356720	11212 543605	33078 780571	89801	177922	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	3463 483580	20733 753630	48233 1028601	125845	239816	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	24673 2844403	130556 4481496	274874 6165633	688494	1445742	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	+++++ 483265	18937 774740	43863 1031948	116851	241289	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dinitrophenol	ANT	Lin1	+++++ 790945	17247 1262853	44292 1731009	148268	360101	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
Acenaphthene	ANT	Ave	19451 1810004	93815 2870698	190885 3923335	465378	913318	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitrophenol	ANT	Ave	+++++ 947240	35717 1450090	87409 1970605	219778	446932	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
2,4-Dinitrotoluene	ANT	Ave	4745 707924	29789 1097829	60591 1517678	166398	342266	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	28684 2862375	142367 4572895	286648 6160741	705327	1434233	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	+++++ 659542	25321 1037102	52488 1439285	157792	321753	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	4567 642702	25793 1038811	59448 1436493	157615	315620	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.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

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	+++++ 1799572	67636 2763163	164079 3827235	432308	866185	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Diethyl phthalate	ANT	Ave	22144 2287018	110705 3607046	223599 4949520	565946	1139216	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexadecane	NPT	Ave	7855 956234	44467 1540218	89132 2126398	230197	472734	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chlorophenyl phenyl ether	ANT	Ave	12485 1327216	60963 2073062	136255 2863196	329080	652730	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	+++++ 525678	20173 841852	46378 1120631	118797	255222	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	20245 2158160	104176 3382051	207659 4691094	541248	1090154	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Lin2	+++++ 1015498	26172 1672125	68881 2326155	228428	489409	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
N-Nitrosodiphenylamine	PHN	Ave	15035 1738610	79711 2749021	164628 3772553	428689	840102	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	23499 2577925	123747 3981093	263856 5364895	660761	1278422	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	7361 749175	30656 1162368	71215 1603508	177536	362964	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	6574 794149	39457 1252125	82863 1688252	188573	384045	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	4535 654563	22864 984201	56246 1366593	142431	308538	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pentachlorophenol	PHN	Ave	8098 1166936	40626 1825372	85914 2491946	239282	524704	0.800 80.0	4.00 120	8.00 160	20.0	40.0
n-Octadecane	DCB	Ave	9287 1028101	48093 1669234	94817 +++++	253615	520339	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
Phenanthrene	PHN	Ave	34227 3655291	170977 5890284	343892 8065990	883248	1764682	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	29900 3815910	177727 6065710	347546 8523172	927775	1856496	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	26281 3361526	152716 5352839	308974 7476482	810819	1621770	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	27087 3873914	149165 6249894	331091 8421447	886237	1869731	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	33744 4522174	190375 6983880	406378 9669336	1035215	2125350	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Lin1	+++++ 1903010	+++++ 2996861	68775 3963395	260232	687160	+++++ 40.0	+++++ 60.0	4.00 80.0	10.0	20.0
Pyrene	CRY	Ave	36502 4627495	189355 7119320	414401 9813281	1047978	2213108	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.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Butyl benzyl phthalate	CRY	Ave	+++++ 1727562	55615 2739625	128943 3728562	359434	797272	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	+++++ 1533070	38671 2419455	92636 3212343	284306	660669	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	+++++ 2385567	63191 3775397	164441 5197725	479240	1081408	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	35434 4473221	175586 6906260	395623 9504313	998170	2045120	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	34506 4290997	184843 6749199	376710 9258006	940055	1986833	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Lin2	+++++ 3979461	86174 6334210	207894 8926506	673562	1638100	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	13356 2012576	68250 3187692	141607 4281900	413185	890627	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	24197 4391529	148282 6916860	348551 9409469	881803	2058084	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	29999 4530403	179673 7397787	374766 10087447	991075	1960472	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[e]pyrene	PRY	Ave	26822 4064811	160405 6563130	313742 8997048	843246	1839855	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	21688 4238553	138715 6806624	301392 9468112	833377	1812948	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	25070 4813554	155923 7650821	332043 10559433	908000	2024288	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	19990 4122794	126983 6720920	286894 9279384	767859	1753036	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	26339 4132553	119395 6670983	290982 9169214	798468	1759245	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCB	Ave	7092 730568	38278 1163513	73790 1565093	187867	381734	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCB	Ave	8002 935447	45557 1449387	89872 1957432	237733	477076	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	9127 1080312	56312 1662573	107502 2248963	288755	570640	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	27183 2284603	117861 3639456	230039 4847792	595657	1159552	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	+++++ 351558	10964 587339	28512 835535	81284	159040	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	23375 3161567	125355 4975594	276204 6818938	743823	1500595	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.: 180-43220-1 Analy Batch No.: 128394

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2014 04:19 Calibration End Date: 12/16/2014 07:37 Calibration ID: 20641

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Laboratories
Initial Calibration %Drift Report

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m
Instrument: CH731 Lims Location: 180
Lock State: Unlocked Cpnd Order: Compound Type
Integrator: RTE Last Modified: 16-Dec-2014 11:43:01
No.Compounds:209

Initial Calibration Batches

Ical Batch: \\PITCHROM\ChromData\CH731\20141111-4314.b
Inj Date : 11-Nov-2014 03:50:30, Sublist: chrom-BNA_CH731*sub3

Ical Batch: \\PITCHROM\ChromData\CH731\20141216-4887.b
Inj Date : 16-Dec-2014 04:19:30, Sublist: chrom-BNA_CH731*sub4

Limit Group: BNA 8270D ICAL

Detector 1: MS SCAN

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
* 1 1,4-Dichlorobenzene-d4	180592	165364	159846	175730	144492	148850	112823	131726
* 2 Naphthalene-d8	605744	547929	514431	557286	445228	435913	353470	409281
* 3 Acenaphthene-d10	442552	368509	336309	387145	310215	304946	239588	271068
* 4 Phenanthrene-d10	802943	735436	670708	761912	607133	588691	480027	518666
* 5 Chrysene-d12	743578	680215	621744	724526	557323	559298	439398	478459
* 6 Perylene-d12	494639	480801	425560	496565	378668	368087	274905	287883
$ 7 2-Fluorophenol	-15.4	1.2	0.9	-5.4	4.5	2.1	11.1	1.0
$ 8 Phenol-d5	-22.4	-2.1	-0.1	-2.7	6.1	6.2	12.5	2.6
$ 9 Nitrobenzene-d5	-22.3	3.0	-2.1	4.5	5.8	3.1	3.3	4.6
$ 10 2-Fluorobiphenyl	9.6	0.5	-1.1	-2.3	-2.6	-1.7	-1.2	-1.3
$ 11 2,4,6-Tribromophenol	Disabled	-30.0	-8.1	3.0	-1.9	7.9	14.0	15.0
$ 12 Terphenyl-d14	-15.8	-5.7	0.8	5.8	1.4	5.4	3.5	4.6
13 1,4-Dioxane	-13.1	2.1	7.2	2.5	-3.1	2.1	6.5	-4.2
14 N-Nitrosodimethylamine	-4.9	-1.9	-0.5	2.2	0.7	3.0	2.7	-1.3
15 Pyridine	3.9	6.2	2.7	-10.2	-1.1	2.6	-0.6	-3.4
22 Methyl methanesulfonat	14.3	-6.4	7.1	-4.4	-2.4	-2.4	1.4	-7.2
26 Benzaldehyde	-22.0	-7.0	-7.1	-2.4	6.3	18.0	15.3	-1.1
27 Phenol	-11.0	-3.4	5.7	-4.1	2.7	3.5	8.7	-2.2
28 Aniline	-12.4	-10.9	5.1	-1.2	6.0	3.4	8.1	1.9
29 Bis(2-chloroethyl)ethe	18.5	1.3	0.0	-7.0	-2.8	-3.4	1.4	-8.0
31 2-Chlorophenol	-16.2	-8.3	8.7	-2.6	3.0	2.7	11.7	0.9
32 n-Decane	7.4	-2.0	8.7	-7.4	-3.6	-4.9	3.4	-1.6
33 1,3-Dichlorobenzene	-13.4	-0.2	4.4	3.4	-0.4	3.2	5.8	-2.8
34 1,4-Dichlorobenzene	-0.3	3.0	2.3	-4.9	1.5	-1.8	4.1	-4.0
36 Benzyl alcohol	-28.1	-3.0	-0.5	0.1	2.3	5.6	16.1	7.4
37 1,2-Dichlorobenzene	-3.1	2.7	7.0	-0.1	-2.3	-3.0	4.6	-5.7
38 2-Methylphenol	-5.0	-12.4	2.8	-6.0	0.0	5.2	11.4	4.0
39 Indene	-23.2	-9.4	2.7	1.5	3.9	4.4	15.3	4.7
40 2,2'-oxybis[1-chloropr	5.8	11.7	-0.1	-6.2	-2.1	-4.5	0.7	-5.3
41 N-Nitrosopyrrolidine	-27.5	-7.4	-6.5	2.9	8.1	8.9	16.6	5.0
44 N-Nitrosodi-n-propylam	-6.0	-4.4	-2.5	-4.7	5.9	2.9	9.1	-0.4
45 4-Methylphenol	-12.9	-0.5	-0.4	-7.9	2.6	3.9	11.2	4.1
43 Acetophenone	-16.9	-3.4	5.2	3.4	3.6	1.9	7.3	-1.1
47 Hexachloroethane	-14.1	4.7	13.9	-5.5	3.4	-3.0	4.7	-4.1
48 Nitrobenzene	-7.5	1.9	3.5	3.4	-0.3	2.6	-3.0	-0.7
50 Isophorone	-20.2	-11.4	-5.5	4.0	5.0	7.5	8.9	11.7
51 2-Nitrophenol	-30.2	-6.3	-8.3	5.0	6.9	9.6	9.7	13.5
52 2,4-Dimethylphenol	-22.5	-6.2	5.5	8.0	2.4	4.0	4.5	4.2
56 Benzoic acid	Disabled	Disabled	4.9	-10.7	-7.3	2.0	6.7	4.4
55 Bis(2-chloroethoxy)met	-9.7	-0.1	0.5	2.7	-2.3	0.1	3.8	4.9

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
57 2,4-Dichlorophenol	* -33.3	-5.4	7.5	2.8	4.5	4.8	9.5	9.7
59 1,2,4-Trichlorobenzene	5.9	-4.3	1.9	0.3	-0.4	-3.3	0.0	-0.1
60 Naphthalene	5.9	-7.0	0.8	0.3	-3.2	-1.3	1.2	3.3
62 4-Chloroaniline	-15.2	0.2	-2.3	-0.1	0.3	4.1	4.6	8.5
63 2,6-Dichlorophenol	-12.3	-8.3	7.2	0.5	1.3	2.5	2.4	6.7
64 Hexachlorobutadiene	-3.5	18.3	-5.4	0.1	-1.6	-2.4	-1.9	-3.6
67 Caprolactam	Disabled	0.4	1.2	-3.4	-4.7	-0.4	1.2	5.8
70 4-Chloro-3-methylpheno	-14.8	-9.5	-3.4	2.8	2.2	5.6	9.3	7.8
72 2-Methylnaphthalene	-8.3	-1.8	-3.7	1.5	1.9	1.4	3.5	5.4
75 1-Methylnaphthalene	3.3	-6.7	-7.9	1.2	0.4	0.4	3.7	5.7
76 Hexachlorocyclopentadi	-16.8	-2.6	-6.3	2.3	3.9	7.2	4.3	8.1
77 1,2,4,5-Tetrachloroben	3.5	2.7	7.8	-3.3	0.9	-3.4	-3.1	-5.2
78 2,4,6-Trichlorophenol	-29.5	-10.4	0.8	4.1	4.4	9.5	9.5	11.6
79 2,4,5-Trichlorophenol	-8.7	-12.3	1.4	-0.2	3.9	5.4	4.3	6.1
80 1,1'-Biphenyl	-2.5	3.3	6.7	-2.5	-3.5	-2.8	-0.8	2.1
81 2-Chloronaphthalene	6.8	-5.0	0.9	-1.6	-0.3	-3.8	-4.4	7.5
82 2-Nitroaniline	Disabled	-5.5	-11.0	1.3	1.8	7.0	4.1	2.3
86 Dimethyl phthalate	-2.9	-1.2	-0.4	-3.8	0.0	2.2	1.8	4.2
87 1,3-Dinitrobenzene	Disabled	* -32.7	0.1	3.7	5.1	8.0	3.9	11.8
88 2,6-Dinitrotoluene	-28.1	-8.9	6.8	6.3	3.7	7.1	5.4	7.8
89 Acenaphthylene	-14.7	-4.5	1.4	-3.1	4.1	5.0	4.3	7.6
90 3-Nitroaniline	Disabled	-17.6	-3.8	-2.2	3.3	6.0	7.3	7.1
92 2,4-Dinitrophenol	Disabled	22.4	-5.5	-14.6	-5.9	0.9	0.3	2.3
91 Acenaphthene	-0.3	1.7	4.4	-2.9	-2.5	-1.0	-0.9	1.5
93 4-Nitrophenol	Disabled	-18.6	0.5	-3.6	0.3	9.0	5.3	7.2
94 2,4-Dinitrotoluene	-29.7	-6.7	-4.3	0.3	5.5	11.9	9.5	13.4
95 Dibenzofuran	-4.5	0.2	1.7	-4.5	-0.6	1.7	2.5	3.5
97 2,3,5,6-Tetrachlorophe	Disabled	-17.3	-13.6	-0.9	3.4	8.6	7.8	12.1
99 2,3,4,6-Tetrachlorophe	-27.6	-13.5	0.5	1.7	4.2	8.8	10.9	15.0
100 2-Naphthylamine	Disabled	-19.6	-1.7	-1.1	1.3	7.9	4.6	8.5
101 Diethyl phthalate	-6.7	-1.3	0.5	-2.9	0.0	2.8	2.4	5.3
102 Hexadecane	-22.0	-5.2	-5.3	-2.9	2.2	6.4	11.6	15.3
104 4-Chlorophenyl phenyl	-8.7	-5.8	6.2	-2.1	-0.7	3.5	2.0	5.6
105 4-Nitroaniline	Disabled	-17.7	-4.6	-6.8	2.5	8.2	9.3	9.1
106 Fluorene	-9.3	-1.3	-0.8	-1.4	1.6	3.1	2.0	6.0
108 4,6-Dinitro-2-methylph	Disabled	2.7	-5.5	0.3	-0.9	-0.4	2.8	1.0
109 N-Nitrosodiphenylamine	-12.1	-1.7	2.5	4.9	0.0	3.1	3.0	0.2
111 1,2-Diphenylhydrazine	-9.4	0.7	8.4	6.7	0.4	0.8	-1.6	-6.0
116 4-Bromophenyl phenyl e	0.5	-11.7	3.6	1.5	1.0	3.8	1.8	-0.5
118 Hexachlorobenzene	-16.8	5.4	11.7	0.0	-1.0	1.9	1.6	-2.9
119 Atrazine	-22.4	-17.5	2.5	2.0	7.5	13.6	8.0	6.3
122 Pentachlorophenol	-20.4	-15.8	-10.0	-1.5	5.1	16.3	15.0	11.3
121 n-Octadecane	-17.5	-5.4	-3.5	-5.0	6.0	6.9	18.6	Disabled
126 Phenanthrene	-6.0	-1.0	0.6	1.5	-1.3	1.8	3.7	0.7
128 Anthracene	-19.6	0.8	-0.4	4.5	1.7	4.1	4.6	4.2
130 Carbazole	-19.4	-1.2	1.0	4.1	1.3	4.6	5.3	4.3
132 Di-n-butyl phthalate	-24.4	-12.2	-1.6	3.6	6.3	9.6	11.8	6.8
137 Fluoranthene	-20.2	-5.1	2.3	2.5	2.3	8.4	5.9	3.9
138 Benzidine	Disabled	Disabled	16.1	-11.5	-12.2	6.6	2.3	-1.4
139 Pyrene	-10.6	-3.2	2.9	1.3	1.7	4.9	0.7	2.3
144 Butyl benzyl phthalate	Disabled	-19.9	-9.9	-2.2	3.1	10.3	9.1	9.5
149 3,3'-Dichlorobenzidine	Disabled	* -31.8	-20.7	-5.3	4.6	19.8	17.9	15.5
151 Bis(2-ethylhexyl) phth	Disabled	* -31.6	-13.6	-2.0	5.1	14.4	13.0	14.7
152 Benzo[a]anthracene	-9.0	-5.9	2.9	1.1	-1.6	6.3	2.3	3.9
153 Chrysene	-9.1	1.7	0.5	-2.3	-1.9	4.6	2.6	3.8
156 Di-n-octyl phthalate	Disabled	4.5	-7.5	-6.0	1.4	3.7	0.8	3.0
157 7,12-Dimethylbenz(a)an	-11.0	-9.0	-4.2	6.6	8.2	5.7	3.0	0.7
158 Benzo[b]fluoranthene	-26.2	-9.5	7.9	4.2	14.5	5.6	2.3	1.3
159 Benzo[k]fluoranthene	-15.9	0.8	6.7	7.6	0.2	0.1	0.6	-0.2
176 Benzo[e]pyrene	-15.1	1.7	0.9	3.4	6.3	1.5	0.8	0.6

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
160 Benzo[a]pyrene	-29.2	-9.4	-0.2	5.3	7.9	9.0	7.7	9.0
163 Indeno[1,2,3-cd]pyrene	-26.9	-9.0	-1.7	2.6	7.6	10.6	8.2	8.7
164 Dibenz(a,h)anthracene	* -31.7	-13.1	-0.5	1.7	9.3	11.1	11.4	11.9
165 Benzo[g,h,i]perylene	-12.2	-20.4	-1.6	3.1	6.9	8.5	7.8	7.8

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Dec-2014 04:19:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004887-003
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 16-Dec-2014 09:20:50 Calib Date: 16-Dec-2014 07:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: piccolinov Date: 16-Dec-2014 06:51:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.307	6.307	0.000	92	145163	8.00	8.00	
* 2 Naphthalene-d8	136	7.519	7.519	0.000	98	490965	8.00	8.00	
* 3 Acenaphthene-d10	164	9.149	9.149	0.000	93	338284	8.00	8.00	
* 4 Phenanthrene-d10	188	10.522	10.522	0.000	97	660095	8.00	8.00	
* 5 Chrysene-d12	240	14.064	14.064	0.000	96	683527	8.00	8.00	
* 6 Perylene-d12	264	16.996	16.996	0.000	98	557346	8.00	8.00	
$ 7 2-Fluorophenol	112	4.939	4.939	0.000	86	7092	0.4000	0.3386	
$ 8 Phenol-d5	99	5.949	5.949	0.000	65	8002	0.4000	0.3104	
$ 9 Nitrobenzene-d5	82	6.836	6.836	0.000	88	9127	0.4000	0.3108	
$ 10 2-Fluorobiphenyl	172	8.508	8.508	0.000	97	27183	0.4000	0.4385	
$ 11 2,4,6-Tribromophenol	330	9.870	9.870	0.000	68	2095	0.4000	0.2536	
$ 12 Terphenyl-d14	244	12.311	12.311	0.000	96	23375	0.4000	0.3369	
13 1,4-Dioxane	88	1.809	1.809	0.000	0	3205	0.4000	0.3477	M
14 N-Nitrosodimethylamine	74	2.503	2.503	0.000	44	4914	0.4000	0.3805	M
15 Pyridine	79	2.631	2.631	0.000	45	9470	0.4000	0.4156	M
22 Methyl methanesulfonate	80	4.720	4.720	0.000	21	7859	0.4000	0.4571	
26 Benzaldehyde	77	5.863	5.863	0.000	87	4571	0.4000	0.3121	
27 Phenol	94	5.960	5.960	0.000	90	10784	0.4000	0.3559	
28 Aniline	93	5.976	5.976	0.000	89	11469	0.4000	0.3506	
29 Bis(2-chloroethyl)ether	93	6.040	6.040	0.000	89	9655	0.4000	0.4741	
31 2-Chlorophenol	128	6.104	6.104	0.000	89	7228	0.4000	0.3352	
32 n-Decane	43	6.157	6.157	0.000	79	8039	0.4000	0.4296	
33 1,3-Dichlorobenzene	146	6.253	6.253	0.000	91	9668	0.4000	0.3465	
34 1,4-Dichlorobenzene	146	6.323	6.323	0.000	89	11524	0.4000	0.3988	
36 Benzyl alcohol	108	6.435	6.435	0.000	79	3987	0.4000	0.2878	
37 1,2-Dichlorobenzene	146	6.478	6.478	0.000	85	10617	0.4000	0.3876	
38 2-Methylphenol	108	6.542	6.542	0.000	81	8059	0.4000	0.3799	
39 Indene	116	6.558	6.558	0.000	78	11562	0.4000	0.3073	
40 2,2'-oxybis[1-chloropropan	45	6.569	6.569	0.000	39	8568	0.4000	0.4233	
41 N-Nitrosopyrrolidine	100	6.654	6.654	0.000	23	2562	0.4000	0.2899	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 N-Nitrosodi-n-propylamine	70	6.686	6.686	0.000	66	7532	0.4000	0.3759	
45 4-Methylphenol	108	6.686	6.686	0.000	57	8094	0.4000	0.3484	
43 Acetophenone	105	6.691	6.691	0.000	72	11733	0.4000	0.3322	
47 Hexachloroethane	117	6.804	6.804	0.000	81	4335	0.4000	0.3435	
48 Nitrobenzene	77	6.852	6.852	0.000	82	11360	0.4000	0.3701	
50 Isophorone	82	7.076	7.076	0.000	96	14375	0.4000	0.3190	
51 2-Nitrophenol	139	7.162	7.162	0.000	14	3229	0.4000	0.2793	
52 2,4-Dimethylphenol	107	7.188	7.188	0.000	89	8128	0.4000	0.3102	
56 Benzoic acid	122	7.204	7.204	0.000	1	1786	0.4000	2.31	
55 Bis(2-chloroethoxy)methane	93	7.268	7.268	0.000	97	8706	0.4000	0.3614	
57 2,4-Dichlorophenol	162	7.386	7.386	0.000	84	5494	0.4000	0.2668	
61 Azobenzene	77		7.466				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.466	7.466	0.000	88	11690	0.4000	0.4234	
60 Naphthalene	128	7.541	7.541	0.000	96	28331	0.4000	0.4235	
62 4-Chloroaniline	127	7.573	7.573	0.000	89	9164	0.4000	0.3390	
63 2,6-Dichlorophenol	162	7.594	7.594	0.000	82	7430	0.4000	0.3510	
64 Hexachlorobutadiene	225	7.658	7.658	0.000	85	7433	0.4000	0.3858	
67 Caprolactam	113	7.856	7.856	0.000	25	776	0.4000	1.09	
70 4-Chloro-3-methylphenol	107	8.011	8.011	0.000	91	7713	0.4000	0.3408	
72 2-Methylnaphthalene	142	8.182	8.182	0.000	86	17377	0.4000	0.3669	
75 1-Methylnaphthalene	142	8.273	8.273	0.000	95	18262	0.4000	0.4132	
76 Hexachlorocyclopentadiene	237	8.331	8.331	0.000	80	6703	0.4000	0.3328	
77 1,2,4,5-Tetrachlorobenzene	216	8.337	8.337	0.000	94	12246	0.4000	0.4142	
78 2,4,6-Trichlorophenol	196	8.433	8.433	0.000	84	4712	0.4000	0.2819	
79 2,4,5-Trichlorophenol	196	8.465	8.465	0.000	86	6801	0.4000	0.3652	
80 1,1'-Biphenyl	154	8.599	8.599	0.000	96	23451	0.4000	0.3899	
81 2-Chloronaphthalene	162	8.631	8.631	0.000	89	21928	0.4000	0.4273	
82 2-Nitroaniline	65	8.711	8.711	0.000	89	3388	0.4000	0.2126	
86 Dimethyl phthalate	163	8.855	8.855	0.000	95	22109	0.4000	0.3886	
87 1,3-Dinitrobenzene	168	8.892	8.892	0.000	41	2393	0.4000	0.2717	
88 2,6-Dinitrotoluene	165	8.919	8.919	0.000	80	3463	0.4000	0.2876	
89 Acenaphthylene	152	9.021	9.021	0.000	96	24673	0.4000	0.3413	
90 3-Nitroaniline	138	9.085	9.085	0.000	74	1737	0.4000	0.1429	M
92 2,4-Dinitrophenol	184	9.176	9.176	0.000	60	2081	0.8000	3.41	
91 Acenaphthene	153	9.176	9.176	0.000	92	19451	0.4000	0.3989	
93 4-Nitrophenol	109	9.208	9.208	0.000	81	4043	0.8000	0.3487	
94 2,4-Dinitrotoluene	165	9.293	9.293	0.000	12	4745	0.4000	0.2812	
95 Dibenzofuran	168	9.330	9.330	0.000	92	28684	0.4000	0.3819	
97 2,3,5,6-Tetrachlorophenol	232	9.405	9.405	0.000	82	3694	0.4000	0.2281	
99 2,3,4,6-Tetrachlorophenol	232	9.437	9.437	0.000	66	4567	0.4000	0.2897	M
100 2-Naphthylamine	143	9.469	9.469	0.000	88	11732	0.4000	0.2638	
101 Diethyl phthalate	149	9.496	9.496	0.000	96	22144	0.4000	0.3733	
102 Hexadecane	57	9.501	9.501	0.000	61	7855	0.4000	0.3118	
104 4-Chlorophenyl phenyl ethe	204	9.630	9.630	0.000	88	12485	0.4000	0.3650	
105 4-Nitroaniline	138	9.640	9.640	0.000	43	2867	0.4000	0.2212	
106 Fluorene	166	9.651	9.651	0.000	93	20245	0.4000	0.3627	
108 4,6-Dinitro-2-methylphenol	198	9.678	9.678	0.000	8	4553	0.8000	2.37	
109 N-Nitrosodiphenylamine	169	9.731	9.731	0.000	64	15035	0.4000	0.3515	
111 1,2-Diphenylhydrazine	77	9.774	9.774	0.000	97	23499	0.4000	0.3624	
116 4-Bromophenyl phenyl ether	248	10.084	10.084	0.000	65	7361	0.4000	0.4020	
118 Hexachlorobenzene	284	10.169	10.169	0.000	86	6574	0.4000	0.3328	
119 Atrazine	200	10.201	10.201	0.000	80	4535	0.4000	0.3103	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.340	10.340	0.000	74	8098	0.8000	0.6366	
121 n-Octadecane	57	10.345	10.345	0.000	86	9287	0.4000	0.3299	
126 Phenanthrene	178	10.548	10.548	0.000	95	34227	0.4000	0.3758	
128 Anthracene	178	10.597	10.597	0.000	96	29900	0.4000	0.3216	
130 Carbazole	167	10.735	10.735	0.000	96	26281	0.4000	0.3224	
132 Di-n-butyl phthalate	149	11.029	11.029	0.000	98	27087	0.4000	0.3023	
137 Fluoranthene	202	11.847	11.847	0.000	94	33744	0.4000	0.3190	
138 Benzidine	184	11.964	11.964	0.000	1	3717	0.4000	3.16	
139 Pyrene	202	12.151	12.151	0.000	97	36502	0.4000	0.3576	
144 Butyl benzyl phthalate	149	13.000	13.000	0.000	88	8460	0.4000	0.2334	
149 3,3'-Dichlorobenzidine	252	13.957	13.957	0.000	1	6317	0.4000	0.2133	
151 Bis(2-ethylhexyl) phthalat	149	14.005	14.005	0.000	0	9781	0.4000	0.2028	M
152 Benzo[a]anthracene	228	14.042	14.042	0.000	47	35434	0.4000	0.3638	
153 Chrysene	228	14.112	14.112	0.000	30	34506	0.4000	0.3635	
156 Di-n-octyl phthalate	149	15.308	15.308	0.000	0	13778	0.4000	1.15	M
157 7,12-Dimethylbenz(a)anthra	256	16.168	16.168	0.000	83	13356	0.4000	0.3560	M
158 Benzo[b]fluoranthene	252	16.184	16.184	0.000	81	24197	0.4000	0.2952	M
159 Benzo[k]fluoranthene	252	16.238	16.238	0.000	36	29999	0.4000	0.3364	M
176 Benzo[e]pyrene	252	16.772	16.772	0.000	0	26822	0.4000	0.3398	M
160 Benzo[a]pyrene	252	16.890	16.890	0.000	15	21688	0.4000	0.2830	M
163 Indeno[1,2,3-cd]pyrene	276	19.224	19.224	0.000	0	25070	0.4000	0.2924	M
164 Dibenz(a,h)anthracene	278	19.251	19.251	0.000	0	19990	0.4000	0.2733	M
165 Benzo[g,h,i]perylene	276	19.828	19.828	0.000	0	26339	0.4000	0.3511	M
S 206 Total Cresols	108				0		0.8000	0.7283	
S 208 Methyl Phenols,Total	108				0		0.8000	0.7283	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD0.4i_00007 Amount Added: 1.00 Units: mL

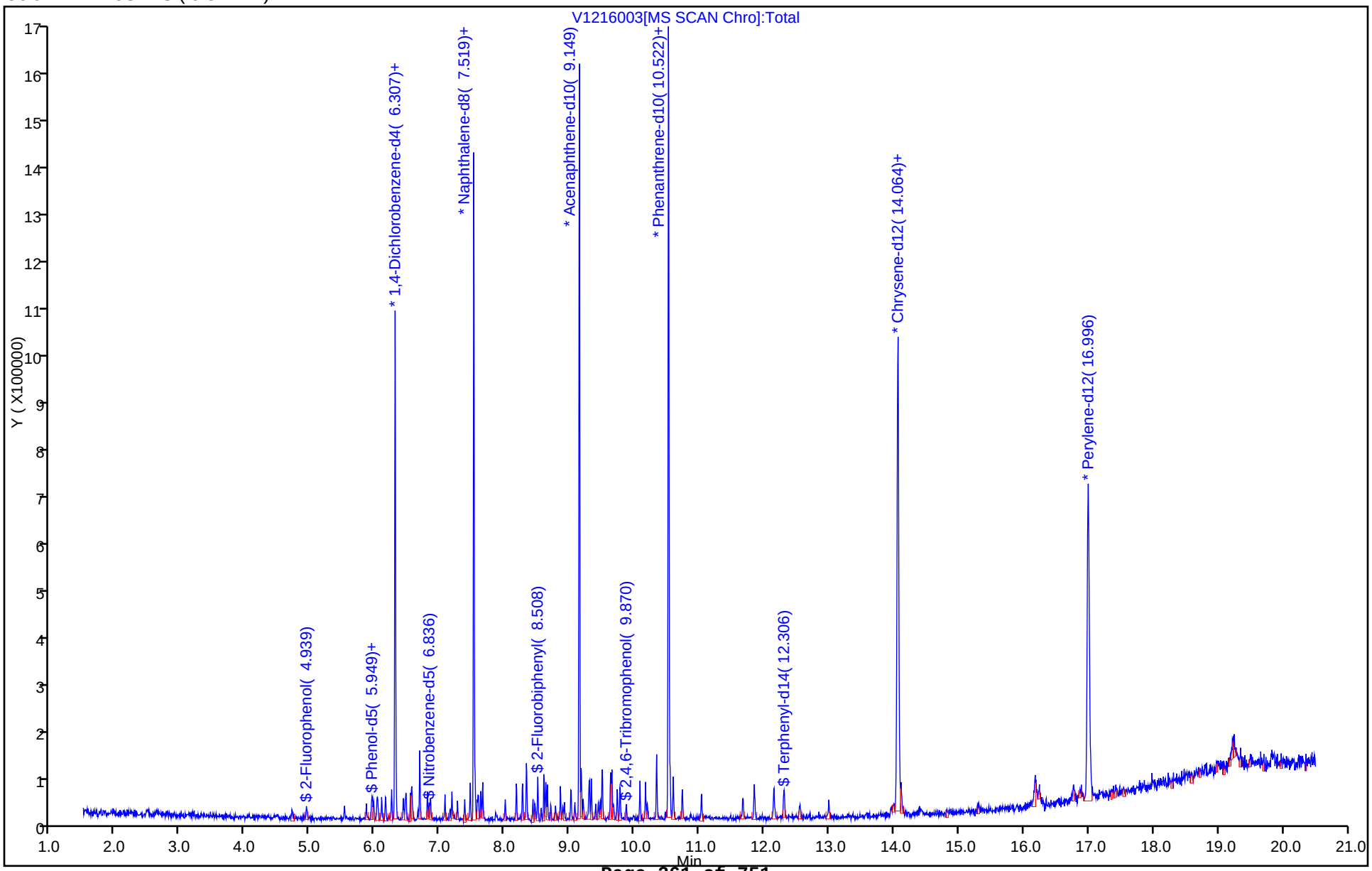
Report Date: 16-Dec-2014 09:20:50 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D

Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

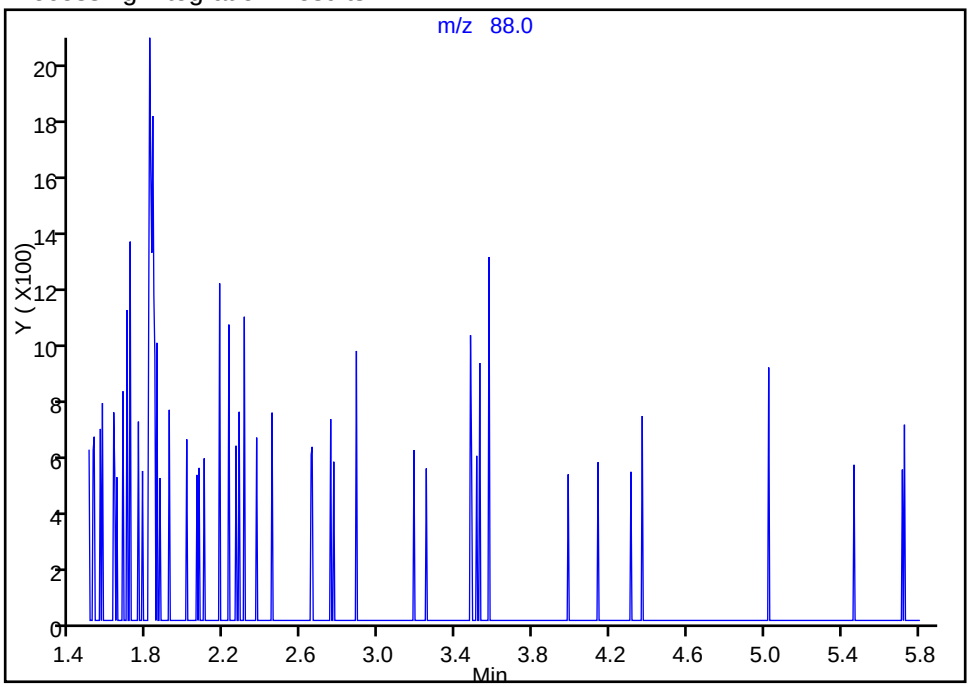
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

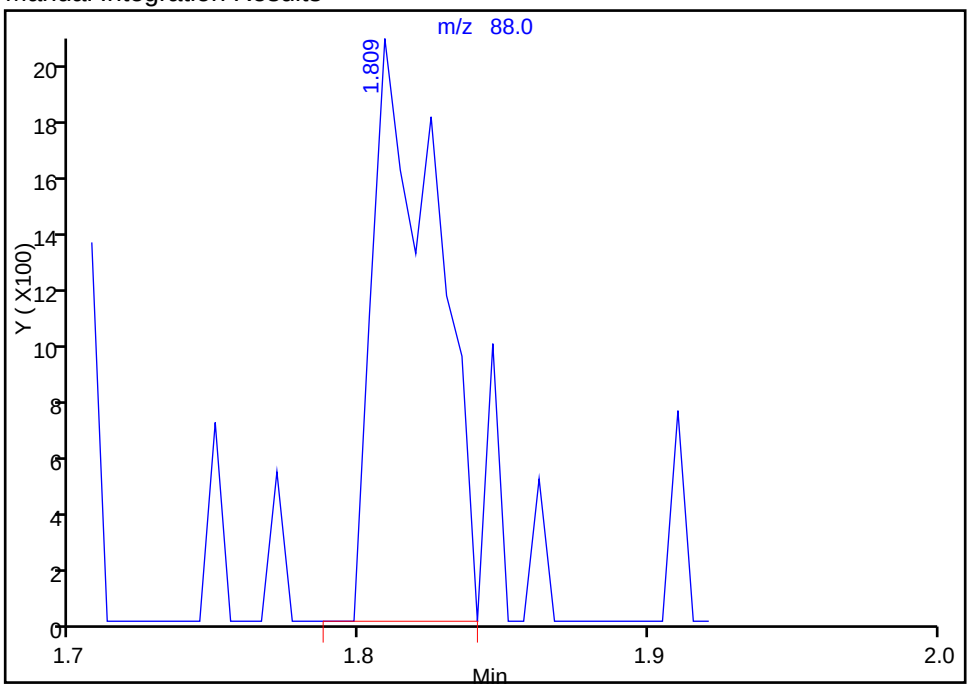
Not Detected
Expected RT: 1.81

Processing Integration Results



Manual Integration Results

RT: 1.81
Response: 3205
Amount: 0.347666



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

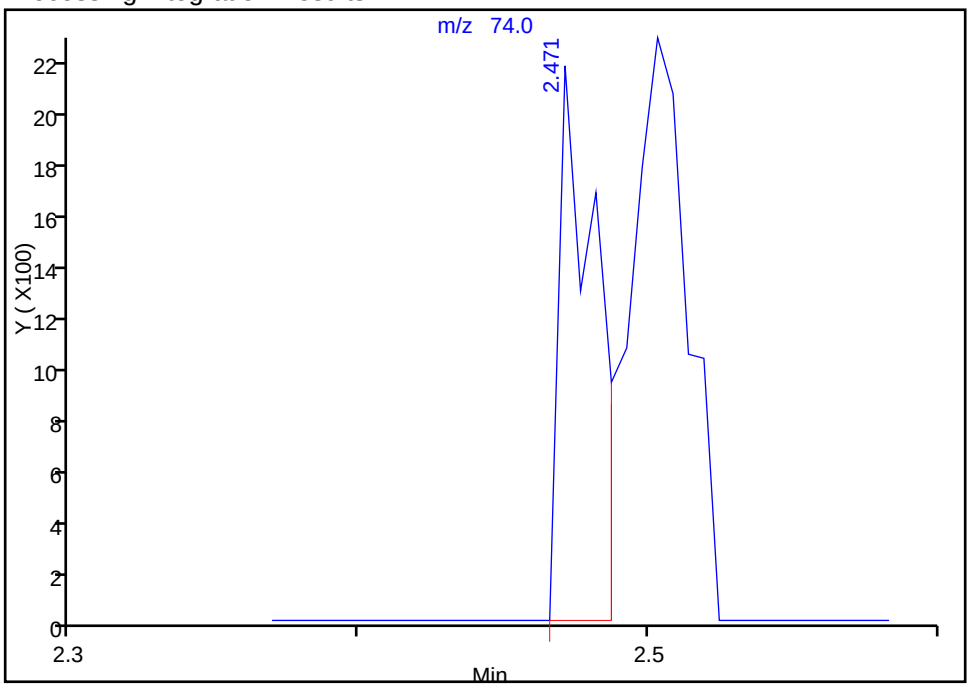
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

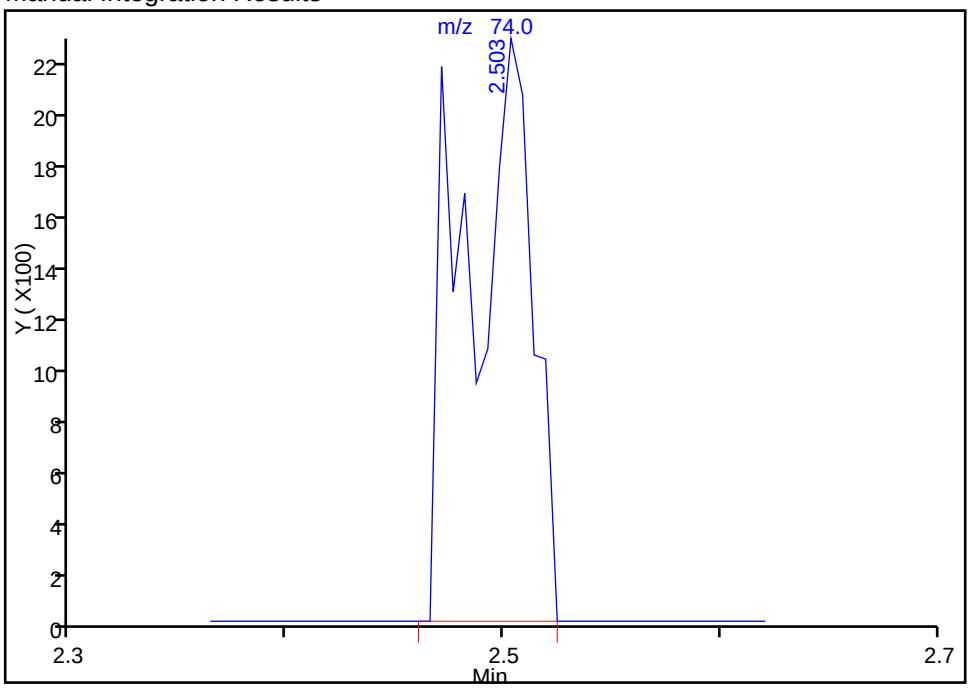
Processing Integration Results

RT: 2.47
Response: 1946
Amount: 0.394264



Manual Integration Results

RT: 2.50
Response: 4914
Amount: 0.380461



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

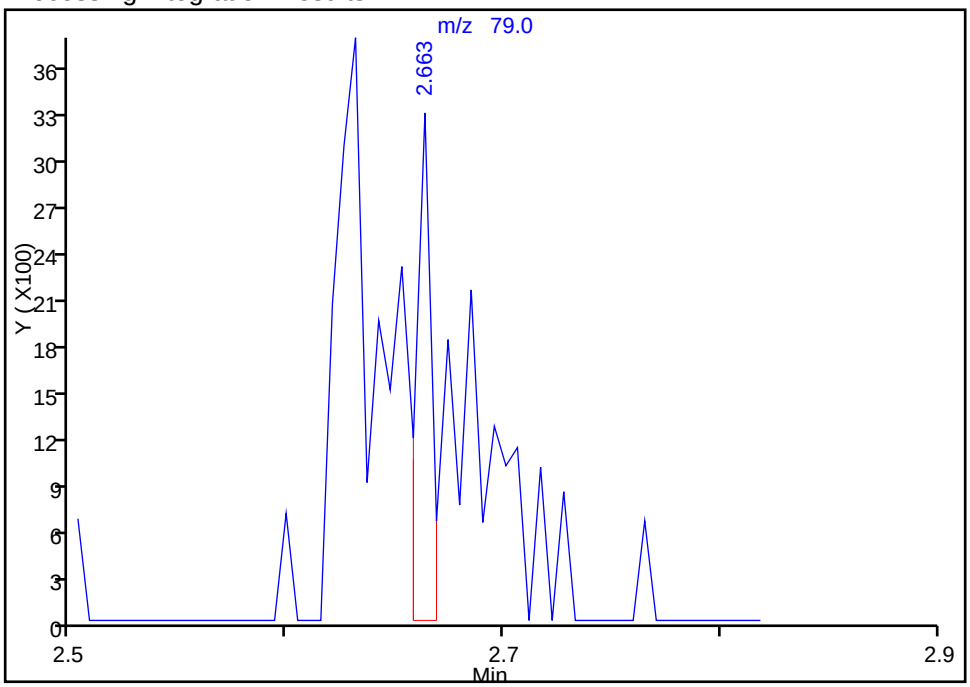
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

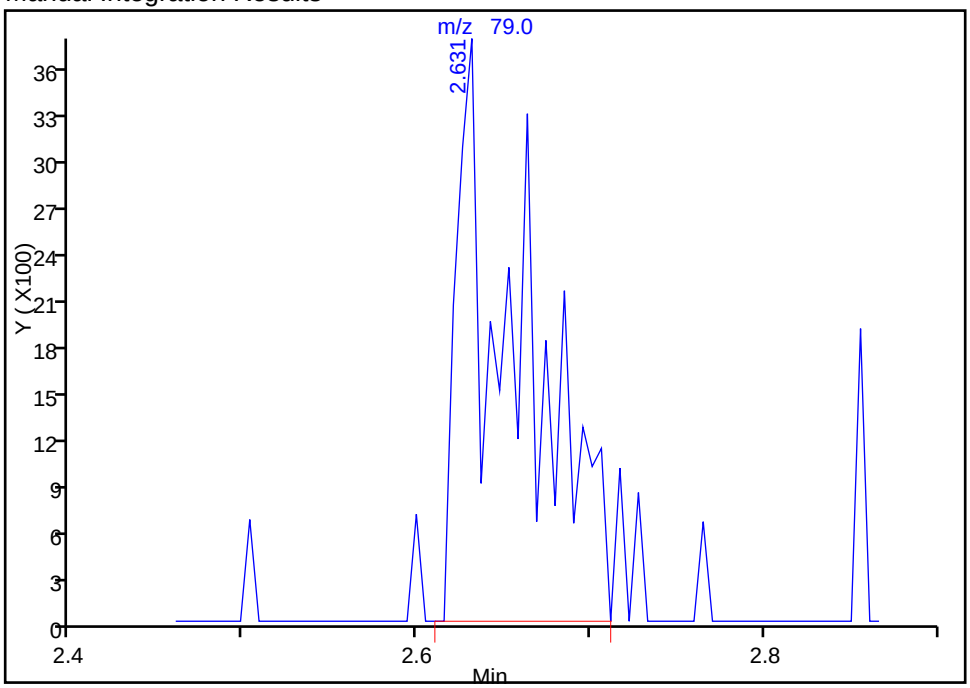
Processing Integration Results

RT: 2.66
Response: 1649
Amount: 0.076111



Manual Integration Results

RT: 2.63
Response: 9470
Amount: 0.415647



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

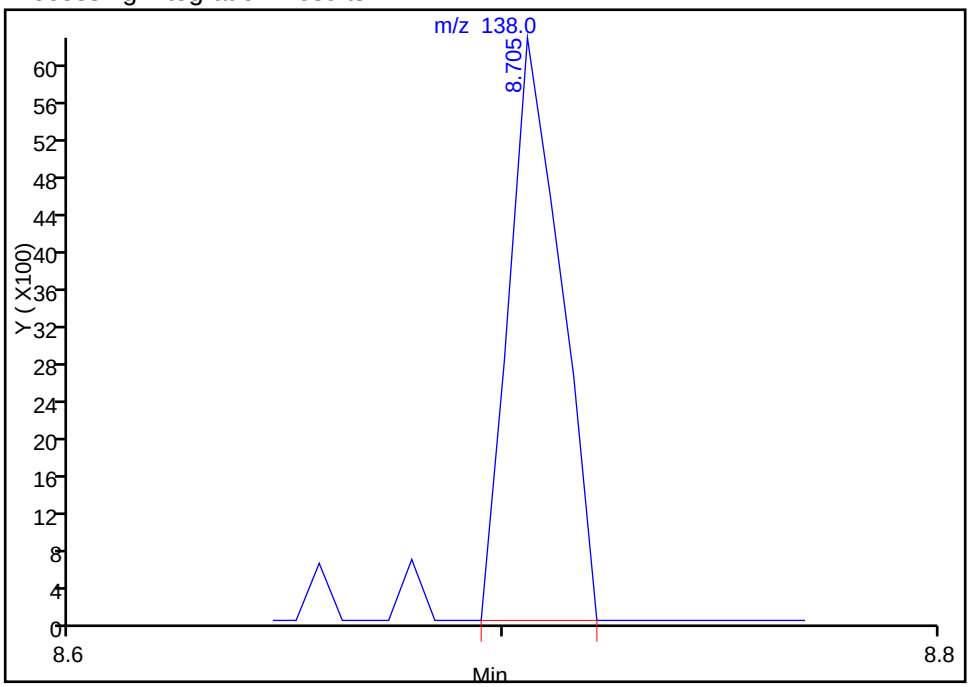
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

90 3-Nitroaniline, CAS: 99-09-2

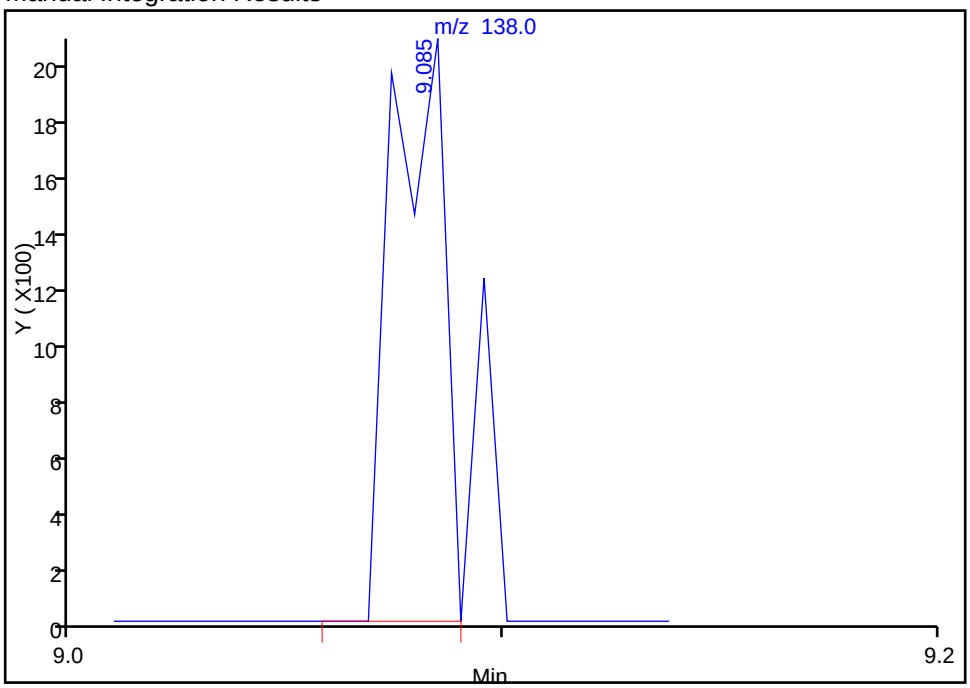
Processing Integration Results

RT: 8.71
Response: 5213
Amount: 0.474392



Manual Integration Results

RT: 9.08
Response: 1737
Amount: 0.142878



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

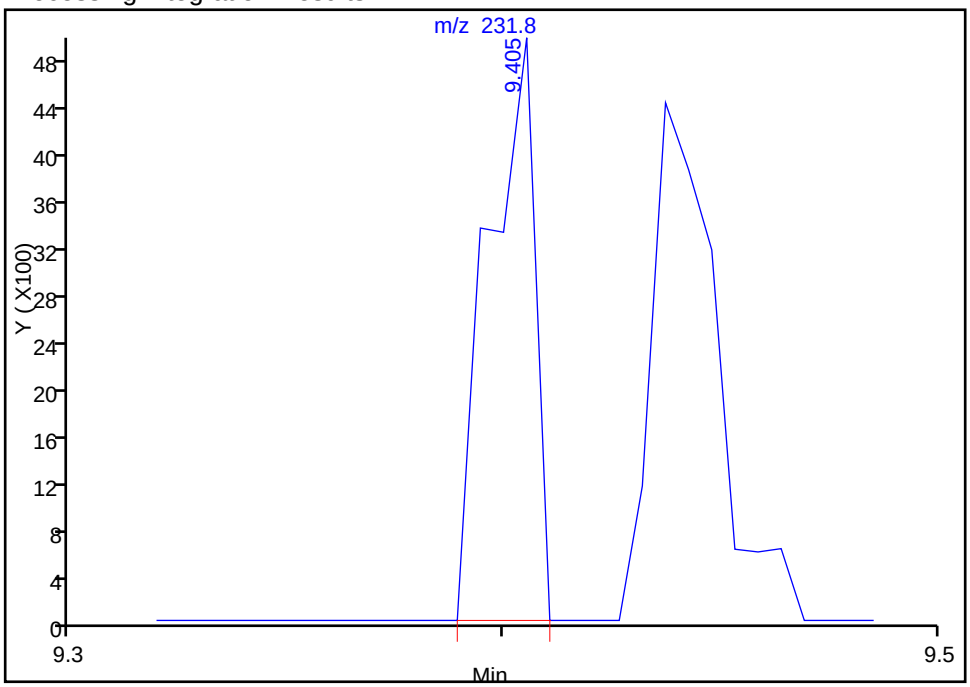
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

99 2,3,4,6-Tetrachlorophenol, CAS: 58-90-2

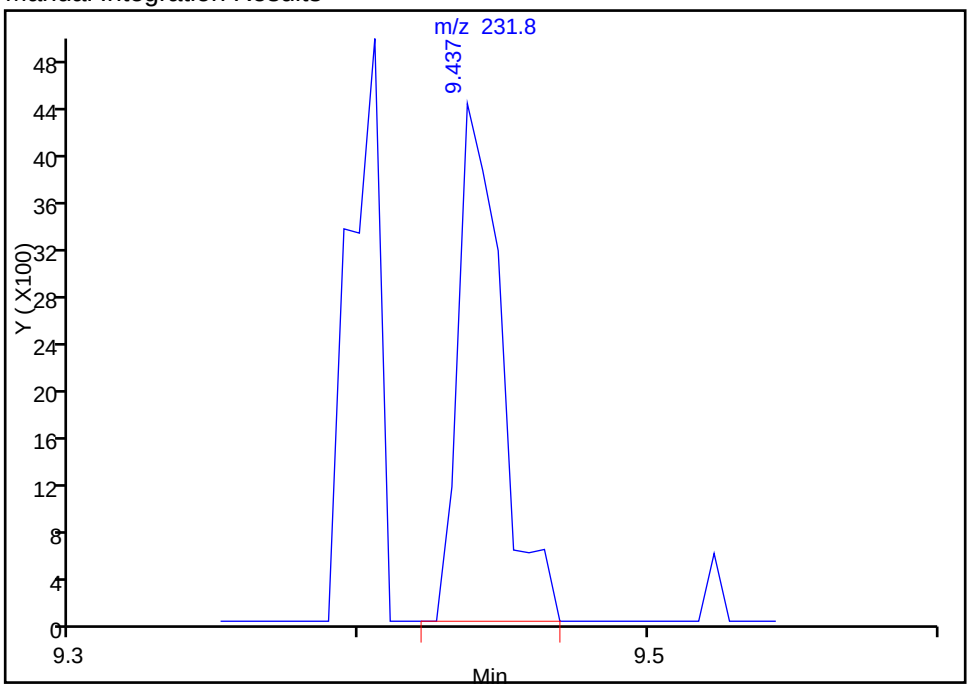
Processing Integration Results

RT: 9.41
Response: 3694
Amount: 0.199984



Manual Integration Results

RT: 9.44
Response: 4567
Amount: 0.289706



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

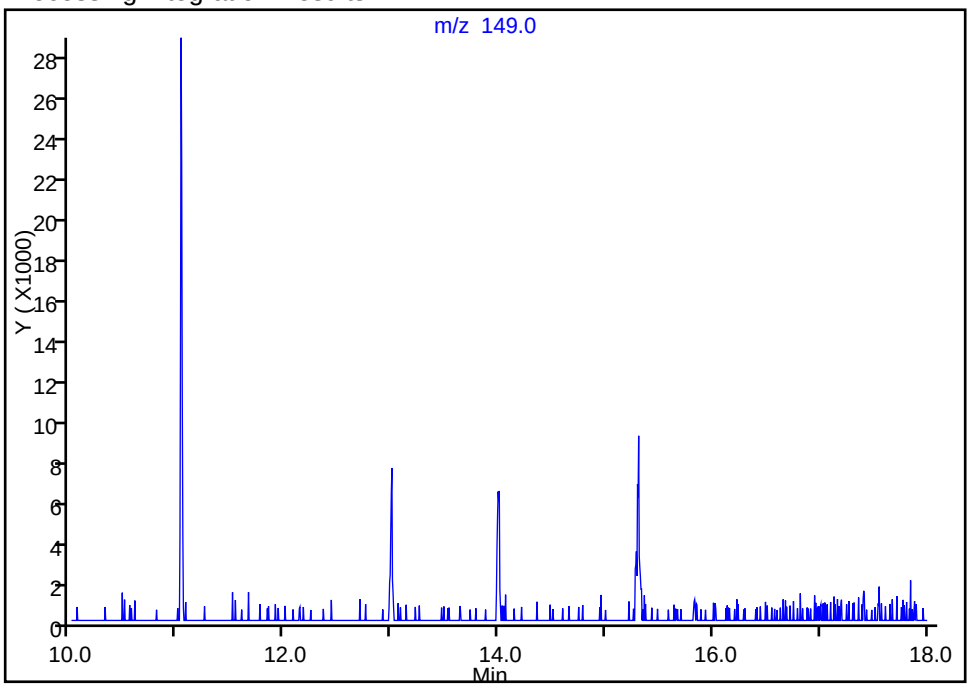
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

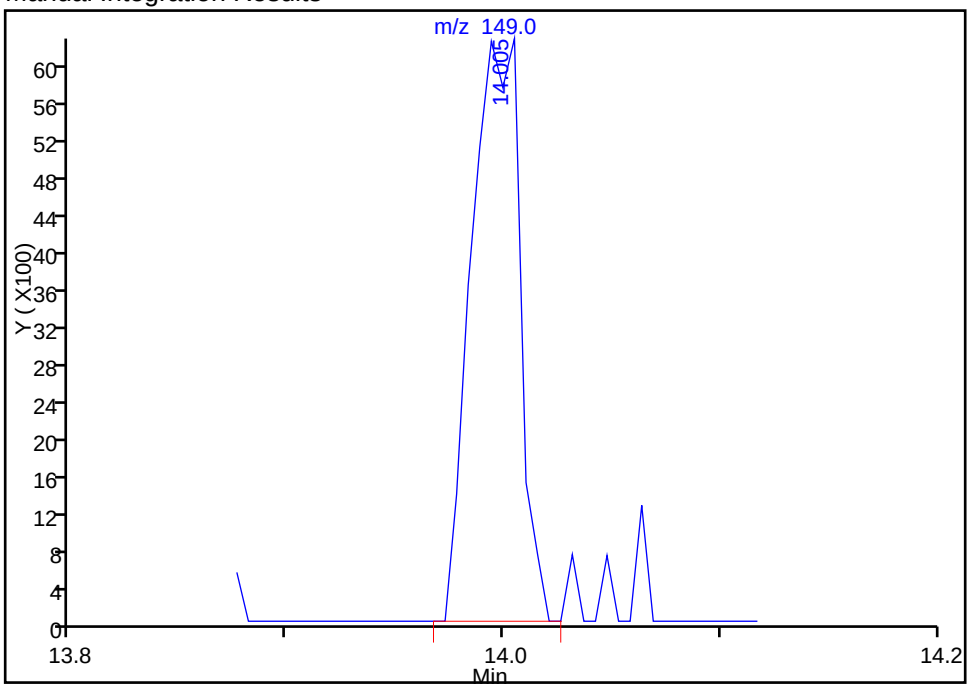
Not Detected
Expected RT: 14.00

Processing Integration Results



Manual Integration Results

RT: 14.00
Response: 9781
Amount: 0.202777



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

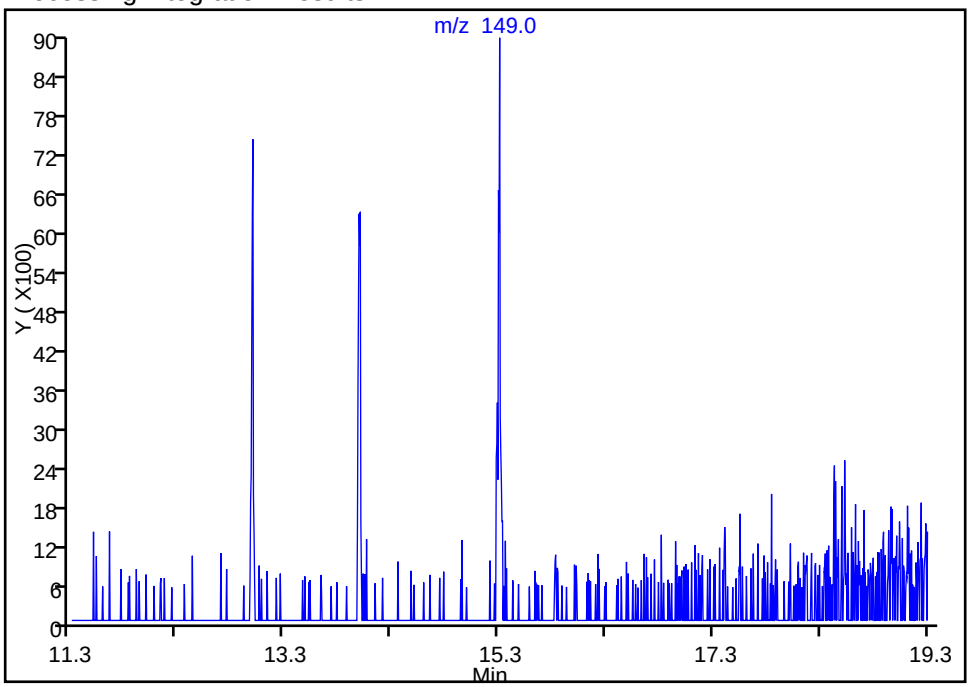
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

156 Di-n-octyl phthalate, CAS: 117-84-0

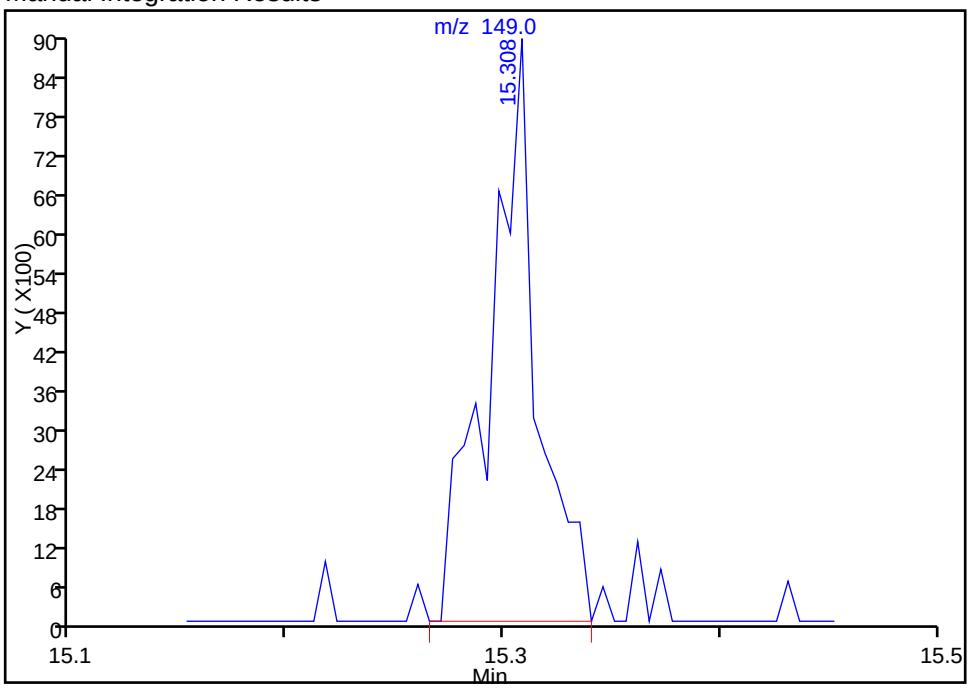
Not Detected
Expected RT: 15.31

Processing Integration Results



Manual Integration Results

RT: 15.31
Response: 13778
Amount: 1.153647



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

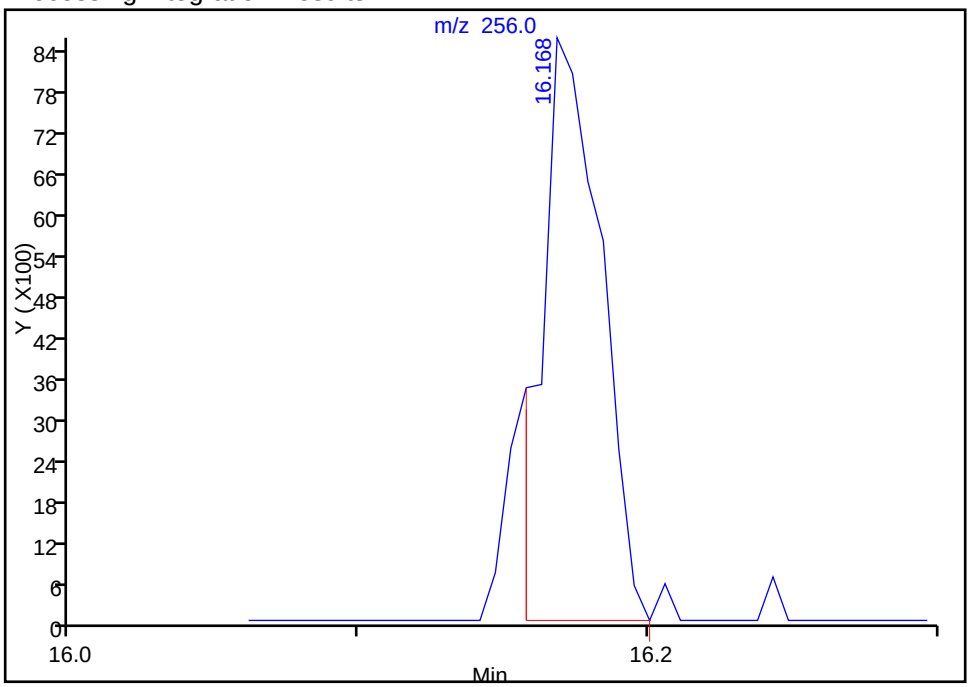
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

157 7,12-Dimethylbenz(a)anthracene, CAS: 57-97-6

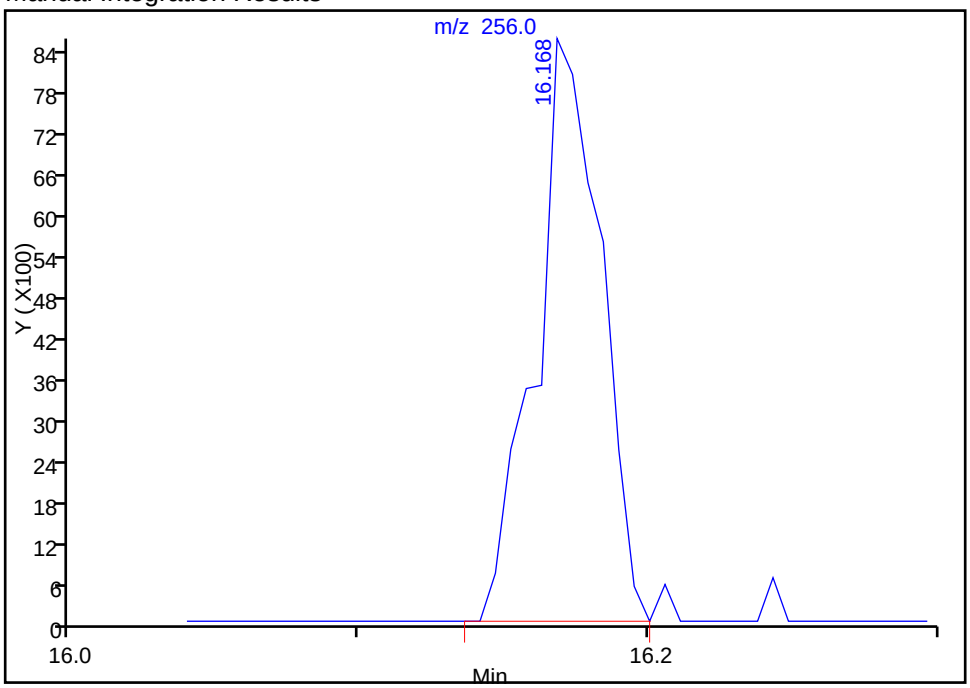
Processing Integration Results

RT: 16.17
Response: 12322
Amount: 0.324896



Manual Integration Results

RT: 16.17
Response: 13356
Amount: 0.355954



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

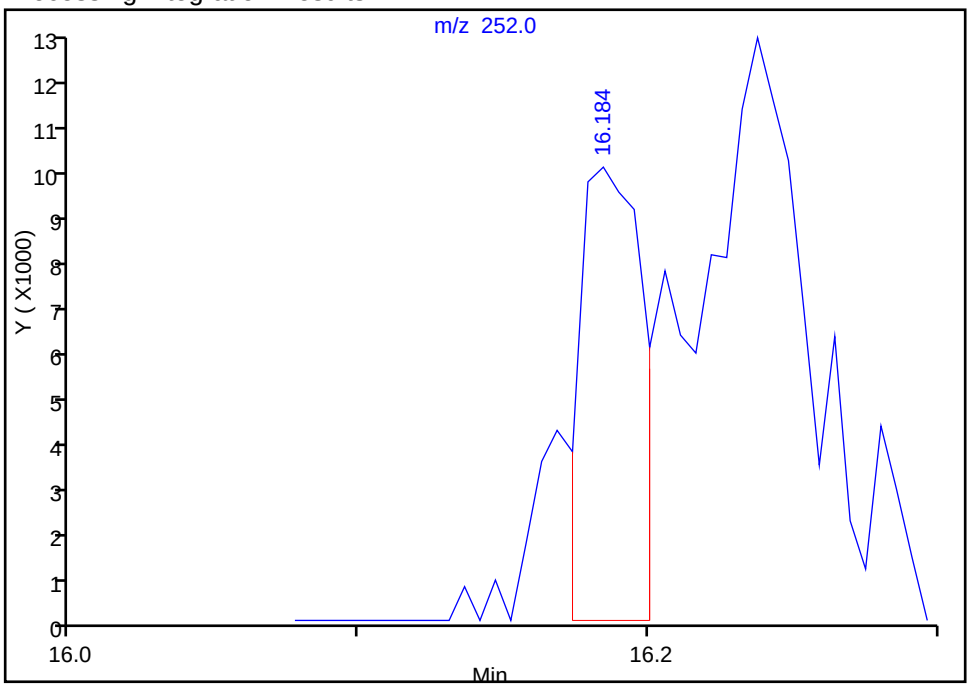
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

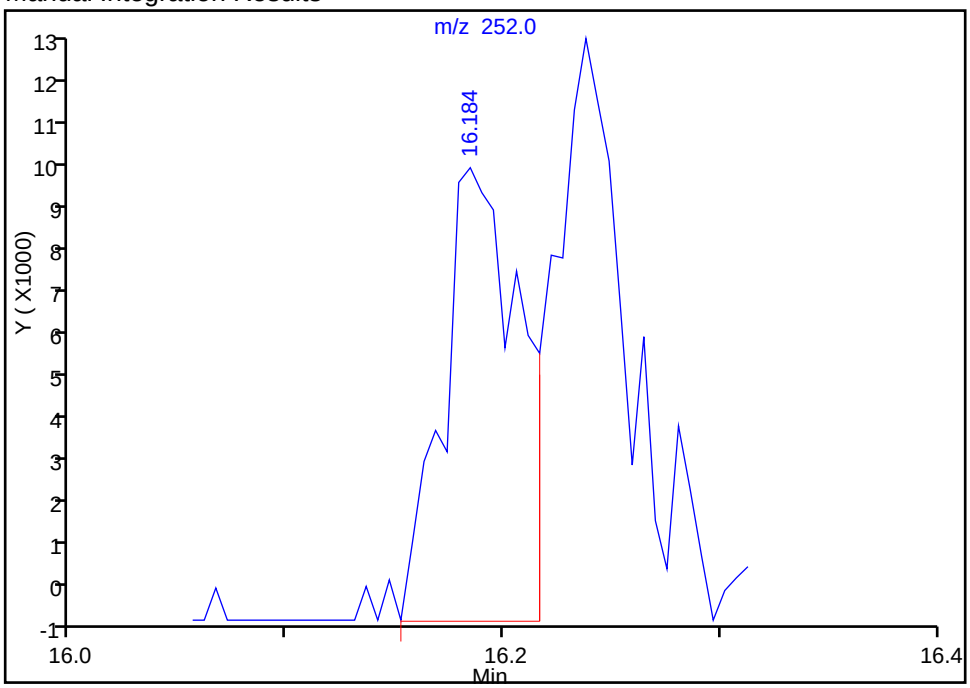
Processing Integration Results

RT: 16.18
Response: 14959
Amount: 0.396180



Manual Integration Results

RT: 16.18
Response: 24197
Amount: 0.295189



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

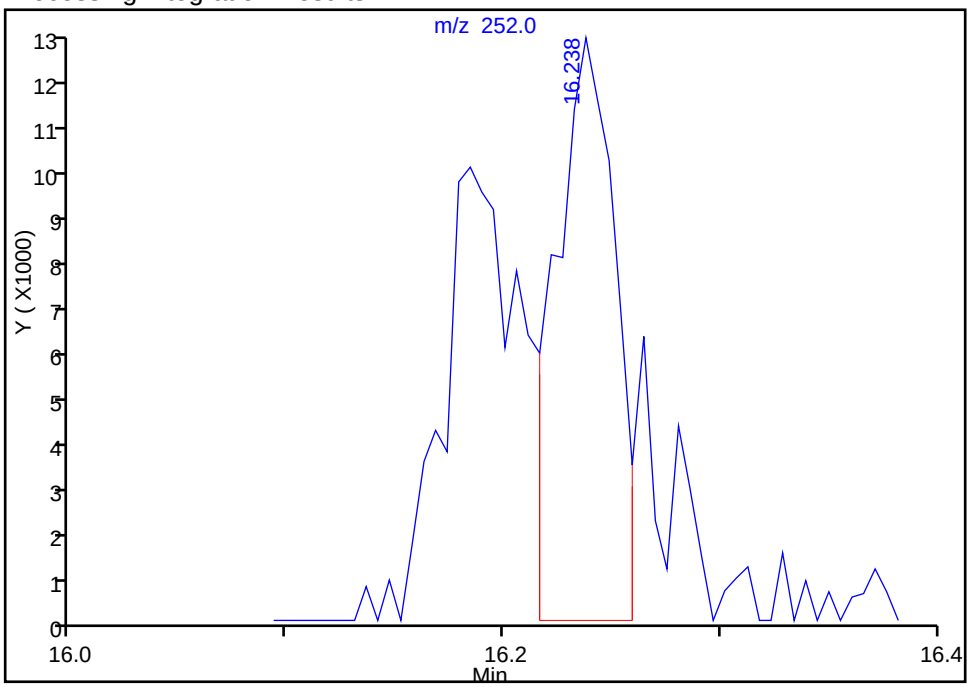
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

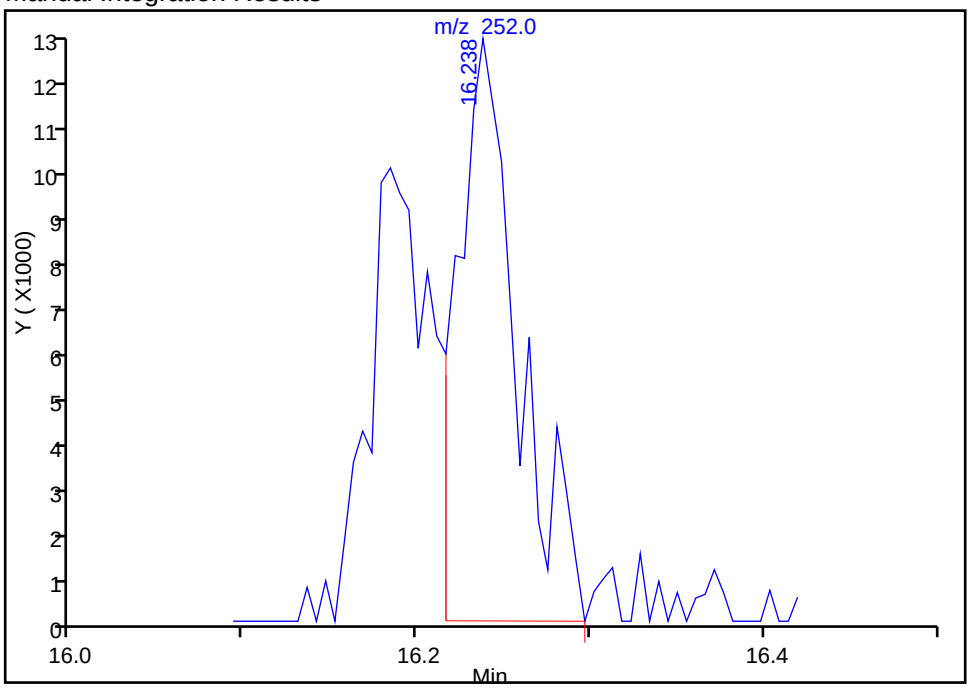
Processing Integration Results

RT: 16.24
Response: 24348
Amount: 0.269374



Manual Integration Results

RT: 16.24
Response: 29999
Amount: 0.336447



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

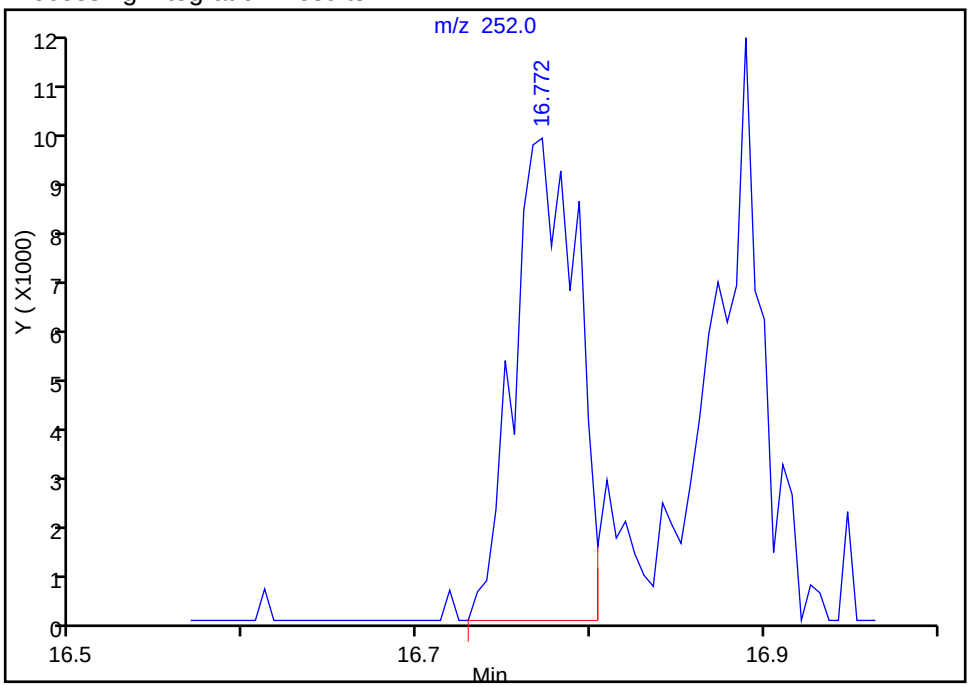
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

176 Benzo[e]pyrene, CAS: 192-97-2

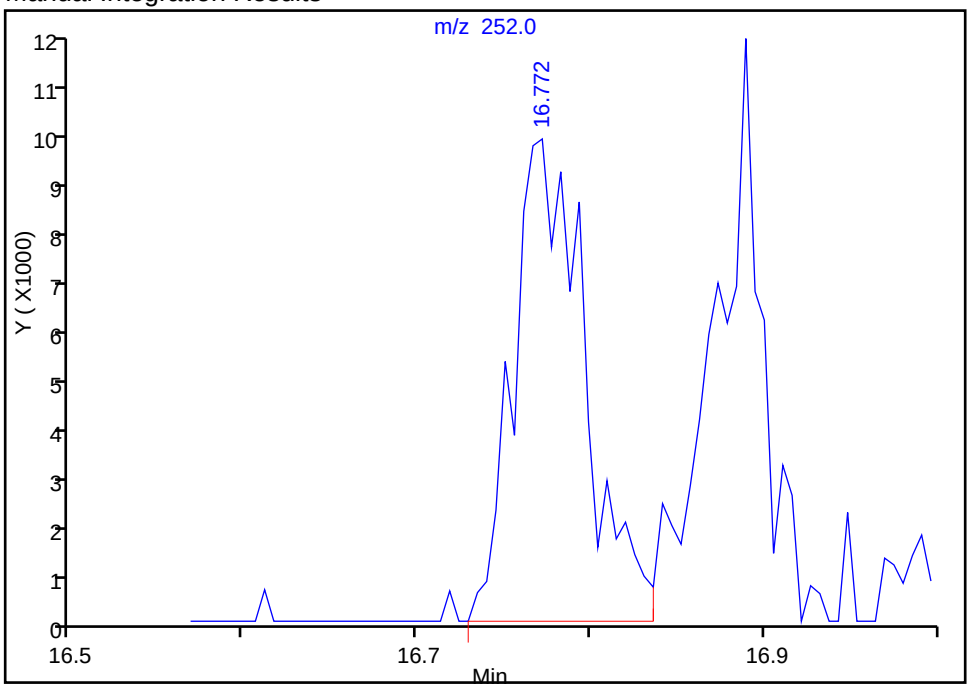
Processing Integration Results

RT: 16.77
Response: 23911
Amount: 0.292708



Manual Integration Results

RT: 16.77
Response: 26822
Amount: 0.339779



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

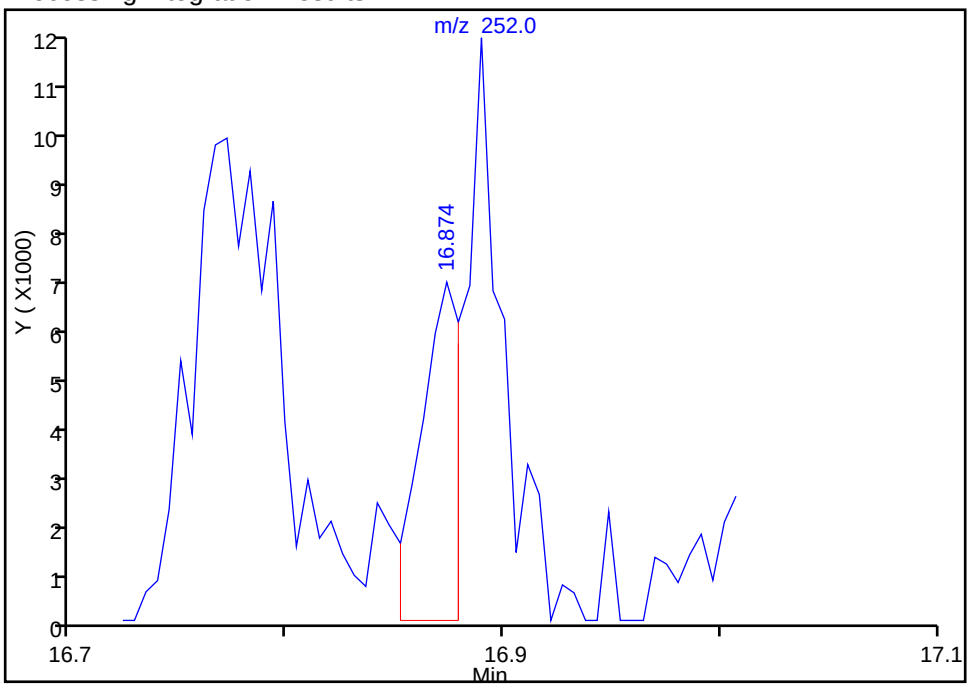
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

160 Benzo[a]pyrene, CAS: 50-32-8

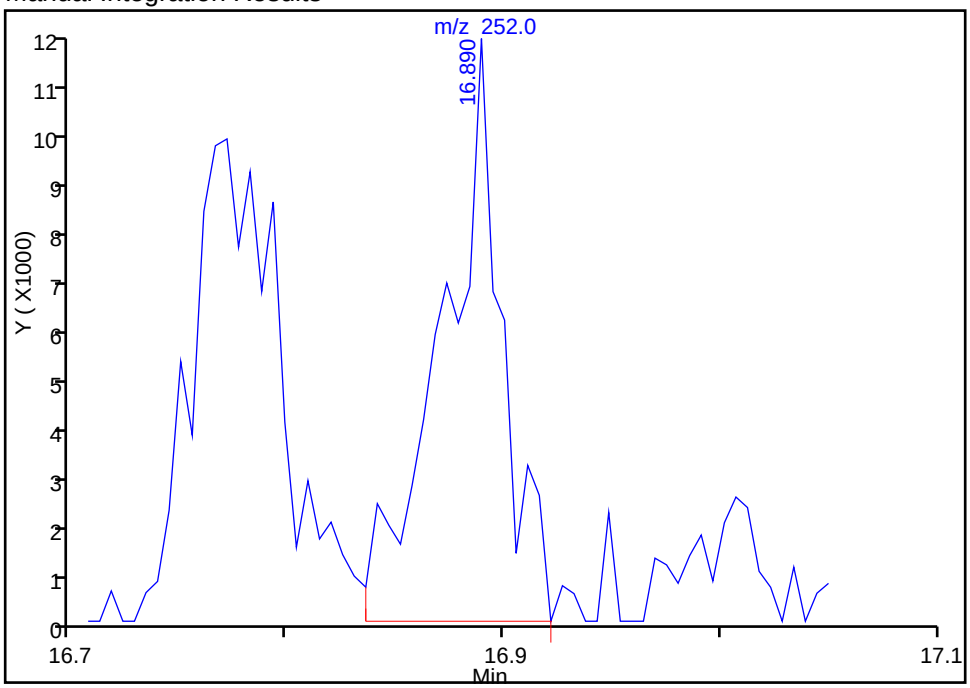
Processing Integration Results

RT: 16.87
Response: 8332
Amount: 0.396082



Manual Integration Results

RT: 16.89
Response: 21688
Amount: 0.283021



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

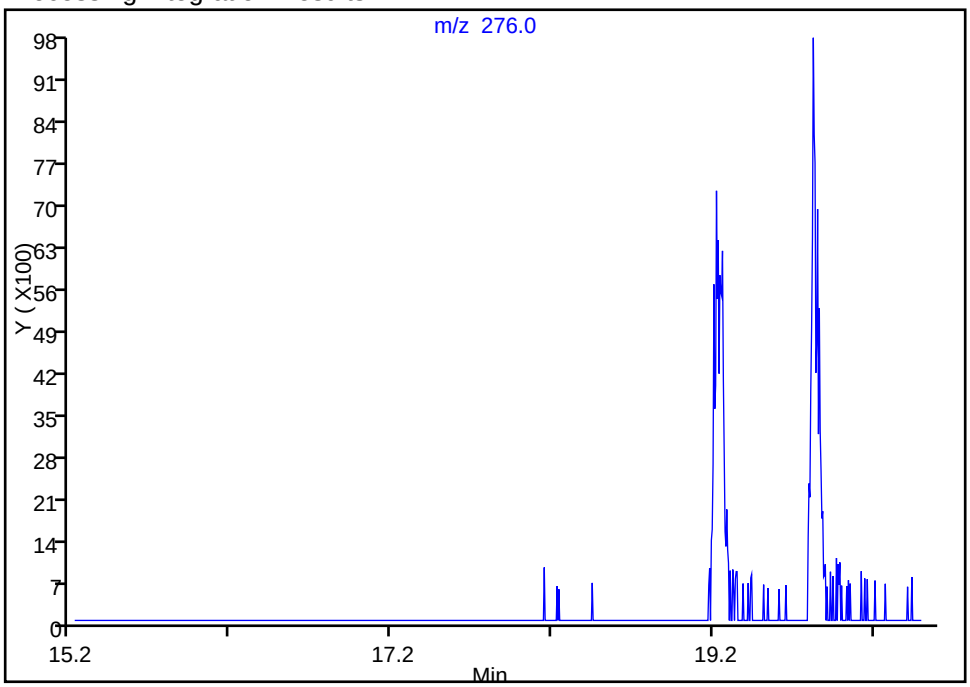
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

163 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

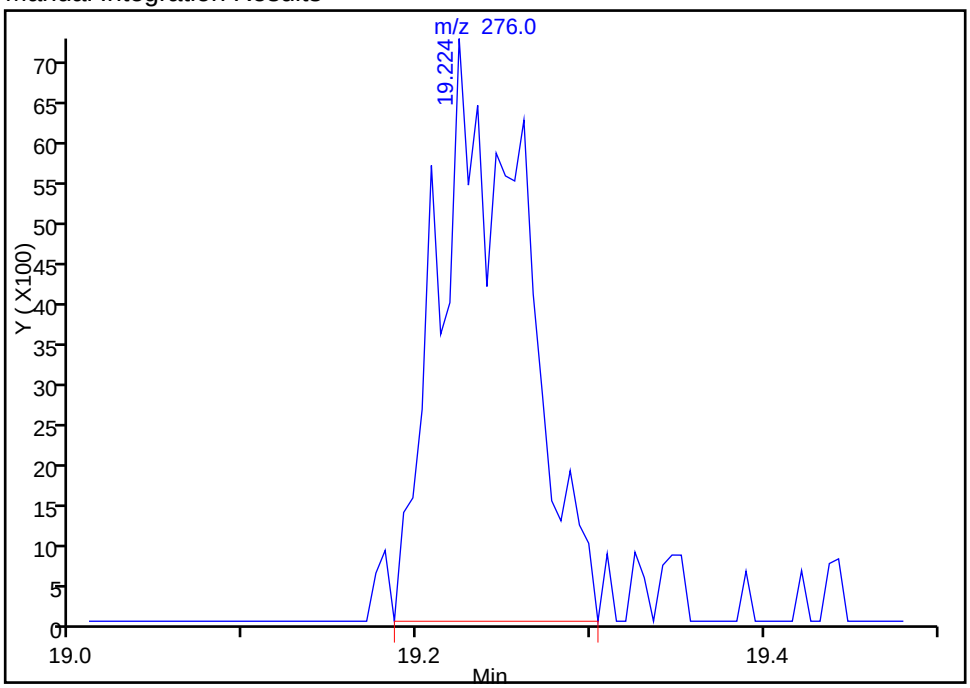
Not Detected
Expected RT: 19.22

Processing Integration Results



Manual Integration Results

RT: 19.22
Response: 25070
Amount: 0.292386



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

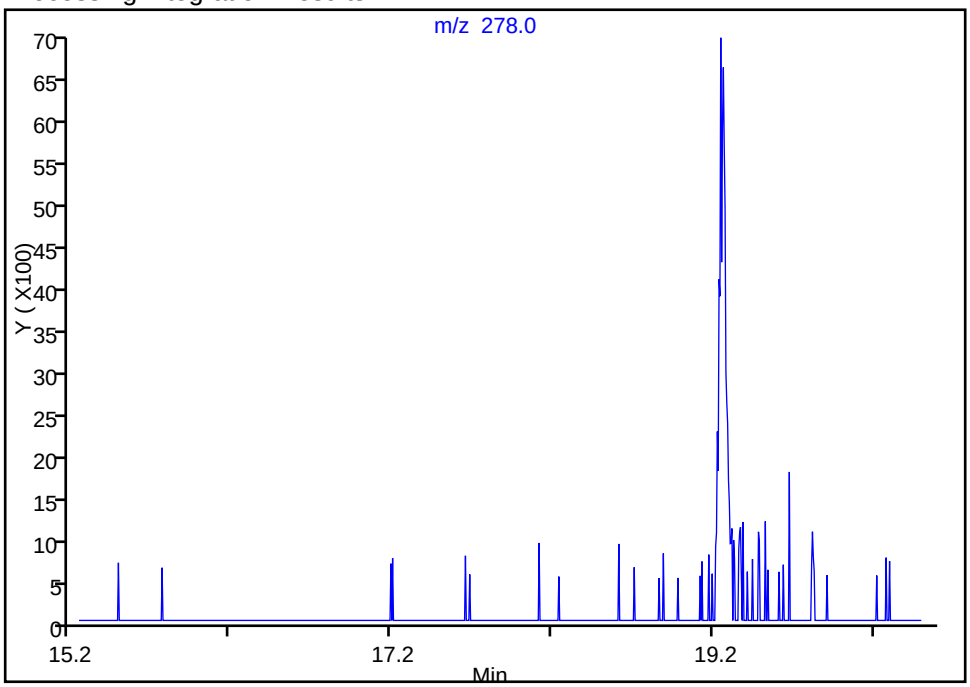
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

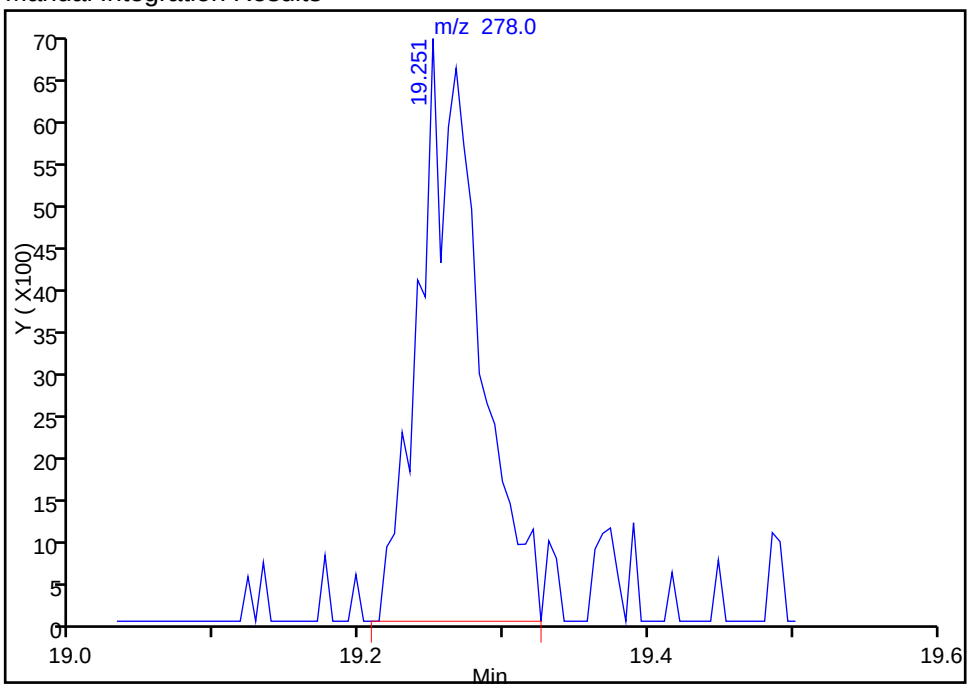
Processing Integration Results

Not Detected
Expected RT: 19.25



Manual Integration Results

RT: 19.25
Response: 19990
Amount: 0.273280



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

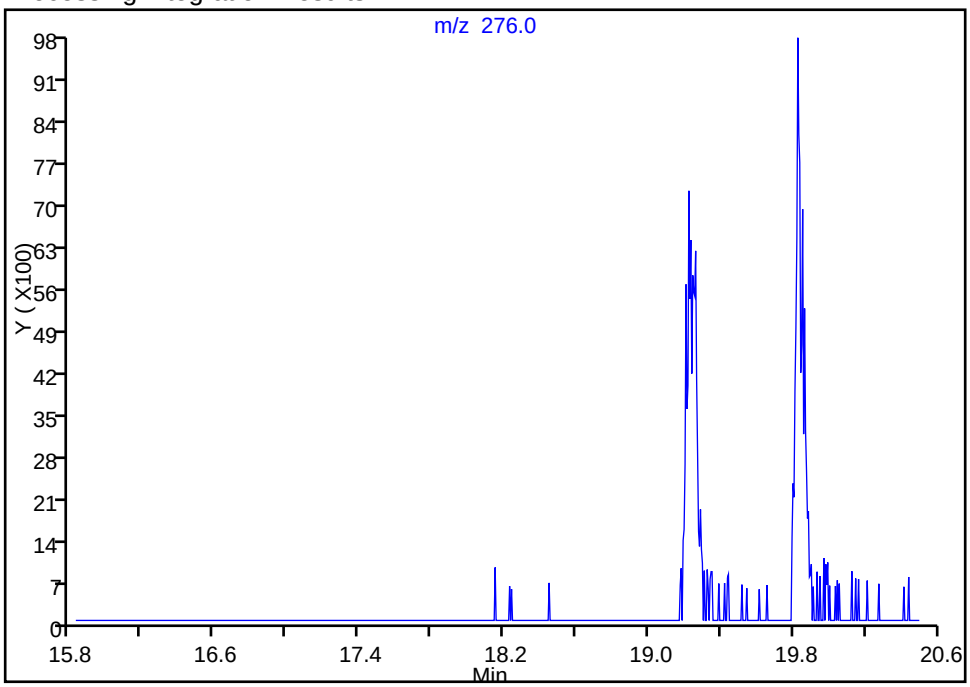
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216003.D				
Injection Date:	16-Dec-2014 04:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

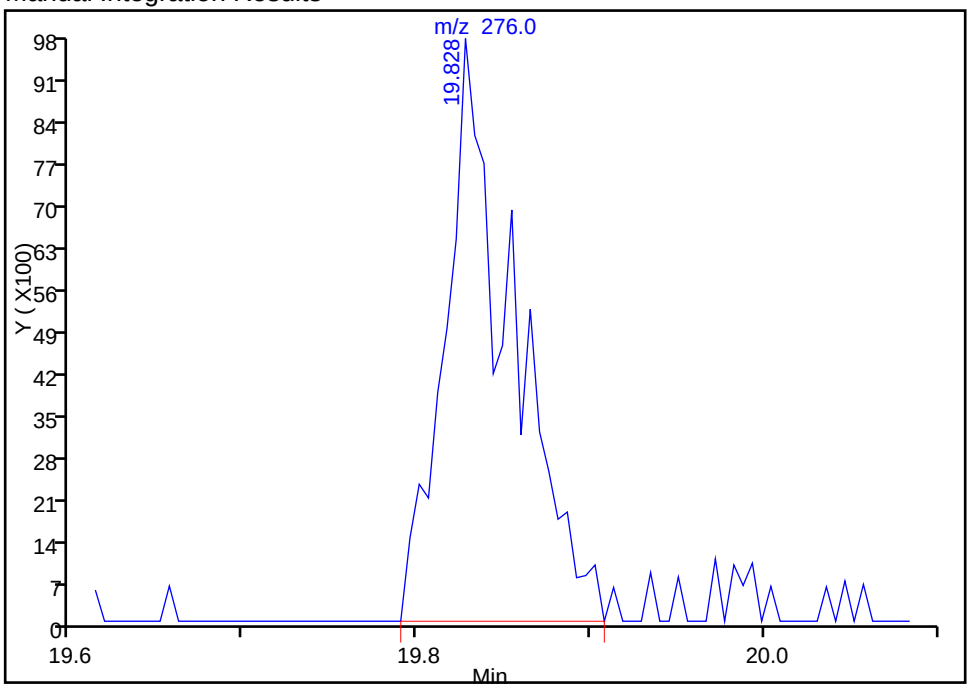
Not Detected
Expected RT: 19.83

Processing Integration Results



Manual Integration Results

RT: 19.83
Response: 26339
Amount: 0.351092



Reviewer: piccolinov, 16-Dec-2014 06:55:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Report Date: 16-Dec-2014 09:20:53 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216004.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Dec-2014 04:48:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004887-004
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 16-Dec-2014 09:20:52 Calib Date: 16-Dec-2014 07:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: piccolinov Date: 16-Dec-2014 06:58:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.307	6.307	0.000	92	131034	8.00	8.00	
* 2 Naphthalene-d8	136	7.520	7.519	0.001	98	457011	8.00	8.00	
* 3 Acenaphthene-d10	164	9.149	9.149	0.000	92	319888	8.00	8.00	
* 4 Phenanthrene-d10	188	10.528	10.522	0.006	96	625717	8.00	8.00	
* 5 Chrysene-d12	240	14.064	14.064	0.000	96	654705	8.00	8.00	
* 6 Perylene-d12	264	17.002	16.996	0.006	98	556912	8.00	8.00	
$ 7 2-Fluorophenol	112	4.940	4.939	0.001	91	38278	2.00	2.02	
$ 8 Phenol-d5	99	5.944	5.949	-0.005	87	45557	2.00	1.96	
$ 9 Nitrobenzene-d5	82	6.831	6.836	-0.005	88	56312	2.00	2.06	
$ 10 2-Fluorobiphenyl	172	8.508	8.508	0.000	98	117861	2.00	2.01	
$ 11 2,4,6-Tribromophenol	330	9.876	9.870	0.006	83	10964	2.00	1.40	
$ 12 Terphenyl-d14	244	12.306	12.311	-0.005	98	125355	2.00	1.89	
13 1,4-Dioxane	88	1.809	1.809	0.000	82	16985	2.00	2.04	
14 N-Nitrosodimethylamine	74	2.466	2.503	-0.037	79	22880	2.00	1.96	M
15 Pyridine	79	2.568	2.631	-0.063	89	43677	2.00	2.12	M
22 Methyl methanesulfonate	80	4.715	4.720	-0.005	91	29050	2.00	1.87	
26 Benzaldehyde	77	5.864	5.863	0.001	83	24586	2.00	1.86	
27 Phenol	94	5.955	5.960	-0.005	93	52866	2.00	1.93	
28 Aniline	93	5.976	5.976	0.000	0	52650	2.00	1.78	
29 Bis(2-chloroethyl)ether	93	6.040	6.040	0.000	89	37239	2.00	2.03	
31 2-Chlorophenol	128	6.099	6.104	-0.005	84	35717	2.00	1.83	
32 n-Decane	43	6.158	6.157	0.001	77	33104	2.00	1.96	
33 1,3-Dichlorobenzene	146	6.254	6.253	0.001	91	50258	2.00	2.00	
34 1,4-Dichlorobenzene	146	6.323	6.323	0.000	92	53739	2.00	2.06	
36 Benzyl alcohol	108	6.430	6.435	-0.005	85	24269	2.00	1.94	
37 1,2-Dichlorobenzene	146	6.473	6.478	-0.005	87	50772	2.00	2.05	
38 2-Methylphenol	108	6.542	6.542	0.000	88	33563	2.00	1.75	
39 Indene	116	6.558	6.558	0.000	86	61576	2.00	1.81	
40 2,2'-oxybis[1-chloropropan	45	6.569	6.569	0.000	80	40798	2.00	2.23	
41 N-Nitrosopyrrolidine	100	6.660	6.654	0.006	78	14779	2.00	1.85	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 N-Nitrosodi-n-propylamine	70	6.687	6.686	0.000	59	34586	2.00	1.91	
45 4-Methylphenol	108	6.687	6.686	0.000	53	41720	2.00	1.99	
43 Acetophenone	105	6.687	6.691	-0.005	75	61608	2.00	1.93	
47 Hexachloroethane	117	6.804	6.804	0.000	90	23858	2.00	2.09	
48 Nitrobenzene	77	6.852	6.852	0.000	86	58221	2.00	2.04	
50 Isophorone	82	7.076	7.076	0.000	96	74316	2.00	1.77	
51 2-Nitrophenol	139	7.157	7.162	-0.005	83	20159	2.00	1.87	
52 2,4-Dimethylphenol	107	7.183	7.188	-0.005	92	45772	2.00	1.88	
56 Benzoic acid	122	7.210	7.204	0.006	59	7734	2.00	2.86	M
55 Bis(2-chloroethoxy)methane	93	7.269	7.268	0.001	97	44820	2.00	2.00	
57 2,4-Dichlorophenol	162	7.381	7.386	-0.005	92	36256	2.00	1.89	
61 Azobenzene	77		7.466				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.466	7.466	0.000	91	49197	2.00	1.91	
60 Naphthalene	128	7.541	7.541	0.000	97	115818	2.00	1.86	
62 4-Chloroaniline	127	7.579	7.573	0.006	93	50434	2.00	2.00	
63 2,6-Dichlorophenol	162	7.589	7.594	-0.005	92	36130	2.00	1.83	
64 Hexachlorobutadiene	225	7.659	7.658	0.001	90	42441	2.00	2.37	
67 Caprolactam	113	7.856	7.856	0.000	80	6406	2.00	2.01	
70 4-Chloro-3-methylphenol	107	8.006	8.011	-0.005	90	38142	2.00	1.81	
72 2-Methylnaphthalene	142	8.177	8.182	-0.005	86	86576	2.00	1.96	
75 1-Methylnaphthalene	142	8.273	8.273	0.000	85	76741	2.00	1.87	
76 Hexachlorocyclopentadiene	237	8.332	8.331	0.001	93	37120	2.00	1.95	
77 1,2,4,5-Tetrachlorobenzene	216	8.337	8.337	0.000	96	57426	2.00	2.05	
78 2,4,6-Trichlorophenol	196	8.433	8.433	0.000	92	28333	2.00	1.79	
79 2,4,5-Trichlorophenol	196	8.465	8.465	0.000	88	30901	2.00	1.75	
80 1,1'-Biphenyl	154	8.604	8.599	0.005	95	117496	2.00	2.07	
81 2-Chloronaphthalene	162	8.631	8.631	0.000	96	92163	2.00	1.90	
82 2-Nitroaniline	65	8.711	8.711	0.000	72	28500	2.00	1.89	
86 Dimethyl phthalate	163	8.855	8.855	0.000	96	106297	2.00	1.98	
87 1,3-Dinitrobenzene	168	8.893	8.892	0.001	80	11212	2.00	1.35	
88 2,6-Dinitrotoluene	165	8.920	8.919	0.001	85	20733	2.00	1.82	
89 Acenaphthylene	152	9.021	9.021	0.000	96	130556	2.00	1.91	
90 3-Nitroaniline	138	9.080	9.085	-0.005	87	18937	2.00	1.65	
92 2,4-Dinitrophenol	184	9.171	9.176	-0.005	62	17247	4.00	4.90	
91 Acenaphthene	153	9.176	9.176	0.000	94	93815	2.00	2.03	
93 4-Nitrophenol	109	9.208	9.208	0.000	87	35717	4.00	3.26	
94 2,4-Dinitrotoluene	165	9.293	9.293	0.000	85	29789	2.00	1.87	
95 Dibenzofuran	168	9.336	9.330	0.006	94	142367	2.00	2.00	
97 2,3,5,6-Tetrachlorophenol	232	9.406	9.405	0.001	92	25321	2.00	1.65	
99 2,3,4,6-Tetrachlorophenol	232	9.443	9.437	0.006	71	25793	2.00	1.73	M
100 2-Naphthylamine	143	9.470	9.469	0.001	93	67636	2.00	1.61	
101 Diethyl phthalate	149	9.496	9.496	0.000	96	110705	2.00	1.97	
102 Hexadecane	57	9.507	9.501	0.006	90	44467	2.00	1.90	
104 4-Chlorophenyl phenyl ethe	204	9.635	9.630	0.005	92	60963	2.00	1.88	
105 4-Nitroaniline	138	9.641	9.640	0.001	70	20173	2.00	1.65	
106 Fluorene	166	9.651	9.651	0.000	91	104176	2.00	1.97	
108 4,6-Dinitro-2-methylphenol	198	9.673	9.678	-0.005	78	26172	4.00	4.11	
109 N-Nitrosodiphenylamine	169	9.737	9.731	0.006	62	79711	2.00	1.97	
111 1,2-Diphenylhydrazine	77	9.774	9.774	0.000	98	123747	2.00	2.01	
116 4-Bromophenyl phenyl ether	248	10.084	10.084	0.000	69	30656	2.00	1.77	
118 Hexachlorobenzene	284	10.170	10.169	0.001	93	39457	2.00	2.11	
119 Atrazine	200	10.196	10.201	-0.005	88	22864	2.00	1.65	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.341	10.340	0.001	85	40626	4.00	3.37	
121 n-Octadecane	57	10.341	10.345	-0.004	87	48093	2.00	1.89	
126 Phenanthrene	178	10.549	10.548	0.001	96	170977	2.00	1.98	
128 Anthracene	178	10.597	10.597	0.001	96	177727	2.00	2.02	
130 Carbazole	167	10.736	10.735	0.001	96	152716	2.00	1.98	
132 Di-n-butyl phthalate	149	11.035	11.029	0.006	99	149165	2.00	1.76	
137 Fluoranthene	202	11.847	11.847	0.000	96	190375	2.00	1.90	
138 Benzidine	184	11.970	11.964	0.006	97	26790	2.00	3.71	
139 Pyrene	202	12.152	12.151	0.001	99	189355	2.00	1.94	
144 Butyl benzyl phthalate	149	13.001	13.000	0.001	96	55615	2.00	1.60	
149 3,3'-Dichlorobenzidine	252	13.962	13.957	0.005	74	38671	2.00	1.36	
151 Bis(2-ethylhexyl) phthalat	149	14.000	14.005	-0.005	96	63191	2.00	1.37	
152 Benzo[a]anthracene	228	14.043	14.042	0.001	96	175586	2.00	1.88	
153 Chrysene	228	14.107	14.112	-0.005	96	184843	2.00	2.03	
156 Di-n-octyl phthalate	149	15.309	15.308	0.001	0	86174	2.00	2.09	M
157 7,12-Dimethylbenz(a)anthra	256	16.179	16.168	0.011	91	68250	2.00	1.82	
158 Benzo[b]fluoranthene	252	16.190	16.184	0.006	96	148282	2.00	1.81	M
159 Benzo[k]fluoranthene	252	16.249	16.238	0.011	96	179673	2.00	2.02	
176 Benzo[e]pyrene	252	16.772	16.772	0.000	0	160405	2.00	2.03	
160 Benzo[a]pyrene	252	16.885	16.890	-0.005	75	138715	2.00	1.81	
163 Indeno[1,2,3-cd]pyrene	276	19.219	19.224	-0.005	0	155923	2.00	1.82	M
164 Dibenz(a,h)anthracene	278	19.267	19.251	0.016	0	126983	2.00	1.74	M
165 Benzo[g,h,i]perylene	276	19.833	19.828	0.005	97	119395	2.00	1.59	
S 206 Total Cresols	108				0		4.00	3.74	
S 208 Methyl Phenols,Total	108				0		4.00	3.74	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

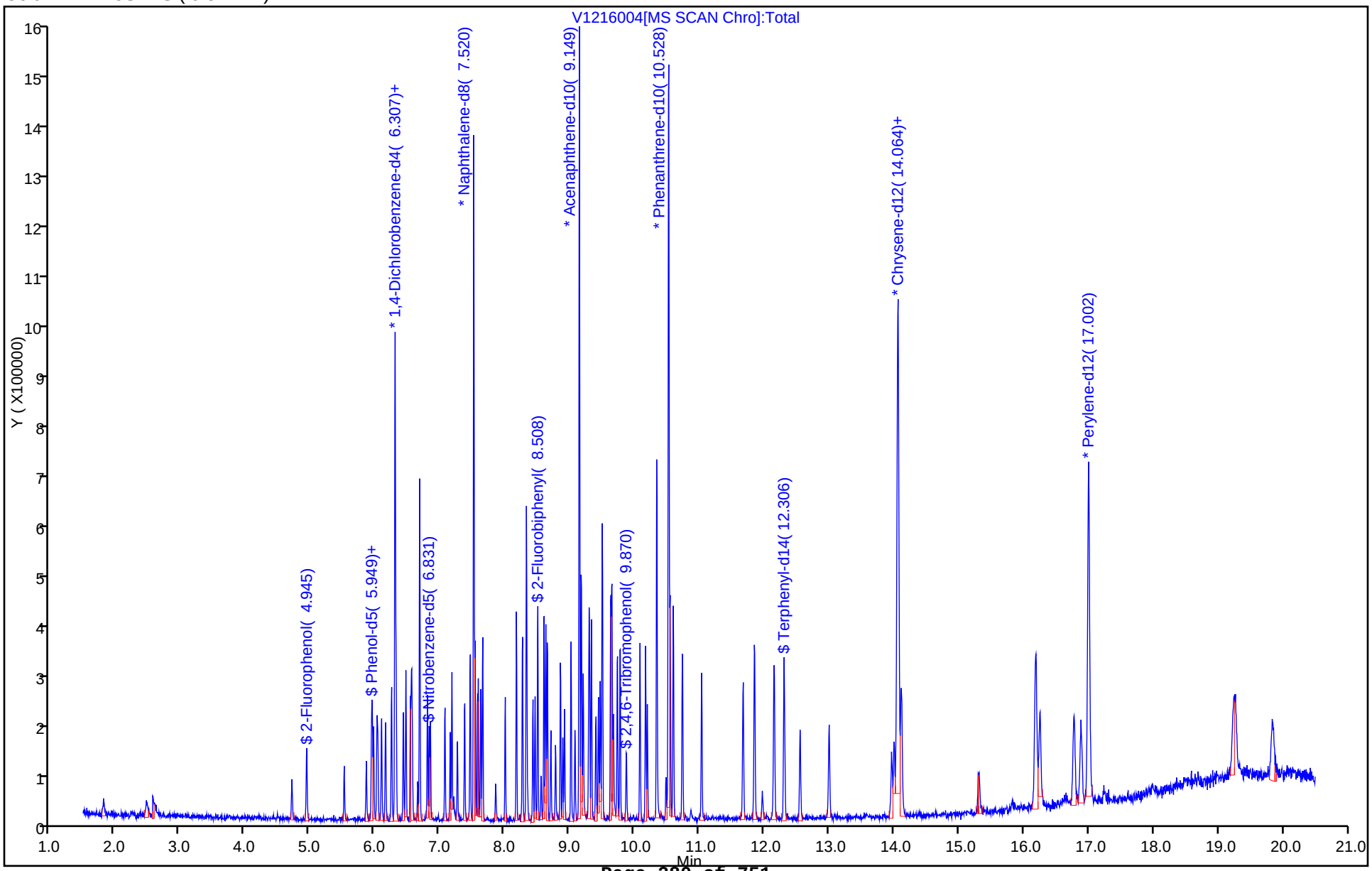
SVTAPSTD2.0i_00005 Amount Added: 1.00 Units: mL

Report Date: 16-Dec-2014 09:20:53 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216004.D				
Injection Date:	16-Dec-2014 04:48:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



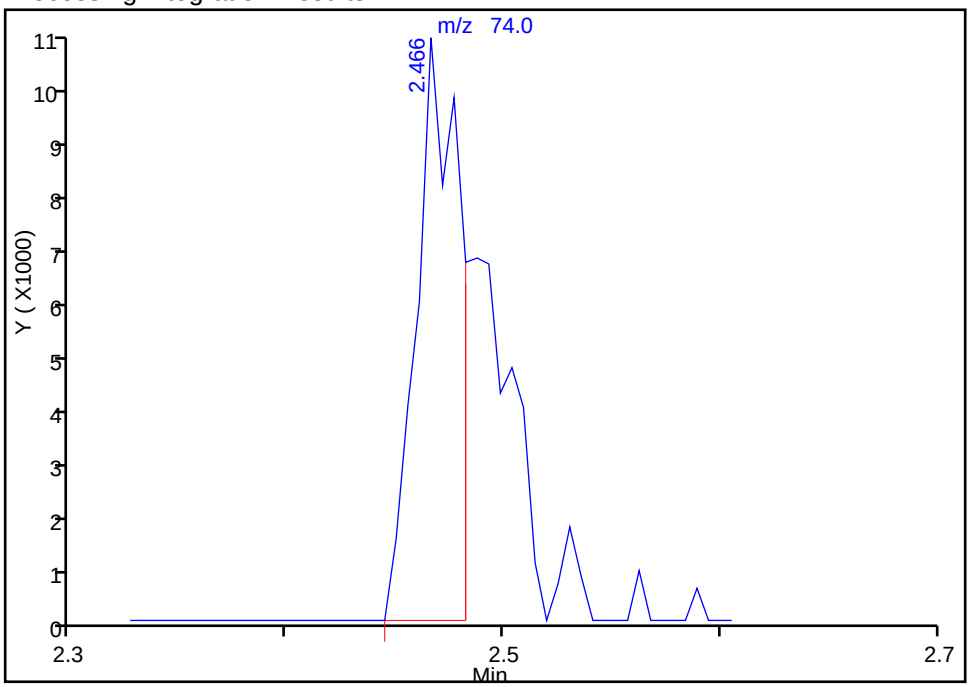
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216004.D
Injection Date: 16-Dec-2014 04:48:30 Instrument ID: CH731
Lims ID: IC
Client ID:
Operator ID: 003200 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

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

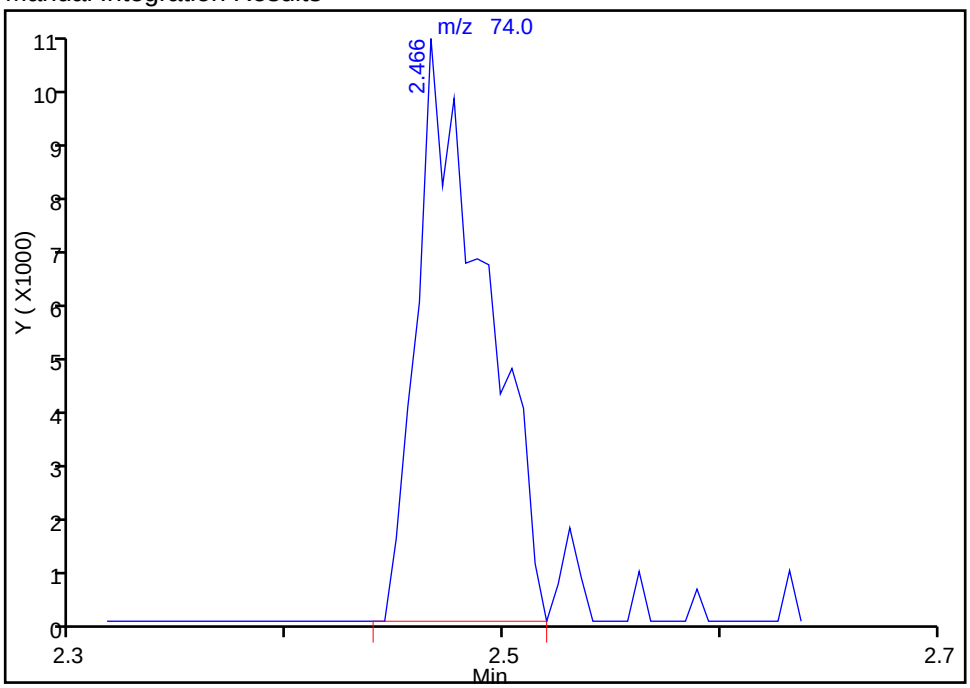
Processing Integration Results

RT: 2.47
Response: 14442
Amount: 1.197260



Manual Integration Results

RT: 2.47
Response: 22880
Amount: 1.962467



Reviewer: piccolinov, 16-Dec-2014 06:58:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

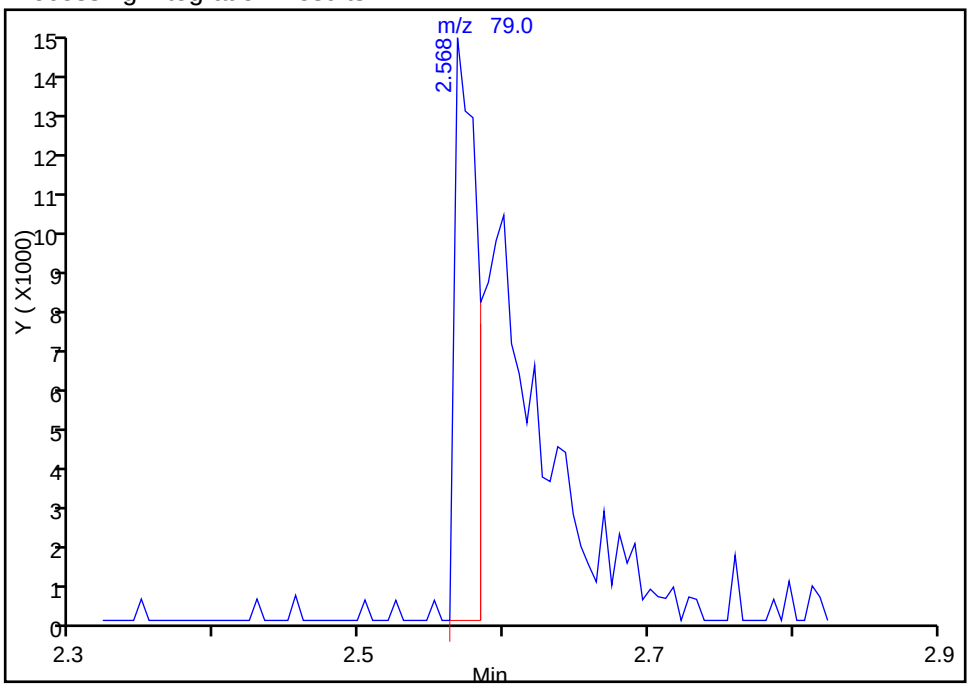
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216004.D				
Injection Date:	16-Dec-2014 04:48:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

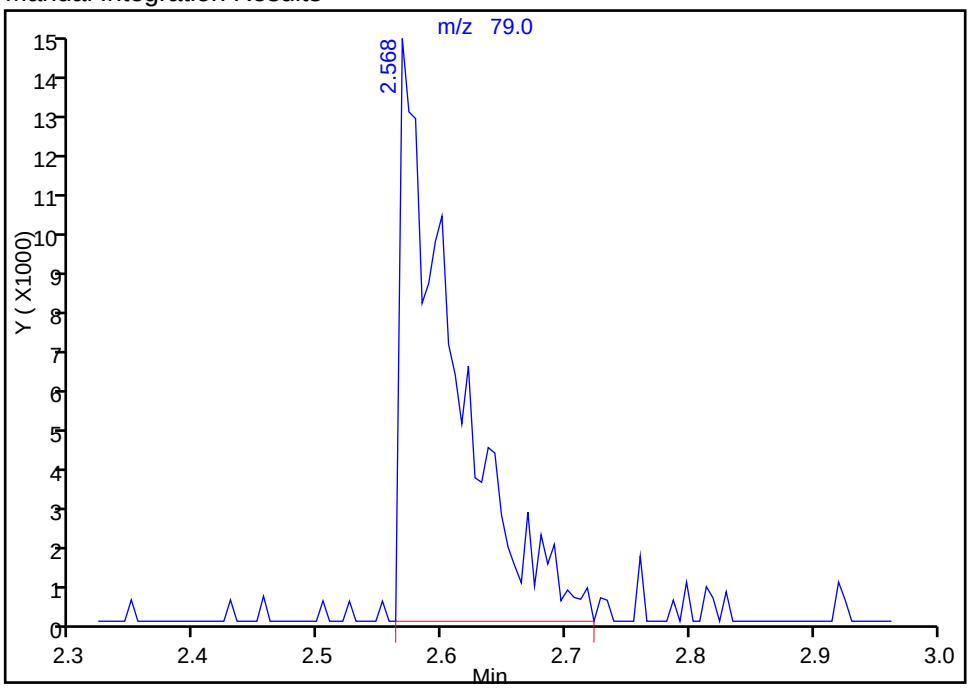
Processing Integration Results

RT: 2.57
Response: 15452
Amount: 0.787662



Manual Integration Results

RT: 2.57
Response: 43677
Amount: 2.123733



Reviewer: piccolinov, 16-Dec-2014 06:58:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

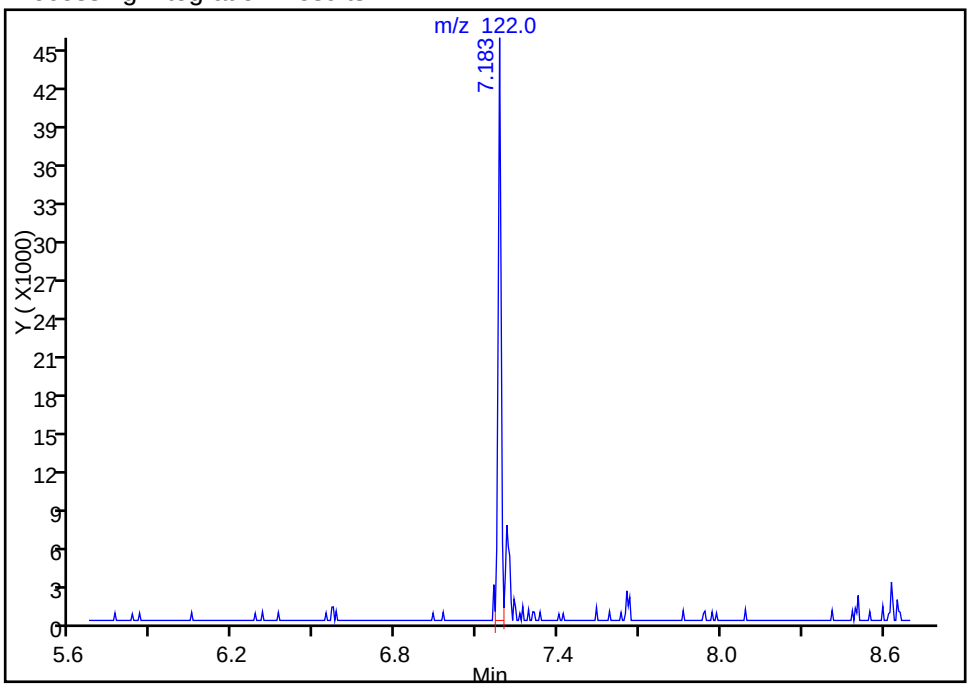
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216004.D				
Injection Date:	16-Dec-2014 04:48:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

56 Benzoic acid, CAS: 65-85-0

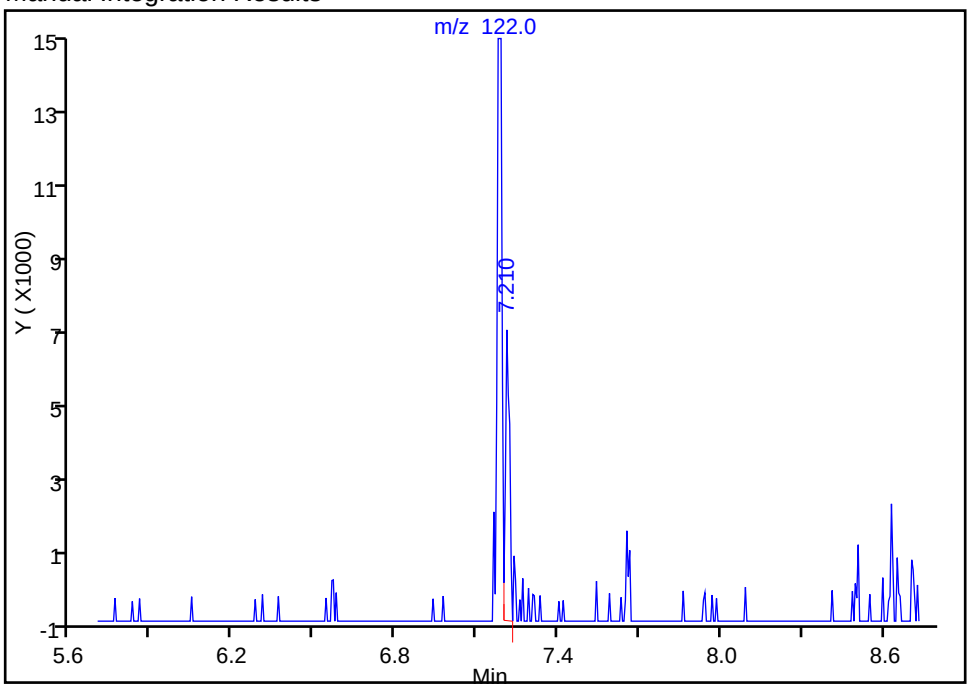
Processing Integration Results

RT: 7.18
Response: 34661
Amount: 2.708163



Manual Integration Results

RT: 7.21
Response: 7734
Amount: 2.862762



Reviewer: piccolinov, 16-Dec-2014 06:58:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

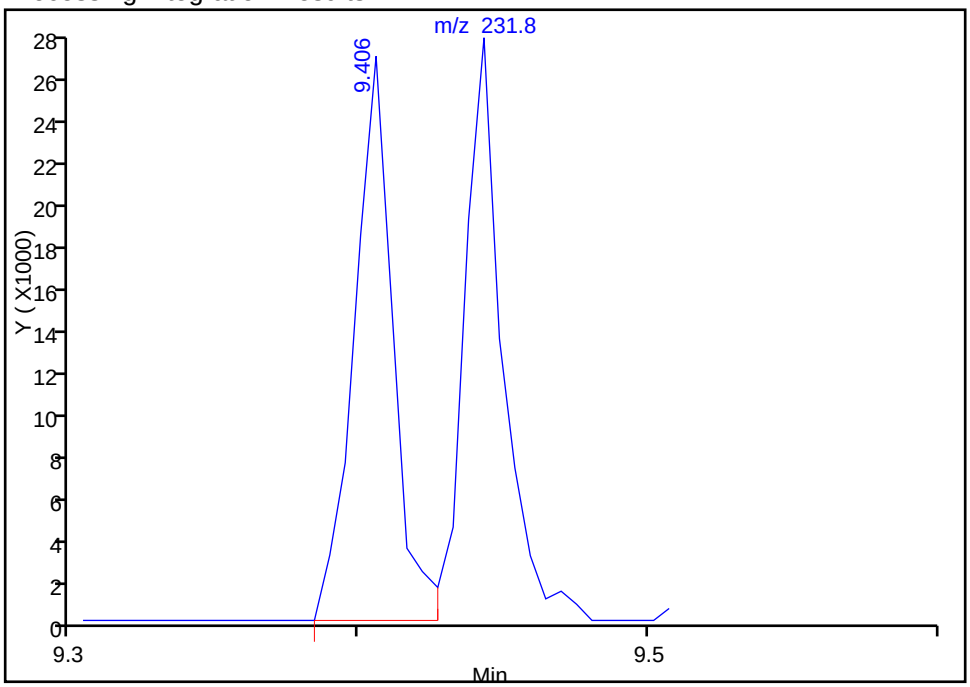
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216004.D				
Injection Date:	16-Dec-2014 04:48:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

99 2,3,4,6-Tetrachlorophenol, CAS: 58-90-2

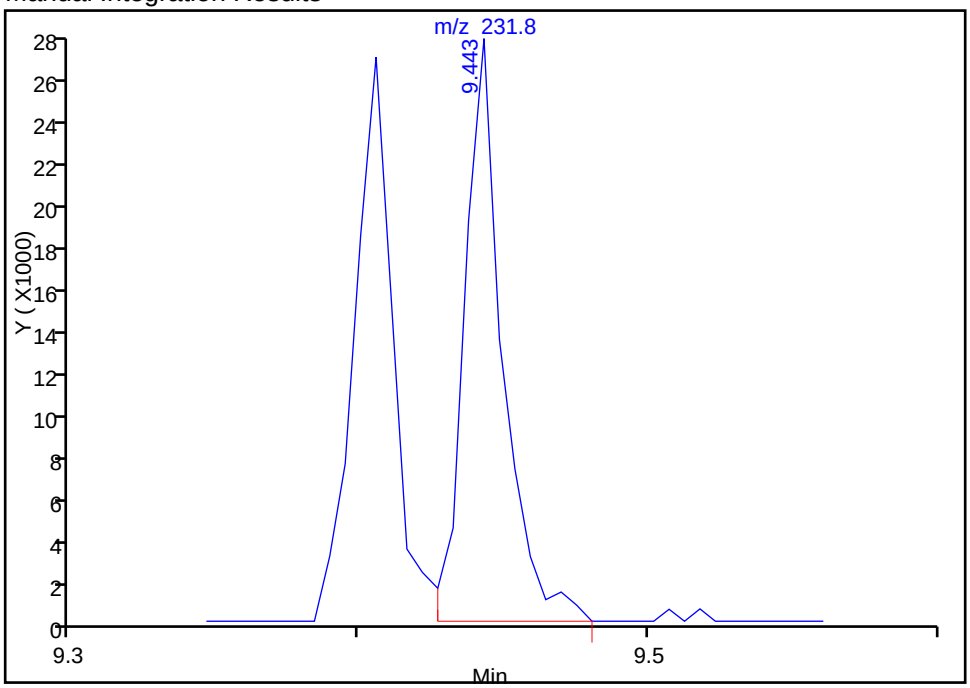
Processing Integration Results

RT: 9.41
Response: 25321
Amount: 1.501146



Manual Integration Results

RT: 9.44
Response: 25793
Amount: 1.730262



Reviewer: piccolinov, 16-Dec-2014 06:58:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

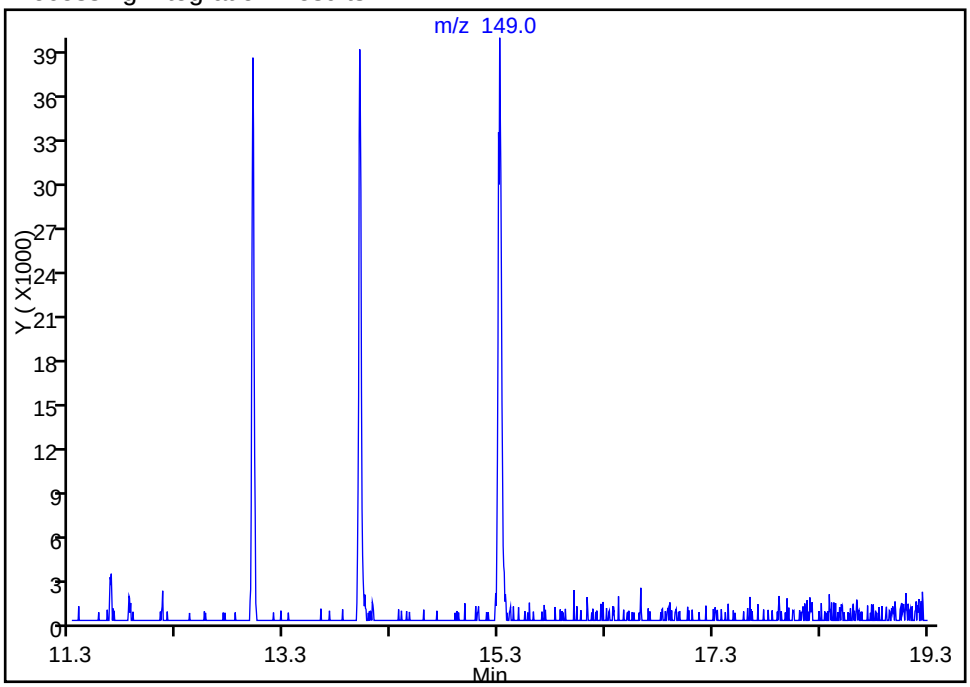
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216004.D				
Injection Date:	16-Dec-2014 04:48:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

156 Di-n-octyl phthalate, CAS: 117-84-0

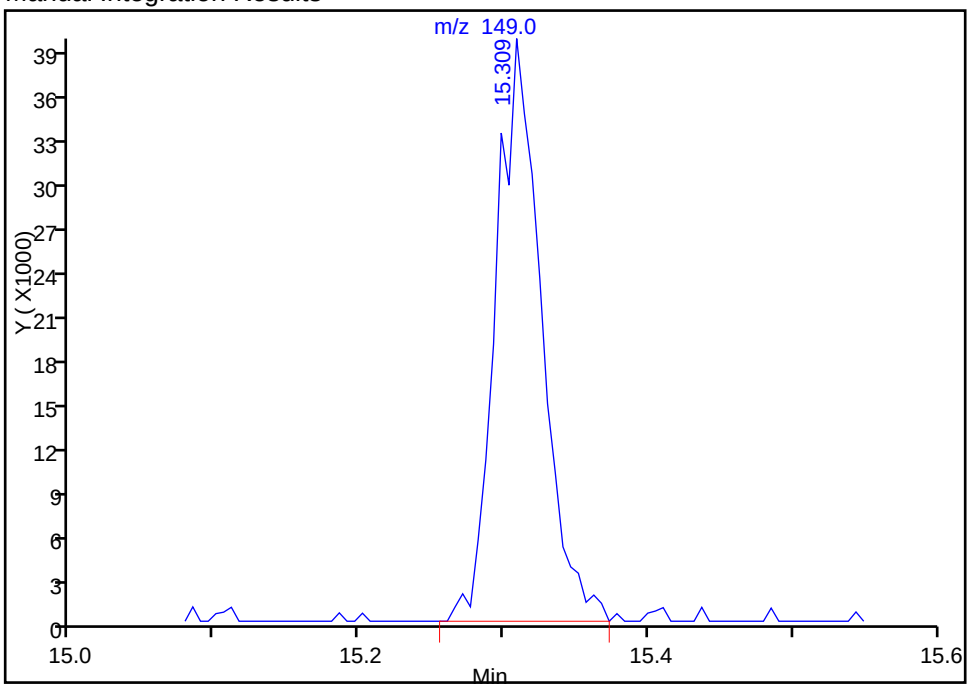
Not Detected
Expected RT: 15.31

Processing Integration Results



Manual Integration Results

RT: 15.31
Response: 86174
Amount: 2.089862



Reviewer: piccolinov, 16-Dec-2014 06:58:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

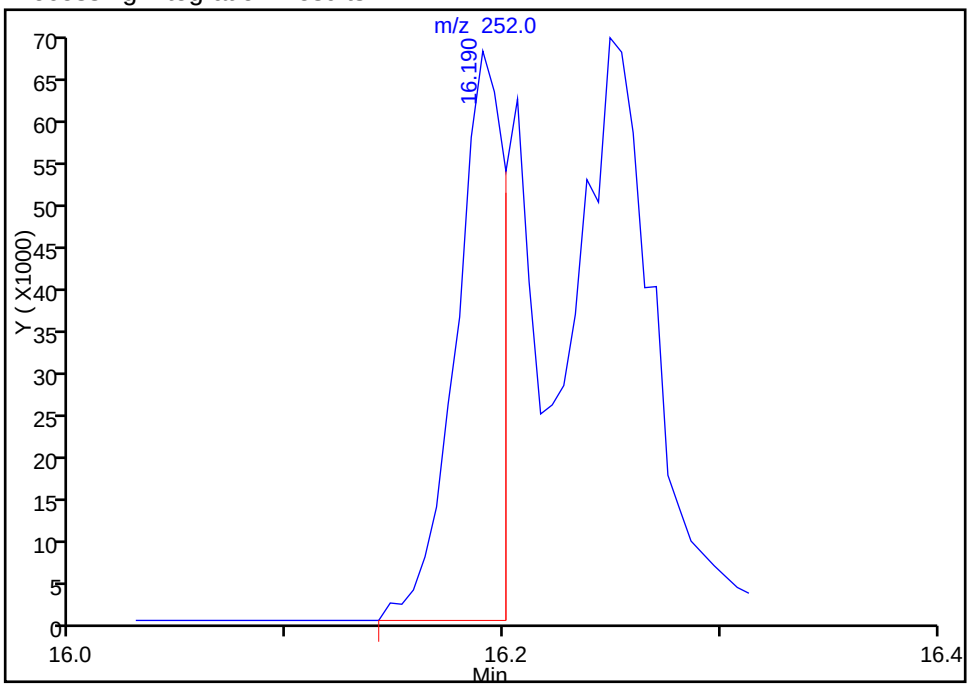
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216004.D				
Injection Date:	16-Dec-2014 04:48:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

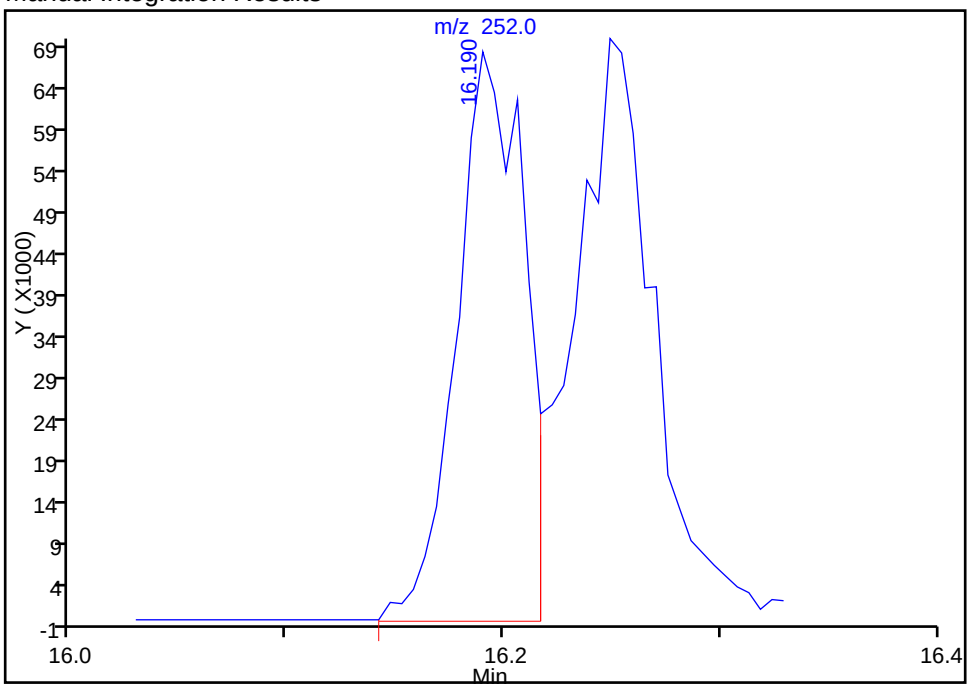
Processing Integration Results

RT: 16.19
Response: 106664
Amount: 1.247265



Manual Integration Results

RT: 16.19
Response: 148282
Amount: 1.810364



Reviewer: piccolinov, 16-Dec-2014 06:58:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

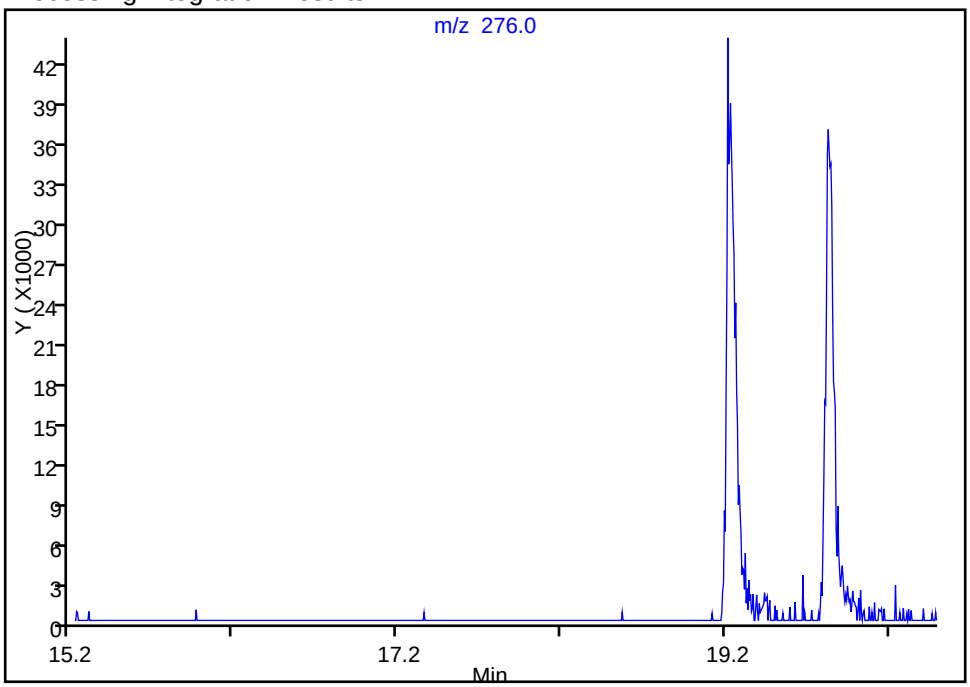
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216004.D				
Injection Date:	16-Dec-2014 04:48:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

163 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

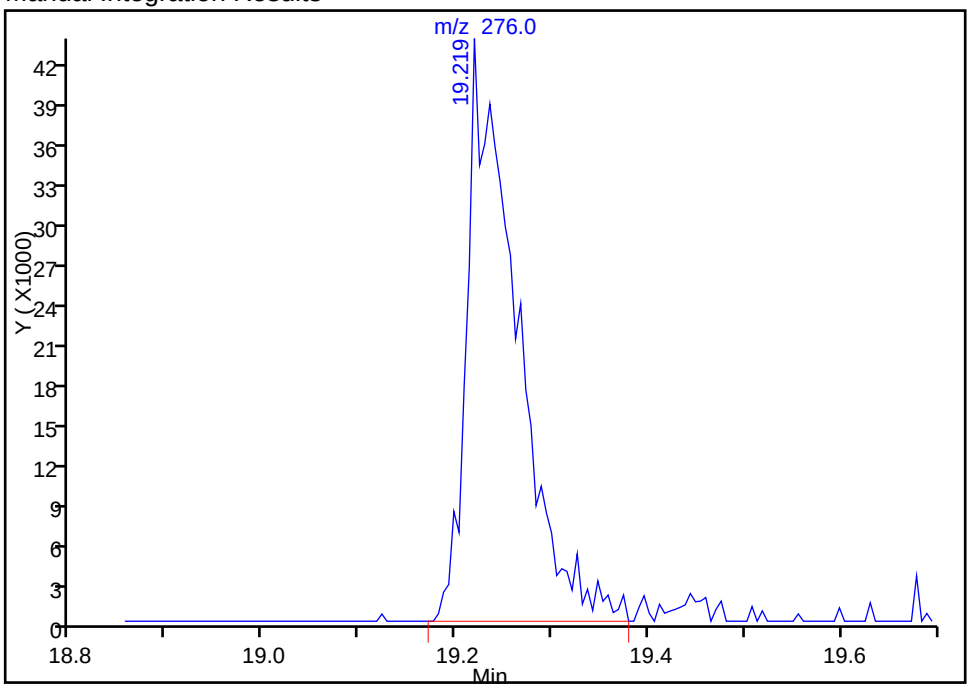
Not Detected
Expected RT: 19.22

Processing Integration Results



Manual Integration Results

RT: 19.22
Response: 155923
Amount: 1.819916



Reviewer: piccolinov, 16-Dec-2014 06:58:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

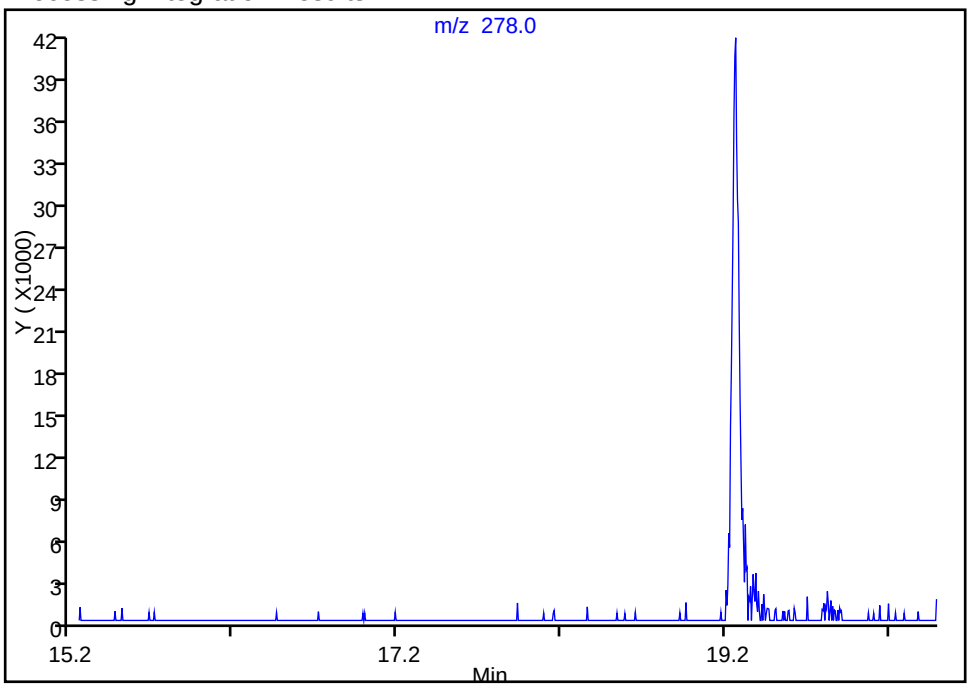
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216004.D				
Injection Date:	16-Dec-2014 04:48:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

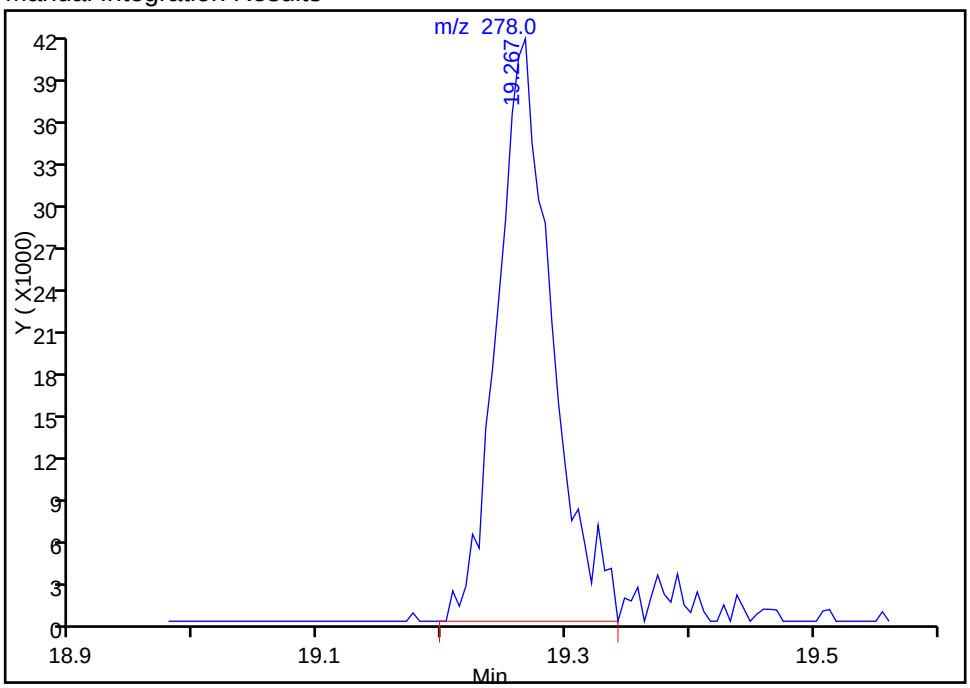
Not Detected
Expected RT: 19.25

Processing Integration Results



Manual Integration Results

RT: 19.27
Response: 126983
Amount: 1.737316



Reviewer: piccolinov, 16-Dec-2014 06:58:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216005.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Dec-2014 05:16:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004887-005
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 16-Dec-2014 09:20:55 Calib Date: 16-Dec-2014 07:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: piccolinov Date: 16-Dec-2014 06:51:24

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	6.307	6.307	0.000	91	126713	8.00	8.00	
* 2 Naphthalene-d8	136	7.520	7.519	0.001	99	458834	8.00	8.00	
* 3 Acenaphthene-d10	164	9.149	9.149	0.000	91	317241	8.00	8.00	
* 4 Phenanthrene-d10	188	10.527	10.522	0.005	96	619528	8.00	8.00	
* 5 Chrysene-d12	240	14.069	14.064	0.005	96	674492	8.00	8.00	
* 6 Perylene-d12	264	17.007	16.996	0.011	98	549093	8.00	8.00	
$ 7 2-Fluorophenol	112	4.940	4.939	0.001	92	73790	4.00	4.04	
$ 8 Phenol-d5	99	5.944	5.949	-0.005	87	89872	4.00	3.99	
$ 9 Nitrobenzene-d5	82	6.836	6.836	0.000	92	107502	4.00	3.92	
$ 10 2-Fluorobiphenyl	172	8.508	8.508	0.000	99	230039	4.00	3.96	
$ 11 2,4,6-Tribromophenol	330	9.876	9.870	0.006	87	28512	4.00	3.68	
$ 12 Terphenyl-d14	244	12.306	12.311	-0.005	98	276204	4.00	4.03	
13 1,4-Dioxane	88	1.809	1.809	0.000	88	34502	4.00	4.29	M
14 N-Nitrosodimethylamine	74	2.466	2.503	-0.037	95	44861	4.00	3.98	
15 Pyridine	79	2.568	2.631	-0.063	91	81665	4.00	4.11	M
22 Methyl methanesulfonate	80	4.715	4.720	-0.005	92	64300	4.00	4.28	
26 Benzaldehyde	77	5.864	5.863	0.001	93	47503	4.00	3.72	
27 Phenol	94	5.955	5.960	-0.005	94	111870	4.00	4.23	
28 Aniline	93	5.976	5.976	0.000	96	119998	4.00	4.20	
29 Bis(2-chloroethyl)ether	93	6.040	6.040	0.000	95	71089	4.00	4.00	
31 2-Chlorophenol	128	6.099	6.104	-0.005	92	81827	4.00	4.35	
32 n-Decane	43	6.158	6.157	0.001	79	71054	4.00	4.35	
33 1,3-Dichlorobenzene	146	6.254	6.253	0.001	91	101726	4.00	4.18	
34 1,4-Dichlorobenzene	146	6.323	6.323	0.000	85	103252	4.00	4.09	
36 Benzyl alcohol	108	6.435	6.435	0.000	83	48155	4.00	3.98	
37 1,2-Dichlorobenzene	146	6.473	6.478	-0.005	89	102309	4.00	4.28	
38 2-Methylphenol	108	6.542	6.542	0.000	90	76103	4.00	4.11	
39 Indene	116	6.558	6.558	0.000	89	134955	4.00	4.11	
40 2,2'-oxybis[1-chloropropan	45	6.574	6.569	0.005	77	70626	4.00	4.00	
41 N-Nitrosopyrrolidine	100	6.654	6.654	0.000	73	28837	4.00	3.74	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 N-Nitrosodi-n-propylamine	70	6.686	6.686	0.000	63	68187	4.00	3.90	
45 4-Methylphenol	108	6.686	6.686	0.000	56	80772	4.00	3.98	
43 Acetophenone	105	6.686	6.691	-0.005	78	129767	4.00	4.21	
47 Hexachloroethane	117	6.804	6.804	0.000	89	50176	4.00	4.55	
48 Nitrobenzene	77	6.852	6.852	0.000	85	118741	4.00	4.14	
50 Isophorone	82	7.076	7.076	0.000	98	159223	4.00	3.78	
51 2-Nitrophenol	139	7.157	7.162	-0.006	77	39623	4.00	3.67	
52 2,4-Dimethylphenol	107	7.183	7.188	-0.005	95	103310	4.00	4.22	
56 Benzoic acid	122	7.215	7.204	0.011	51	22406	4.00	4.19	M
55 Bis(2-chloroethoxy)methane	93	7.269	7.268	0.001	98	90484	4.00	4.02	
57 2,4-Dichlorophenol	162	7.381	7.386	-0.005	92	82755	4.00	4.30	
61 Azobenzene	77		7.466				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.466	7.466	0.000	91	105169	4.00	4.08	
60 Naphthalene	128	7.541	7.541	0.000	97	252154	4.00	4.03	
62 4-Chloroaniline	127	7.579	7.573	0.006	93	98670	4.00	3.91	
63 2,6-Dichlorophenol	162	7.589	7.594	-0.005	92	84823	4.00	4.29	
64 Hexachlorobutadiene	225	7.659	7.658	0.001	94	68153	4.00	3.79	
67 Caprolactam	113	7.862	7.856	0.006	80	19063	4.00	4.05	
70 4-Chloro-3-methylphenol	107	8.006	8.011	-0.005	90	81684	4.00	3.86	
72 2-Methylnaphthalene	142	8.177	8.182	-0.005	86	170474	4.00	3.85	
75 1-Methylnaphthalene	142	8.273	8.273	0.000	88	152121	4.00	3.68	
76 Hexachlorocyclopentadiene	237	8.332	8.331	0.001	95	70769	4.00	3.75	
77 1,2,4,5-Tetrachlorobenzene	216	8.337	8.337	0.000	97	119611	4.00	4.31	
78 2,4,6-Trichlorophenol	196	8.433	8.433	0.000	92	63199	4.00	4.03	
79 2,4,5-Trichlorophenol	196	8.465	8.465	0.000	93	70817	4.00	4.06	
80 1,1'-Biphenyl	154	8.604	8.599	0.005	96	240763	4.00	4.27	
81 2-Chloronaphthalene	162	8.631	8.631	0.000	98	194324	4.00	4.04	
82 2-Nitroaniline	65	8.711	8.711	0.000	75	53201	4.00	3.56	
86 Dimethyl phthalate	163	8.861	8.855	0.006	96	212656	4.00	3.99	
87 1,3-Dinitrobenzene	168	8.893	8.892	0.001	83	33078	4.00	4.00	
88 2,6-Dinitrotoluene	165	8.919	8.919	0.000	89	48233	4.00	4.27	
89 Acenaphthylene	152	9.021	9.021	0.000	97	274874	4.00	4.05	
90 3-Nitroaniline	138	9.080	9.085	-0.005	83	43863	4.00	3.85	
92 2,4-Dinitrophenol	184	9.176	9.176	0.000	80	44292	8.00	7.56	
91 Acenaphthene	153	9.181	9.176	0.005	93	190885	4.00	4.17	
93 4-Nitrophenol	109	9.208	9.208	0.000	87	87409	8.00	8.04	
94 2,4-Dinitrotoluene	165	9.293	9.293	0.000	84	60591	4.00	3.83	
95 Dibenzofuran	168	9.336	9.330	0.006	94	286648	4.00	4.07	
97 2,3,5,6-Tetrachlorophenol	232	9.406	9.405	0.001	88	52488	4.00	3.46	
99 2,3,4,6-Tetrachlorophenol	232	9.443	9.437	0.006	75	59448	4.00	4.02	
100 2-Naphthylamine	143	9.470	9.469	0.001	93	164079	4.00	3.93	
101 Diethyl phthalate	149	9.502	9.496	0.006	97	223599	4.00	4.02	
102 Hexadecane	57	9.507	9.501	0.006	87	89132	4.00	3.79	
104 4-Chlorophenyl phenyl ethe	204	9.630	9.630	0.000	92	136255	4.00	4.25	
105 4-Nitroaniline	138	9.646	9.640	0.006	74	46378	4.00	3.82	
106 Fluorene	166	9.651	9.651	0.000	94	207659	4.00	3.97	
108 4,6-Dinitro-2-methylphenol	198	9.673	9.678	-0.005	81	68881	8.00	7.56	
109 N-Nitrosodiphenylamine	169	9.737	9.731	0.006	65	164628	4.00	4.10	
111 1,2-Diphenylhydrazine	77	9.779	9.774	0.005	99	263856	4.00	4.34	
116 4-Bromophenyl phenyl ether	248	10.084	10.084	0.000	71	71215	4.00	4.14	
118 Hexachlorobenzene	284	10.169	10.169	0.000	95	82863	4.00	4.47	
119 Atrazine	200	10.196	10.201	-0.005	92	56246	4.00	4.10	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.340	10.340	0.000	89	85914	8.00	7.20	
121 n-Octadecane	57	10.346	10.345	0.001	85	94817	4.00	3.86	
126 Phenanthrene	178	10.549	10.548	0.001	96	343892	4.00	4.02	
128 Anthracene	178	10.597	10.597	0.001	96	347546	4.00	3.98	
130 Carbazole	167	10.736	10.735	0.001	97	308974	4.00	4.04	
132 Di-n-butyl phthalate	149	11.035	11.029	0.006	100	331091	4.00	3.94	
137 Fluoranthene	202	11.852	11.847	0.005	96	406378	4.00	4.09	
138 Benzidine	184	11.975	11.964	0.011	98	68775	4.00	4.65	
139 Pyrene	202	12.151	12.151	0.000	98	414401	4.00	4.11	
144 Butyl benzyl phthalate	149	13.001	13.000	0.001	95	128943	4.00	3.60	
149 3,3'-Dichlorobenzidine	252	13.968	13.957	0.011	73	92636	4.00	3.17	
151 Bis(2-ethylhexyl) phthalat	149	14.005	14.005	0.000	94	164441	4.00	3.45	
152 Benzo[a]anthracene	228	14.048	14.042	0.006	96	395623	4.00	4.12	
153 Chrysene	228	14.117	14.112	0.005	95	376710	4.00	4.02	
156 Di-n-octyl phthalate	149	15.314	15.308	0.006	99	207894	4.00	3.70	
157 7,12-Dimethylbenz(a)anthra	256	16.179	16.168	0.011	77	141607	4.00	3.83	
158 Benzo[b]fluoranthene	252	16.195	16.184	0.011	95	348551	4.00	4.32	
159 Benzo[k]fluoranthene	252	16.254	16.238	0.016	96	374766	4.00	4.27	
176 Benzo[e]pyrene	252	16.788	16.772	0.016	0	313742	4.00	4.03	
160 Benzo[a]pyrene	252	16.885	16.890	-0.005	75	301392	4.00	3.99	
163 Indeno[1,2,3-cd]pyrene	276	19.235	19.224	0.011	96	332043	4.00	3.93	
164 Dibenz(a,h)anthracene	278	19.267	19.251	0.016	81	286894	4.00	3.98	M
165 Benzo[g,h,i]perylene	276	19.849	19.828	0.021	96	290982	4.00	3.94	
S 206 Total Cresols	108				0		8.00	8.09	
S 208 Methyl Phenols,Total	108				0		8.00	8.09	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD4.0i_00006 Amount Added: 1.00 Units: mL

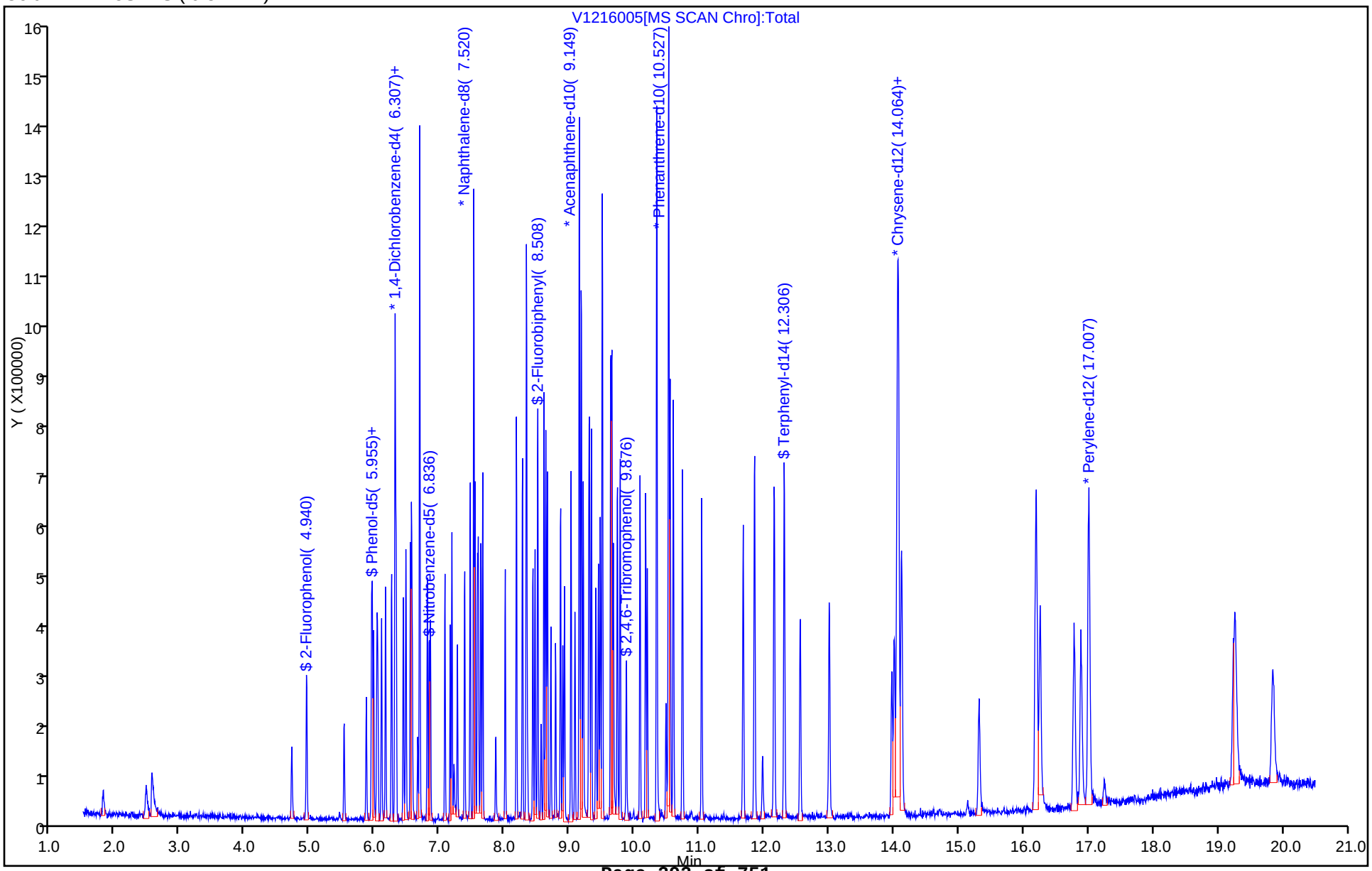
Report Date: 16-Dec-2014 09:20:56 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216005.D

Injection Date:	16-Dec-2014 05:16:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

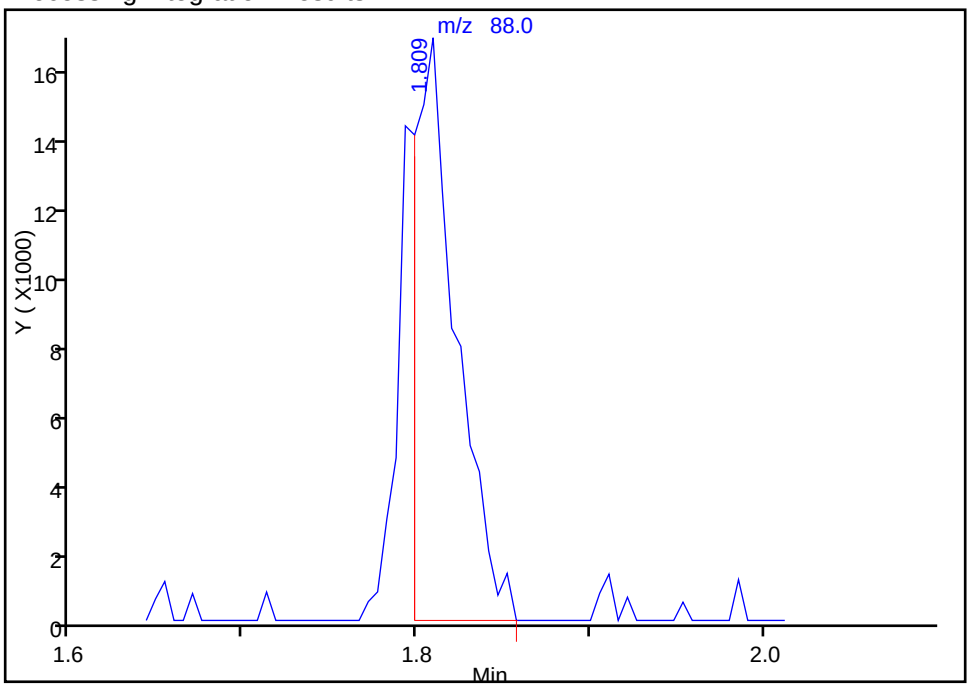
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216005.D
Injection Date: 16-Dec-2014 05:16:30 Instrument ID: CH731
Lims ID: IC
Client ID:
Operator ID: 003200 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

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

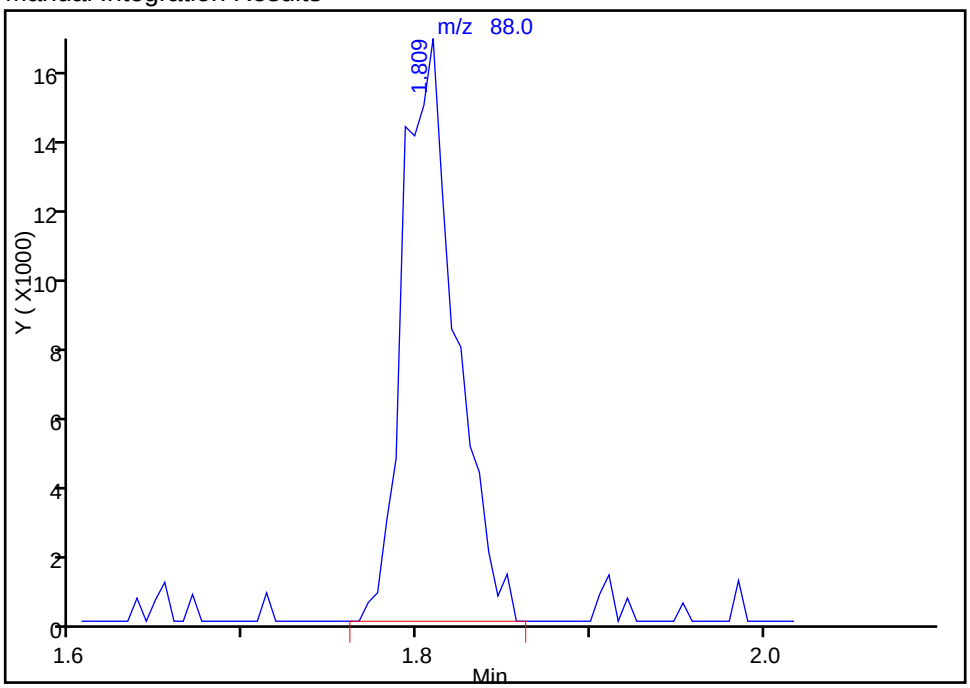
Processing Integration Results

RT: 1.81
Response: 27277
Amount: 3.227252



Manual Integration Results

RT: 1.81
Response: 34502
Amount: 4.287587



Reviewer: piccolinov, 16-Dec-2014 07:00:06
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

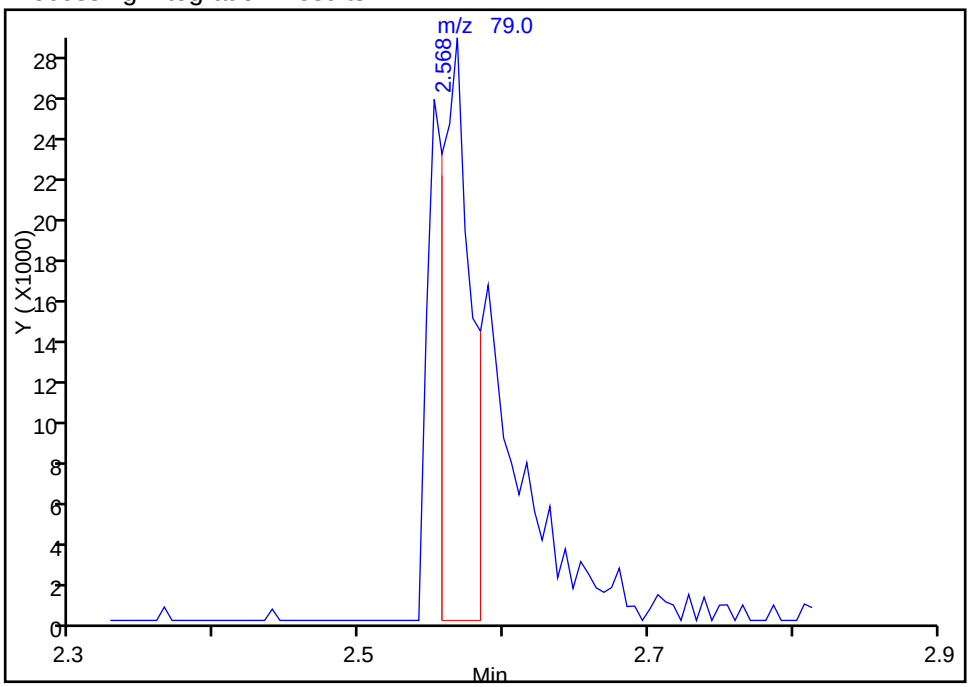
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216005.D				
Injection Date:	16-Dec-2014 05:16:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

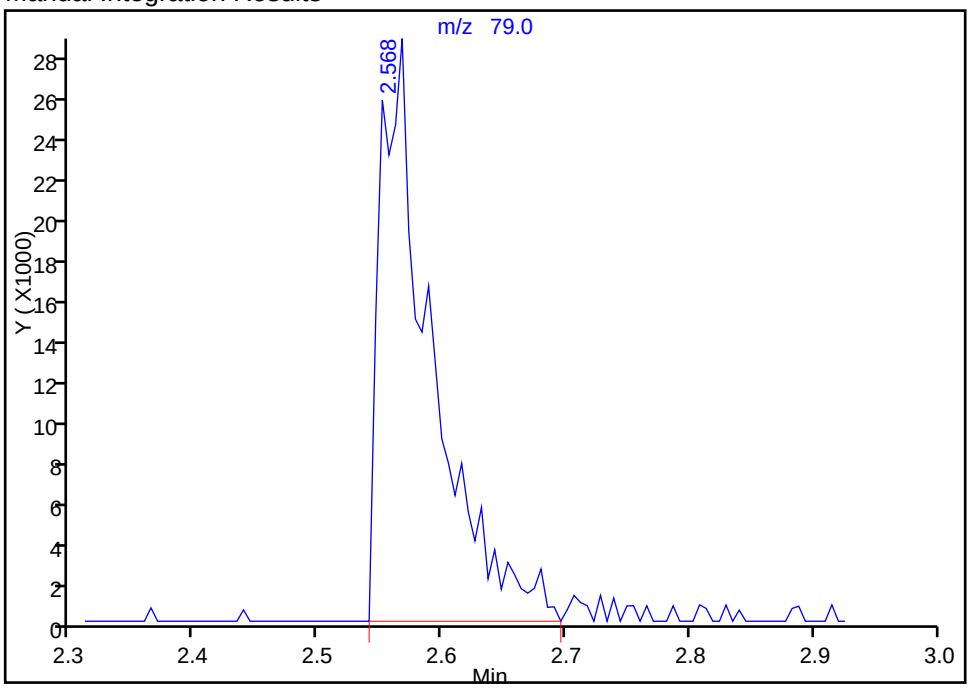
Processing Integration Results

RT: 2.57
Response: 38945
Amount: 1.883537



Manual Integration Results

RT: 2.57
Response: 81665
Amount: 4.106254



Reviewer: piccolinov, 16-Dec-2014 07:00:06
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

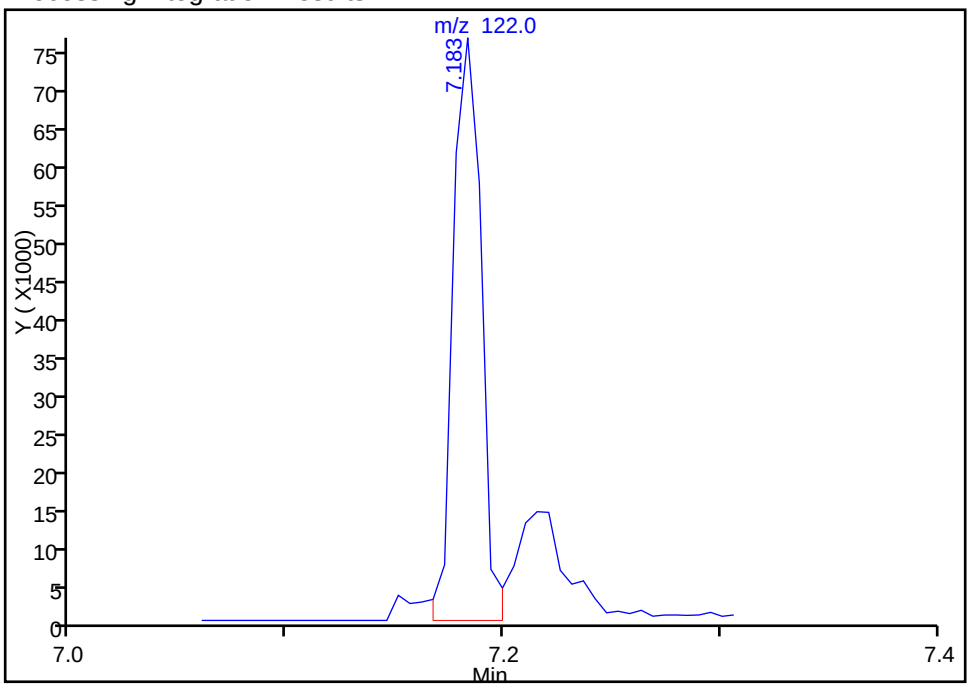
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216005.D
Injection Date: 16-Dec-2014 05:16:30 Instrument ID: CH731
Lims ID: IC
Client ID:
Operator ID: 003200 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

56 Benzoic acid, CAS: 65-85-0

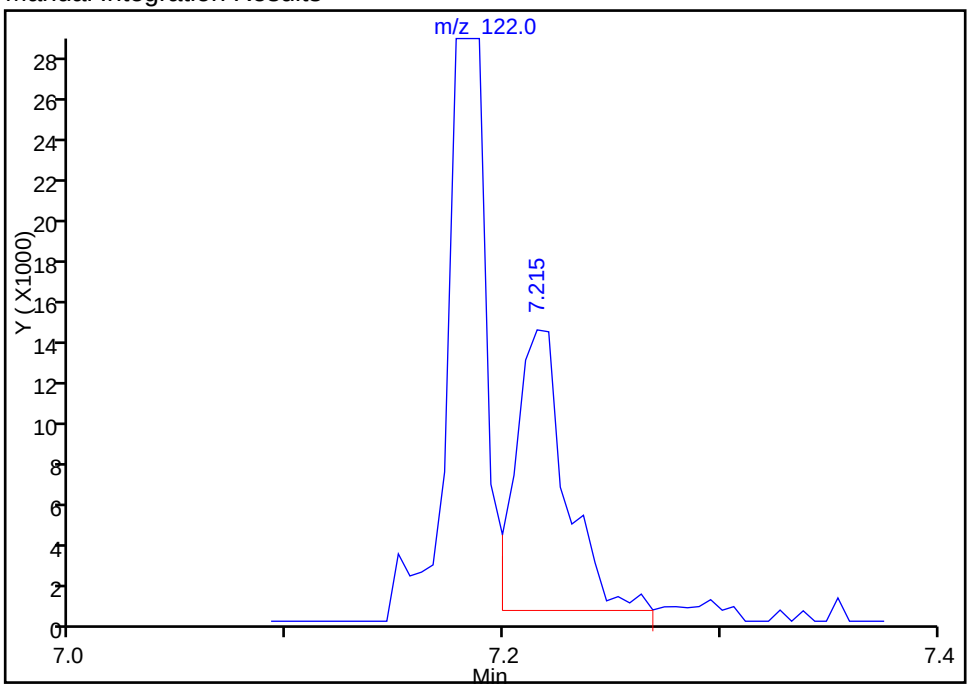
Processing Integration Results

RT: 7.18
Response: 69601
Amount: 6.236584



Manual Integration Results

RT: 7.22
Response: 22406
Amount: 4.194560



Reviewer: piccolinov, 16-Dec-2014 07:00:06
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

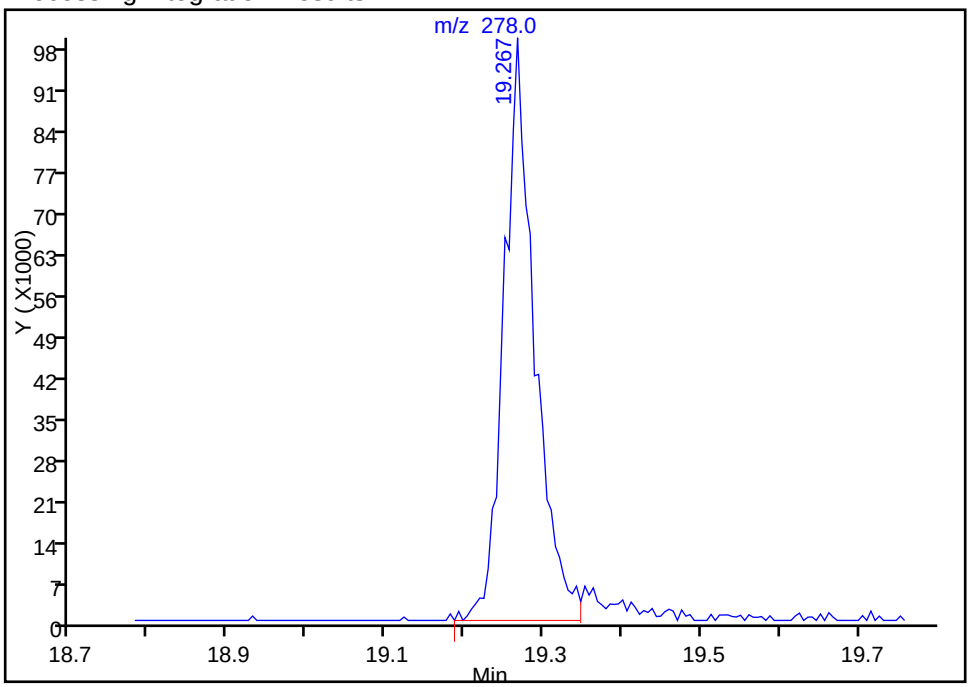
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216005.D				
Injection Date:	16-Dec-2014 05:16:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

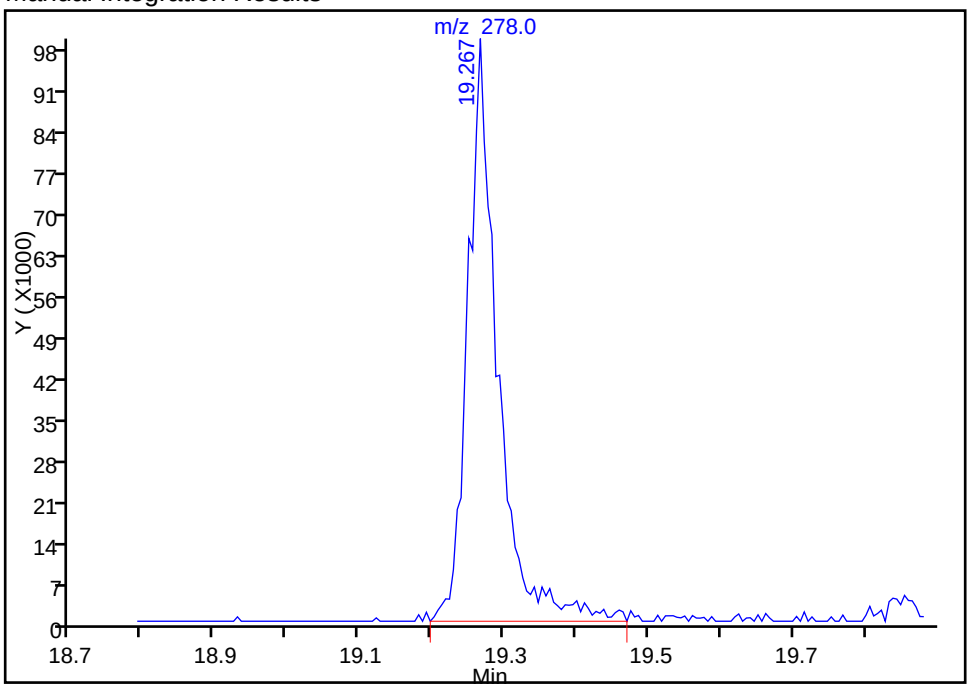
Processing Integration Results

RT: 19.27
Response: 269808
Amount: 3.684940



Manual Integration Results

RT: 19.27
Response: 286894
Amount: 3.981030



Reviewer: piccolinov, 16-Dec-2014 08:48:34
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216006.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 16-Dec-2014 05:44:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004887-006
Misc. Info.: ICIS
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 16-Dec-2014 09:24:16 Calib Date: 16-Dec-2014 07:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: piccolinov Date: 16-Dec-2014 09:20:47

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	6.301	6.301	0.000	93	137644	8.00	8.00	
* 2 Naphthalene-d8	136	7.519	7.519	0.000	99	462091	8.00	8.00	
* 3 Acenaphthene-d10	164	9.149	9.149	0.000	92	332553	8.00	8.00	
* 4 Phenanthrene-d10	188	10.522	10.522	0.000	96	630446	8.00	8.00	
* 5 Chrysene-d12	240	14.064	14.064	0.000	96	692731	8.00	8.00	
* 6 Perylene-d12	264	17.002	17.002	0.000	98	575542	8.00	8.00	
$ 7 2-Fluorophenol	112	4.939	4.939	0.000	91	187867	10.0	9.46	
$ 8 Phenol-d5	99	5.943	5.943	0.000	87	237733	10.0	9.73	
$ 9 Nitrobenzene-d5	82	6.830	6.830	0.000	90	288755	10.0	10.4	
$ 10 2-Fluorobiphenyl	172	8.508	8.508	0.000	99	595657	10.0	9.77	
$ 11 2,4,6-Tribromophenol	330	9.875	9.875	0.000	86	81284	10.0	10.3	
$ 12 Terphenyl-d14	244	12.306	12.306	0.000	98	743823	10.0	10.6	
13 1,4-Dioxane	88	1.803	1.803	0.000	90	89613	10.0	10.3	
14 N-Nitrosodimethylamine	74	2.460	2.460	0.000	87	125105	10.0	10.2	
15 Pyridine	79	2.546	2.546	0.000	95	194049	10.0	8.98	
22 Methyl methanesulfonate	80	4.704	4.704	0.000	91	155884	10.0	9.56	
26 Benzaldehyde	77	5.858	5.858	0.000	90	135561	10.0	9.76	
27 Phenol	94	5.954	5.954	0.000	92	275563	10.0	9.59	
28 Aniline	93	5.970	5.970	0.000	95	306421	10.0	9.88	
29 Bis(2-chloroethyl)ether	93	6.040	6.040	0.000	92	179638	10.0	9.30	
31 2-Chlorophenol	128	6.093	6.093	0.000	93	199216	10.0	9.74	
32 n-Decane	43	6.157	6.157	0.000	76	164336	10.0	9.26	
33 1,3-Dichlorobenzene	146	6.248	6.248	0.000	93	273510	10.0	10.3	
34 1,4-Dichlorobenzene	146	6.323	6.323	0.000	88	260540	10.0	9.51	
36 Benzyl alcohol	108	6.430	6.430	0.000	85	131486	10.0	10.0	
37 1,2-Dichlorobenzene	146	6.472	6.472	0.000	90	259330	10.0	9.99	
38 2-Methylphenol	108	6.542	6.542	0.000	93	189131	10.0	9.40	
39 Indene	116	6.558	6.558	0.000	88	362127	10.0	10.1	
40 2,2'-oxybis[1-chloropropan	45	6.568	6.568	0.000	78	179990	10.0	9.38	
41 N-Nitrosopyrrolidine	100	6.654	6.654	0.000	80	86226	10.0	10.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 N-Nitrosodi-n-propylamine	70	6.686	6.686	0.000	64	181157	10.0	9.53	
45 4-Methylphenol	108	6.686	6.686	0.000	55	202833	10.0	9.21	
43 Acetophenone	105	6.686	6.686	0.000	78	346326	10.0	10.3	
47 Hexachloroethane	117	6.804	6.804	0.000	88	113135	10.0	9.45	
48 Nitrobenzene	77	6.852	6.852	0.000	85	298745	10.0	10.3	
50 Isophorone	82	7.071	7.071	0.000	97	441058	10.0	10.4	
51 2-Nitrophenol	139	7.156	7.156	0.000	85	114291	10.0	10.5	
52 2,4-Dimethylphenol	107	7.183	7.183	0.000	96	266430	10.0	10.8	
56 Benzoic acid	122	7.226	7.226	0.000	86	75017	10.0	8.93	
55 Bis(2-chloroethoxy)methane	93	7.268	7.268	0.000	96	232827	10.0	10.3	
57 2,4-Dichlorophenol	162	7.375	7.375	0.000	96	199294	10.0	10.3	
61 Azobenzene	77		7.466				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.466	7.466	0.000	92	260647	10.0	10.0	
60 Naphthalene	128	7.541	7.541	0.000	98	631514	10.0	10.0	
62 4-Chloroaniline	127	7.573	7.573	0.000	92	254218	10.0	10.0	
63 2,6-Dichlorophenol	162	7.589	7.589	0.000	95	200240	10.0	10.1	
64 Hexachlorobutadiene	225	7.658	7.658	0.000	94	181496	10.0	10.0	
67 Caprolactam	113	7.861	7.861	0.000	81	54162	10.0	9.66	
70 4-Chloro-3-methylphenol	107	8.006	8.006	0.000	90	219039	10.0	10.3	
72 2-Methylnaphthalene	142	8.176	8.176	0.000	89	452528	10.0	10.2	
75 1-Methylnaphthalene	142	8.267	8.267	0.000	91	421066	10.0	10.1	
76 Hexachlorocyclopentadiene	237	8.326	8.326	0.000	96	202581	10.0	10.2	
77 1,2,4,5-Tetrachlorobenzene	216	8.337	8.337	0.000	97	280973	10.0	9.67	
78 2,4,6-Trichlorophenol	196	8.433	8.433	0.000	93	171011	10.0	10.4	
79 2,4,5-Trichlorophenol	196	8.465	8.465	0.000	93	182776	10.0	9.98	
80 1,1'-Biphenyl	154	8.604	8.604	0.000	96	576720	10.0	9.75	
81 2-Chloronaphthalene	162	8.631	8.631	0.000	97	496204	10.0	9.84	
82 2-Nitroaniline	65	8.711	8.711	0.000	73	158731	10.0	10.1	
86 Dimethyl phthalate	163	8.855	8.855	0.000	96	538254	10.0	9.62	
87 1,3-Dinitrobenzene	168	8.892	8.892	0.000	84	89801	10.0	10.4	
88 2,6-Dinitrotoluene	165	8.919	8.919	0.000	88	125845	10.0	10.6	
89 Acenaphthylene	152	9.021	9.021	0.000	97	688494	10.0	9.69	
90 3-Nitroaniline	138	9.079	9.079	0.000	87	116851	10.0	9.78	
92 2,4-Dinitrophenol	184	9.175	9.175	0.000	71	148268	20.0	17.1	
91 Acenaphthene	153	9.175	9.175	0.000	89	465378	10.0	9.71	
93 4-Nitrophenol	109	9.208	9.208	0.000	89	219778	20.0	19.3	
94 2,4-Dinitrotoluene	165	9.293	9.293	0.000	87	166398	10.0	10.0	
95 Dibenzofuran	168	9.336	9.336	0.000	94	705327	10.0	9.55	
97 2,3,5,6-Tetrachlorophenol	232	9.400	9.400	0.000	91	157792	10.0	9.91	
99 2,3,4,6-Tetrachlorophenol	232	9.443	9.443	0.000	76	157615	10.0	10.2	
100 2-Naphthylamine	143	9.469	9.469	0.000	94	432308	10.0	9.89	
101 Diethyl phthalate	149	9.496	9.496	0.000	96	565946	10.0	9.71	
102 Hexadecane	57	9.507	9.507	0.000	83	230197	10.0	9.71	
104 4-Chlorophenyl phenyl ethe	204	9.630	9.630	0.000	93	329080	10.0	9.79	
105 4-Nitroaniline	138	9.640	9.640	0.000	70	118797	10.0	9.32	
106 Fluorene	166	9.651	9.651	0.000	93	541248	10.0	9.86	
108 4,6-Dinitro-2-methylphenol	198	9.672	9.672	0.000	85	228428	20.0	20.1	
109 N-Nitrosodiphenylamine	169	9.731	9.731	0.000	63	428689	10.0	10.5	
111 1,2-Diphenylhydrazine	77	9.774	9.774	0.000	100	660761	10.0	10.7	
116 4-Bromophenyl phenyl ether	248	10.084	10.084	0.000	70	177536	10.0	10.2	
118 Hexachlorobenzene	284	10.169	10.169	0.000	93	188573	10.0	10.0	
119 Atrazine	200	10.196	10.196	0.000	93	142431	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.340	10.340	0.000	88	239282	20.0	19.7	
121 n-Octadecane	57	10.340	10.340	0.000	86	253615	10.0	9.50	
126 Phenanthrene	178	10.548	10.548	0.000	97	883248	10.0	10.2	
128 Anthracene	178	10.596	10.596	0.000	96	927775	10.0	10.4	
130 Carbazole	167	10.741	10.741	0.000	96	810819	10.0	10.4	
132 Di-n-butyl phthalate	149	11.035	11.035	0.000	100	886237	10.0	10.4	
137 Fluoranthene	202	11.847	11.847	0.000	96	1035215	10.0	10.2	
138 Benzidine	184	11.975	11.975	0.000	98	260232	10.0	8.85	
139 Pyrene	202	12.151	12.151	0.000	98	1047978	10.0	10.1	
144 Butyl benzyl phthalate	149	13.000	13.000	0.000	97	359434	10.0	9.78	
149 3,3'-Dichlorobenzidine	252	13.967	13.967	0.000	74	284306	10.0	9.47	
151 Bis(2-ethylhexyl) phthalat	149	14.005	14.005	0.000	95	479240	10.0	9.80	
152 Benzo[a]anthracene	228	14.047	14.047	0.000	97	998170	10.0	10.1	
153 Chrysene	228	14.117	14.117	0.000	95	940055	10.0	9.77	
156 Di-n-octyl phthalate	149	15.314	15.314	0.000	99	673562	10.0	9.40	
157 7,12-Dimethylbenz(a)anthra	256	16.184	16.184	0.000	92	413185	10.0	10.7	
158 Benzo[b]fluoranthene	252	16.195	16.195	0.000	95	881803	10.0	10.4	
159 Benzo[k]fluoranthene	252	16.254	16.254	0.000	96	991075	10.0	10.8	
176 Benzo[e]pyrene	252	16.777	16.777	0.000	0	843246	10.0	10.3	
160 Benzo[a]pyrene	252	16.889	16.889	0.000	74	833377	10.0	10.5	
163 Indeno[1,2,3-cd]pyrene	276	19.235	19.235	0.000	98	908000	10.0	10.3	
164 Dibenz(a,h)anthracene	278	19.267	19.267	0.000	88	767859	10.0	10.2	
165 Benzo[g,h,i]perylene	276	19.849	19.849	0.000	96	798468	10.0	10.3	
S 206 Total Cresols	108				0		20.0	18.6	
S 208 Methyl Phenols,Total	108				0		20.0	18.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD10i_00082 Amount Added: 1.00 Units: mL

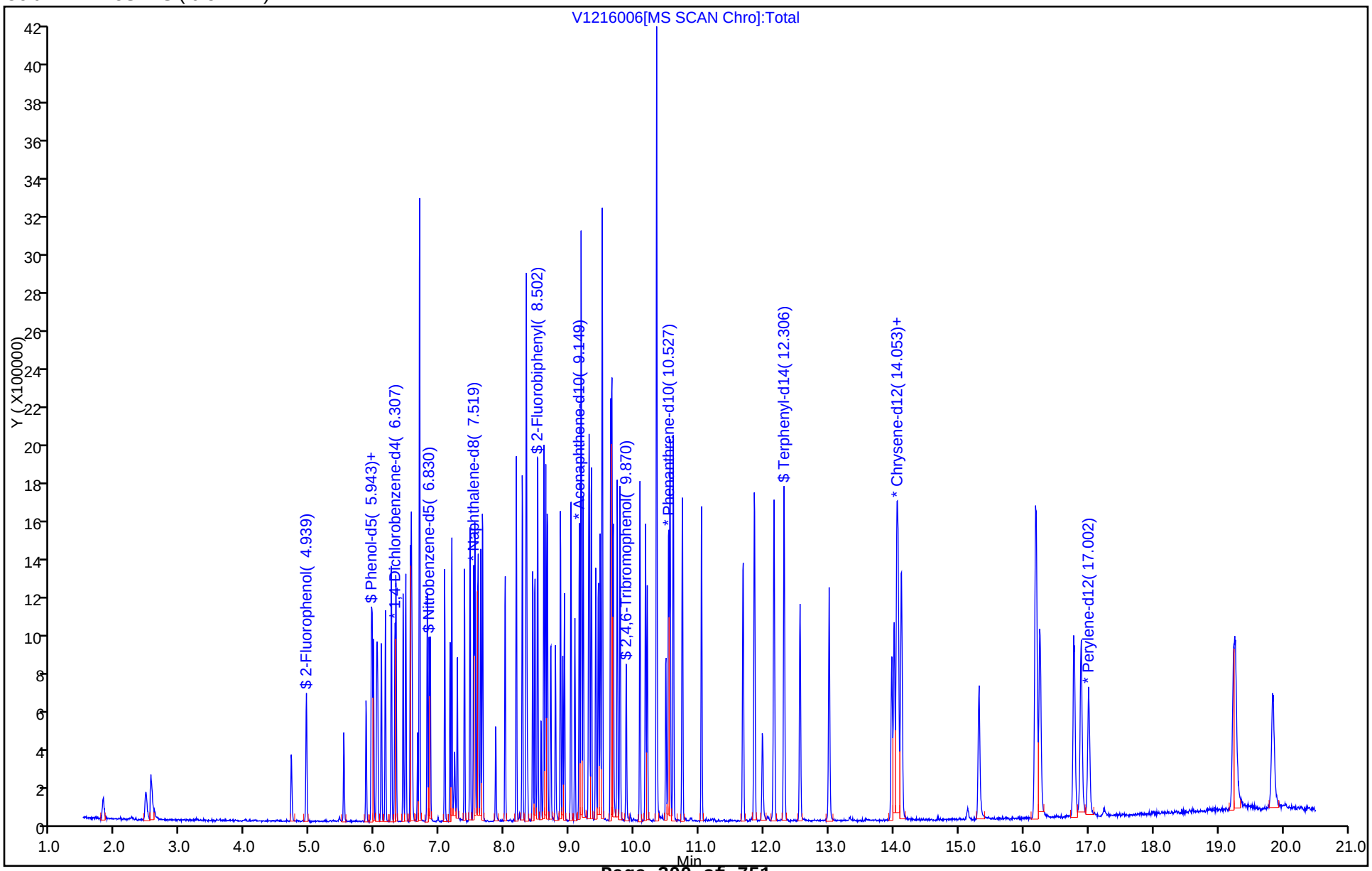
Report Date: 16-Dec-2014 09:24:16 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216006.D

Injection Date:	16-Dec-2014 05:44:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	ICIS			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Report Date: 16-Dec-2014 09:20:57 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216007.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Dec-2014 06:12:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004887-007
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 16-Dec-2014 09:20:57 Calib Date: 16-Dec-2014 07:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: piccolinov Date: 16-Dec-2014 07:03:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.309	6.307	0.002	92	126583	8.00	8.00	
* 2 Naphthalene-d8	136	7.522	7.519	0.003	98	450987	8.00	8.00	
* 3 Acenaphthene-d10	164	9.156	9.149	0.007	91	325011	8.00	8.00	
* 4 Phenanthrene-d10	188	10.535	10.522	0.013	96	647930	8.00	8.00	
* 5 Chrysene-d12	240	14.077	14.064	0.012	96	728956	8.00	8.00	
* 6 Perylene-d12	264	17.025	16.996	0.029	98	611232	8.00	8.00	
$ 7 2-Fluorophenol	112	4.941	4.939	0.002	91	381734	20.0	20.9	
$ 8 Phenol-d5	99	5.946	5.949	-0.003	89	477076	20.0	21.2	
$ 9 Nitrobenzene-d5	82	6.838	6.836	0.002	90	570640	20.0	21.2	
$ 10 2-Fluorobiphenyl	172	8.510	8.508	0.002	99	1159552	20.0	19.5	
$ 11 2,4,6-Tribromophenol	330	9.878	9.870	0.008	89	159040	20.0	19.6	
$ 12 Terphenyl-d14	244	12.314	12.311	0.003	99	1500595	20.0	20.3	
13 1,4-Dioxane	88	1.795	1.809	-0.014	89	155805	20.0	19.4	
14 N-Nitrosodimethylamine	74	2.457	2.503	-0.046	88	226926	20.0	20.1	
15 Pyridine	79	2.527	2.631	-0.104	94	392892	20.0	19.8	
22 Methyl methanesulfonate	80	4.712	4.720	-0.008	91	292650	20.0	19.5	
26 Benzaldehyde	77	5.860	5.863	-0.003	91	271514	20.0	21.3	
27 Phenol	94	5.956	5.960	-0.004	98	542434	20.0	20.5	
28 Aniline	93	5.978	5.976	0.002	97	605014	20.0	21.2	
29 Bis(2-chloroethyl)ether	93	6.042	6.040	0.002	91	345190	20.0	19.4	
31 2-Chlorophenol	128	6.101	6.104	-0.003	92	387544	20.0	20.6	
32 n-Decane	43	6.159	6.157	0.002	77	314700	20.0	19.3	
33 1,3-Dichlorobenzene	146	6.256	6.253	0.003	91	484746	20.0	19.9	
34 1,4-Dichlorobenzene	146	6.325	6.323	0.002	88	511679	20.0	20.3	
36 Benzyl alcohol	108	6.437	6.435	0.002	85	247139	20.0	20.5	
37 1,2-Dichlorobenzene	146	6.475	6.478	-0.003	91	466706	20.0	19.5	
38 2-Methylphenol	108	6.549	6.542	0.007	93	370071	20.0	20.0	
39 Indene	116	6.560	6.558	0.002	87	681624	20.0	20.8	
40 2,2'-oxybis[1-chloropropan	45	6.576	6.569	0.007	77	345392	20.0	19.6	
41 N-Nitrosopyrrolidine	100	6.662	6.654	0.008	76	166607	20.0	21.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 N-Nitrosodi-n-propylamine	70	6.688	6.686	0.002	71	370149	20.0	21.2	
45 4-Methylphenol	108	6.688	6.686	0.002	92	415838	20.0	20.5	
43 Acetophenone	105	6.688	6.691	-0.003	80	638000	20.0	20.7	
47 Hexachloroethane	117	6.806	6.804	0.002	87	227526	20.0	20.7	
48 Nitrobenzene	77	6.854	6.852	0.002	86	562270	20.0	19.9	
50 Isophorone	82	7.078	7.076	0.002	98	869382	20.0	21.0	
51 2-Nitrophenol	139	7.158	7.162	-0.004	84	227025	20.0	21.4	
52 2,4-Dimethylphenol	107	7.185	7.188	-0.003	97	493152	20.0	20.5	
56 Benzoic acid	122	7.244	7.204	0.040	53	177008	20.0	18.5	M
55 Bis(2-chloroethoxy)methane	93	7.271	7.268	0.003	95	432445	20.0	19.5	
57 2,4-Dichlorophenol	162	7.383	7.386	-0.003	95	395421	20.0	20.9	
61 Azobenzene	77		7.466				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.468	7.466	0.002	91	505148	20.0	19.9	
60 Naphthalene	128	7.543	7.541	0.002	98	1189861	20.0	19.4	
62 4-Chloroaniline	127	7.580	7.573	0.007	92	497903	20.0	20.1	
63 2,6-Dichlorophenol	162	7.597	7.594	0.002	92	394040	20.0	20.3	
64 Hexachlorobutadiene	225	7.661	7.658	0.003	94	348300	20.0	19.7	
67 Caprolactam	113	7.869	7.856	0.013	82	110004	20.0	19.1	
70 4-Chloro-3-methylphenol	107	8.013	8.011	0.002	92	424853	20.0	20.4	
72 2-Methylnaphthalene	142	8.184	8.182	0.002	90	886708	20.0	20.4	
75 1-Methylnaphthalene	142	8.275	8.273	0.002	90	814980	20.0	20.1	
76 Hexachlorocyclopentadiene	237	8.334	8.331	0.003	96	402142	20.0	20.8	
77 1,2,4,5-Tetrachlorobenzene	216	8.339	8.337	0.002	97	573312	20.0	20.2	
78 2,4,6-Trichlorophenol	196	8.435	8.433	0.002	94	335317	20.0	20.9	
79 2,4,5-Trichlorophenol	196	8.473	8.465	0.008	91	371915	20.0	20.8	
80 1,1'-Biphenyl	154	8.606	8.599	0.007	96	1114750	20.0	19.3	
81 2-Chloronaphthalene	162	8.638	8.631	0.007	97	982764	20.0	19.9	
82 2-Nitroaniline	65	8.713	8.711	0.002	74	311692	20.0	20.4	
86 Dimethyl phthalate	163	8.863	8.855	0.008	96	1092840	20.0	20.0	
87 1,3-Dinitrobenzene	168	8.900	8.892	0.008	84	177922	20.0	21.0	
88 2,6-Dinitrotoluene	165	8.927	8.919	0.008	89	239816	20.0	20.7	
89 Acenaphthylene	152	9.028	9.021	0.007	97	1445742	20.0	20.8	
90 3-Nitroaniline	138	9.087	9.085	0.002	87	241289	20.0	20.7	
92 2,4-Dinitrophenol	184	9.183	9.176	0.007	80	360101	40.0	37.7	
91 Acenaphthene	153	9.183	9.176	0.007	87	913318	20.0	19.5	
93 4-Nitrophenol	109	9.215	9.208	0.007	88	446932	40.0	40.1	
94 2,4-Dinitrotoluene	165	9.301	9.293	0.008	87	342266	20.0	21.1	
95 Dibenzofuran	168	9.343	9.330	0.013	95	1434233	20.0	19.9	
97 2,3,5,6-Tetrachlorophenol	232	9.407	9.405	0.002	92	321753	20.0	20.7	
99 2,3,4,6-Tetrachlorophenol	232	9.445	9.437	0.008	74	315620	20.0	20.8	
100 2-Naphthylamine	143	9.477	9.469	0.008	93	866185	20.0	20.3	
101 Diethyl phthalate	149	9.504	9.496	0.008	96	1139216	20.0	20.0	
102 Hexadecane	57	9.509	9.501	0.008	88	472734	20.0	20.4	
104 4-Chlorophenyl phenyl ethe	204	9.637	9.630	0.007	92	652730	20.0	19.9	
105 4-Nitroaniline	138	9.648	9.640	0.008	78	255222	20.0	20.5	
106 Fluorene	166	9.659	9.651	0.008	93	1090154	20.0	20.3	
108 4,6-Dinitro-2-methylphenol	198	9.680	9.678	0.002	86	489409	40.0	39.6	
109 N-Nitrosodiphenylamine	169	9.739	9.731	0.008	63	840102	20.0	20.0	
111 1,2-Diphenylhydrazine	77	9.781	9.774	0.007	99	1278422	20.0	20.1	
116 4-Bromophenyl phenyl ether	248	10.091	10.084	0.007	70	362964	20.0	20.2	
118 Hexachlorobenzene	284	10.177	10.169	0.008	93	384045	20.0	19.8	
119 Atrazine	200	10.203	10.201	0.002	93	308538	20.0	21.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.348	10.340	0.008	88	524704	40.0	42.0	
121 n-Octadecane	57	10.348	10.345	0.003	88	520339	20.0	21.2	
126 Phenanthrene	178	10.556	10.548	0.008	97	1764682	20.0	19.7	
128 Anthracene	178	10.604	10.597	0.008	97	1856496	20.0	20.3	
130 Carbazole	167	10.743	10.735	0.008	96	1621770	20.0	20.3	
132 Di-n-butyl phthalate	149	11.042	11.029	0.013	100	1869731	20.0	21.3	
137 Fluoranthene	202	11.860	11.847	0.013	96	2125350	20.0	20.5	
138 Benzidine	184	11.982	11.964	0.018	98	687160	20.0	17.6	
139 Pyrene	202	12.159	12.151	0.008	99	2213108	20.0	20.3	
144 Butyl benzyl phthalate	149	13.008	13.000	0.008	96	797272	20.0	20.6	
149 3,3'-Dichlorobenzidine	252	13.975	13.957	0.018	74	660669	20.0	20.9	
151 Bis(2-ethylhexyl) phthalat	149	14.018	14.005	0.013	95	1081408	20.0	21.0	
152 Benzo[a]anthracene	228	14.060	14.042	0.018	96	2045120	20.0	19.7	
153 Chrysene	228	14.130	14.112	0.018	95	1986833	20.0	19.6	
156 Di-n-octyl phthalate	149	15.321	15.308	0.013	99	1638100	20.0	20.3	
157 7,12-Dimethylbenz(a)anthra	256	16.197	16.168	0.029	91	890627	20.0	21.6	
158 Benzo[b]fluoranthene	252	16.213	16.184	0.029	95	2058084	20.0	22.9	
159 Benzo[k]fluoranthene	252	16.272	16.238	0.034	96	1960472	20.0	20.0	
176 Benzo[e]pyrene	252	16.796	16.772	0.024	0	1839855	20.0	21.3	
160 Benzo[a]pyrene	252	16.902	16.890	0.012	75	1812948	20.0	21.6	
163 Indeno[1,2,3-cd]pyrene	276	19.258	19.224	0.034	97	2024288	20.0	21.5	
164 Dibenz(a,h)anthracene	278	19.285	19.251	0.034	86	1753036	20.0	21.9	M
165 Benzo[g,h,i]perylene	276	19.867	19.828	0.039	97	1759245	20.0	21.4	
S 206 Total Cresols	108				0		40.0	40.5	
S 208 Methyl Phenols,Total	108				0		40.0	40.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD20i_00005 Amount Added: 1.00 Units: mL

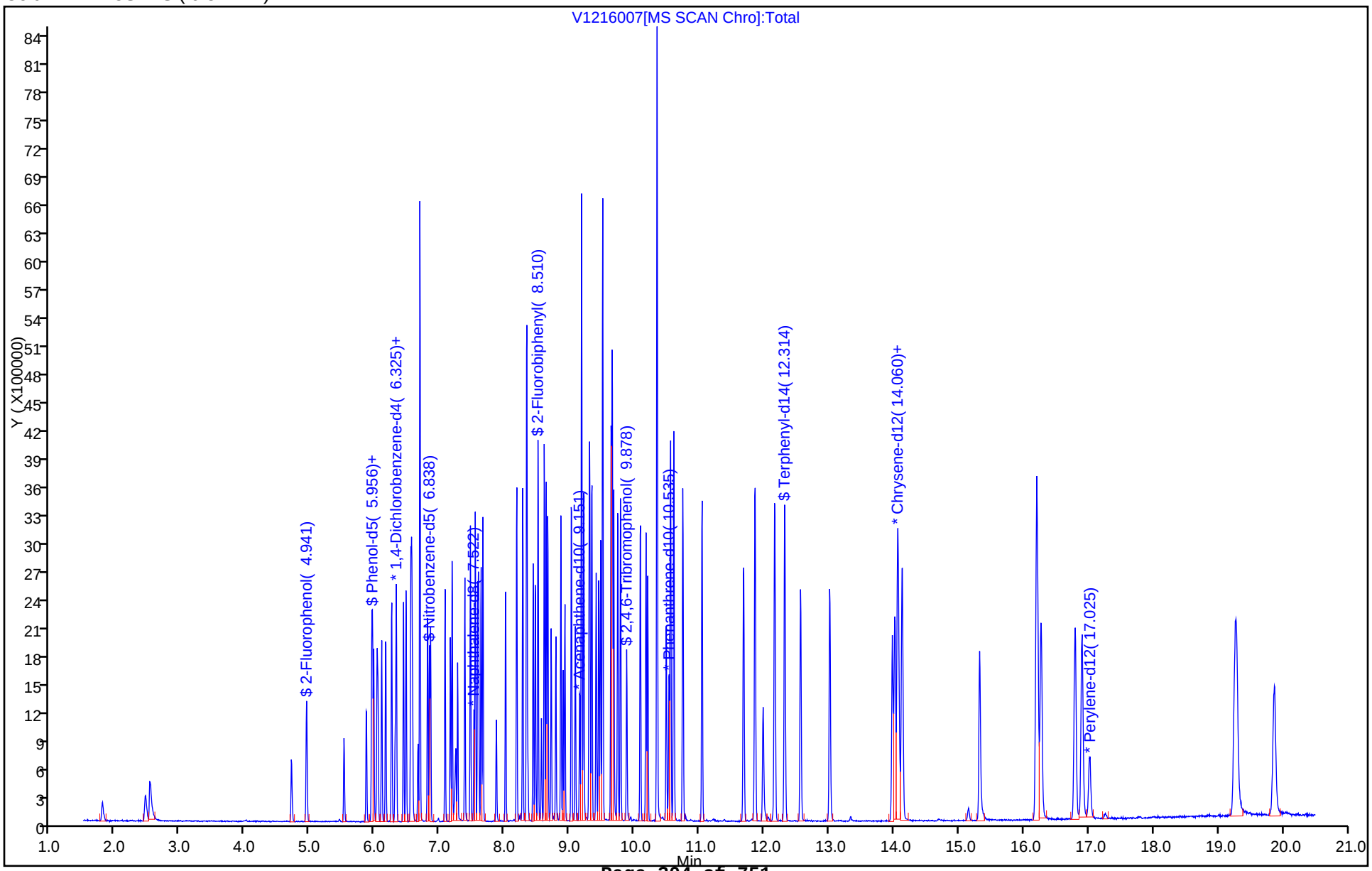
Report Date: 16-Dec-2014 09:20:57 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216007.D

Injection Date:	16-Dec-2014 06:12:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	7
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

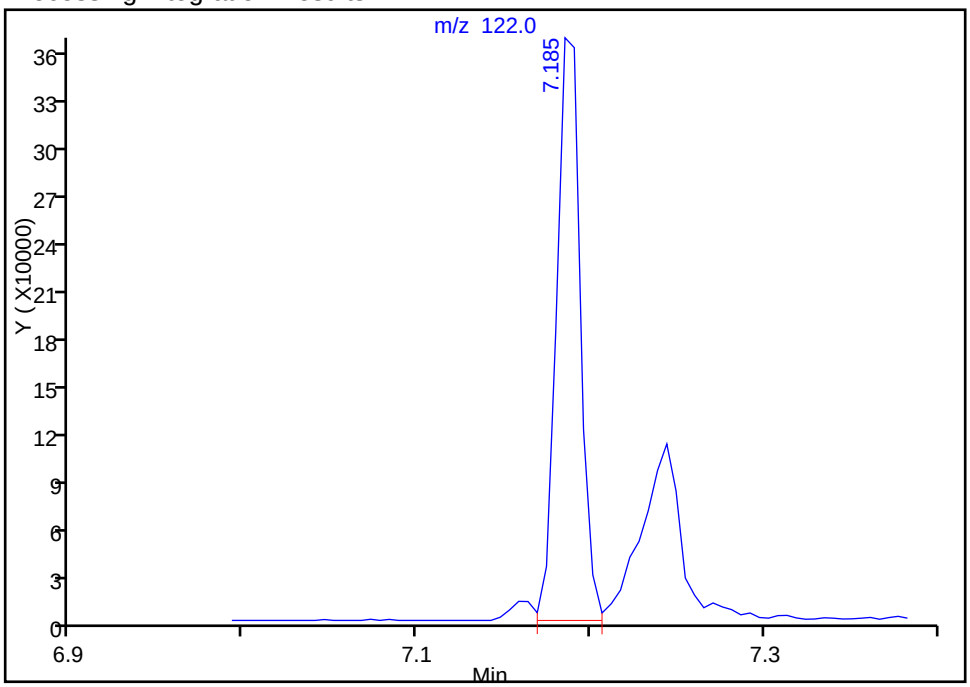
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216007.D				
Injection Date:	16-Dec-2014 06:12:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

56 Benzoic acid, CAS: 65-85-0

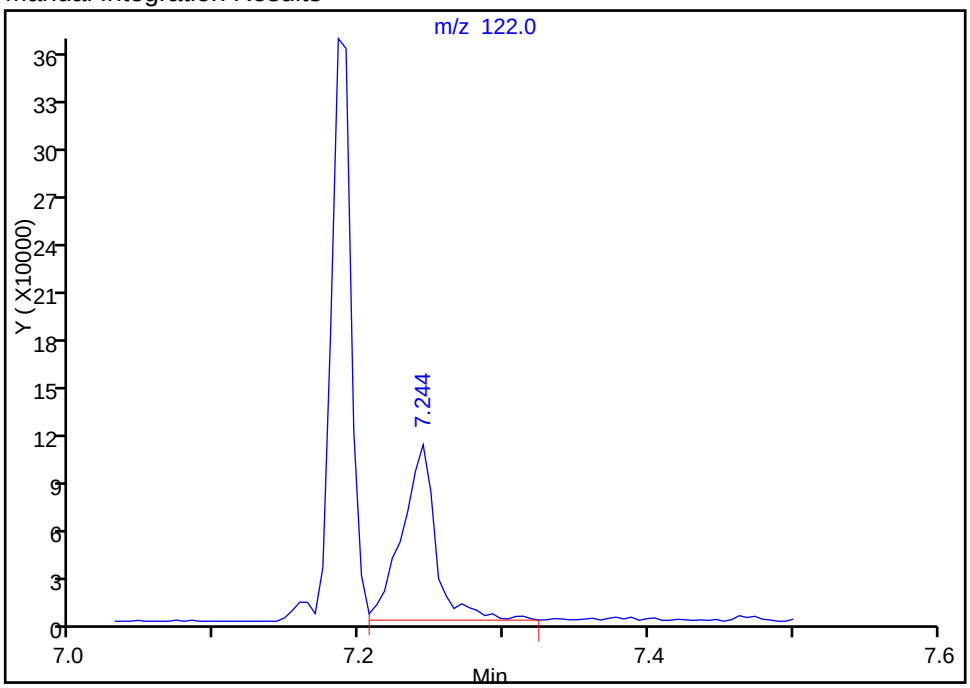
Processing Integration Results

RT: 7.19
Response: 347762
Amount: 38.028192



Manual Integration Results

RT: 7.24
Response: 177008
Amount: 18.537721



Reviewer: piccolinov, 16-Dec-2014 07:03:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

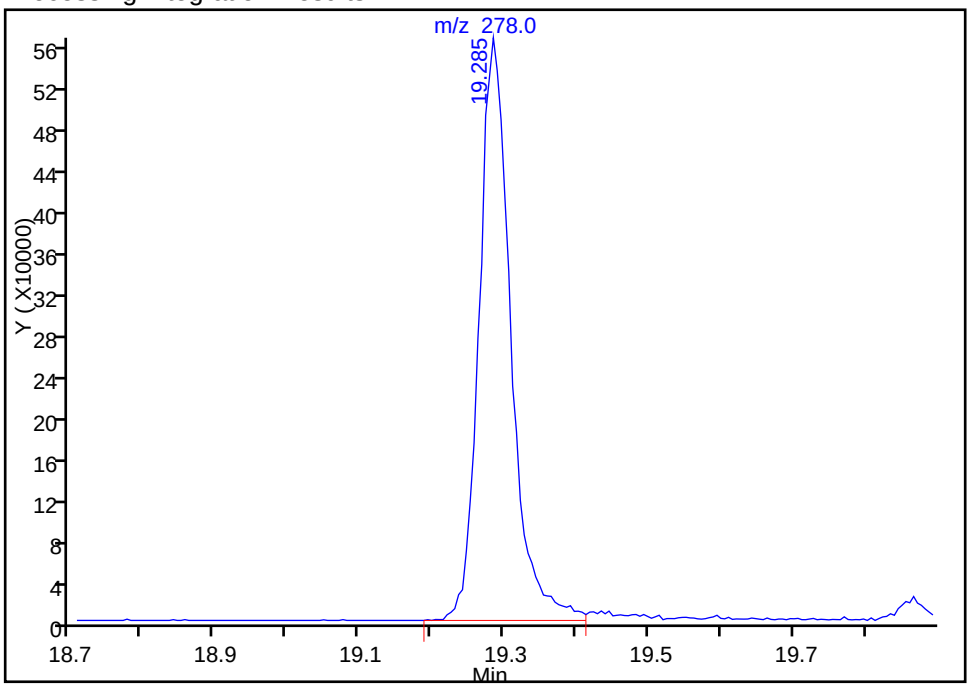
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216007.D				
Injection Date:	16-Dec-2014 06:12:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

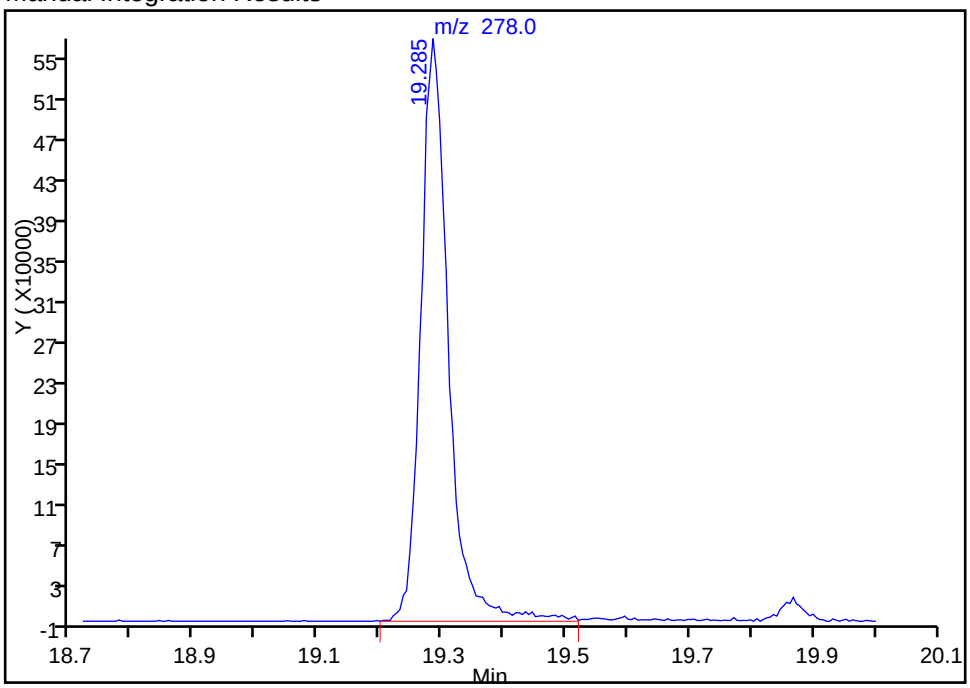
Processing Integration Results

RT: 19.29
Response: 1718609
Amount: 21.481139



Manual Integration Results

RT: 19.29
Response: 1753036
Amount: 21.852676



Reviewer: piccolinov, 16-Dec-2014 08:49:12
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216008.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Dec-2014 06:41:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004887-008
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 16-Dec-2014 09:20:59 Calib Date: 16-Dec-2014 07:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: piccolinov Date: 16-Dec-2014 07:48:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.304	6.307	-0.003	93	124029	8.00	8.00	
* 2 Naphthalene-d8	136	7.522	7.519	0.003	99	437930	8.00	8.00	
* 3 Acenaphthene-d10	164	9.151	9.149	0.002	91	317045	8.00	8.00	
* 4 Phenanthrene-d10	188	10.529	10.522	0.007	96	650750	8.00	8.00	
* 5 Chrysene-d12	240	14.076	14.064	0.012	96	738433	8.00	8.00	
* 6 Perylene-d12	264	17.009	16.996	0.013	98	707141	8.00	8.00	
$ 7 2-Fluorophenol	112	4.941	4.939	0.002	92	730568	40.0	40.8	
$ 8 Phenol-d5	99	5.946	5.949	-0.003	89	935447	40.0	42.5	
$ 9 Nitrobenzene-d5	82	6.833	6.836	-0.003	89	1080312	40.0	41.2	
$ 10 2-Fluorobiphenyl	172	8.510	8.508	0.002	99	2284603	40.0	39.3	
$ 11 2,4,6-Tribromophenol	330	9.878	9.870	0.008	92	351558	40.0	43.2	
$ 12 Terphenyl-d14	244	12.314	12.311	0.003	98	3161567	40.0	42.2	
13 1,4-Dioxane	88	1.790	1.809	-0.019	88	321521	40.0	40.8	
14 N-Nitrosodimethylamine	74	2.452	2.503	-0.051	87	454855	40.0	41.2	
15 Pyridine	79	2.521	2.631	-0.110	94	798574	40.0	41.0	M
22 Methyl methanesulfonate	80	4.706	4.720	-0.014	90	573342	40.0	39.0	
26 Benzaldehyde	77	5.860	5.863	-0.003	91	590795	40.0	47.2	
27 Phenol	94	5.956	5.960	-0.004	97	1071988	40.0	41.4	
28 Aniline	93	5.972	5.976	-0.004	95	1155895	40.0	41.4	
29 Bis(2-chloroethyl)ether	93	6.042	6.040	0.002	93	672351	40.0	38.6	
31 2-Chlorophenol	128	6.095	6.104	-0.009	93	756976	40.0	41.1	
32 n-Decane	43	6.159	6.157	0.002	77	608286	40.0	38.0	
33 1,3-Dichlorobenzene	146	6.250	6.253	-0.003	92	984601	40.0	41.3	
34 1,4-Dichlorobenzene	146	6.320	6.323	-0.003	89	969893	40.0	39.3	
36 Benzyl alcohol	108	6.432	6.435	-0.003	85	499867	40.0	42.2	
37 1,2-Dichlorobenzene	146	6.475	6.478	-0.003	90	907889	40.0	38.8	
38 2-Methylphenol	108	6.549	6.542	0.007	94	762348	40.0	42.1	
39 Indene	116	6.560	6.558	0.002	89	1342332	40.0	41.8	
40 2,2'-oxybis[1-chloropropan	45	6.571	6.569	0.002	76	660871	40.0	38.2	
41 N-Nitrosopyrrolidine	100	6.656	6.654	0.002	76	328863	40.0	43.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 N-Nitrosodi-n-propylamine	70	6.688	6.686	0.002	66	704975	40.0	41.2	
45 4-Methylphenol	108	6.688	6.686	0.002	60	825060	40.0	41.6	
43 Acetophenone	105	6.688	6.691	-0.003	76	1230093	40.0	40.8	
47 Hexachloroethane	117	6.806	6.804	0.002	87	418459	40.0	38.8	
48 Nitrobenzene	77	6.854	6.852	0.002	85	1123989	40.0	41.1	
50 Isophorone	82	7.073	7.076	-0.003	98	1729042	40.0	43.0	
51 2-Nitrophenol	139	7.158	7.162	-0.004	90	452222	40.0	43.9	
52 2,4-Dimethylphenol	107	7.185	7.188	-0.003	97	972323	40.0	41.6	
56 Benzoic acid	122	7.255	7.204	0.051	89	405600	40.0	40.8	
55 Bis(2-chloroethoxy)methane	93	7.271	7.268	0.003	96	860311	40.0	40.0	
57 2,4-Dichlorophenol	162	7.377	7.386	-0.009	95	769785	40.0	41.9	
61 Azobenzene	77		7.466				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.463	7.466	-0.003	93	952650	40.0	38.7	
60 Naphthalene	128	7.543	7.541	0.002	98	2356528	40.0	39.5	
62 4-Chloroaniline	127	7.575	7.573	0.002	93	1003638	40.0	41.6	
63 2,6-Dichlorophenol	162	7.591	7.594	-0.003	94	774471	40.0	41.0	
64 Hexachlorobutadiene	225	7.655	7.658	-0.003	94	670870	40.0	39.0	
67 Caprolactam	113	7.874	7.856	0.018	80	229439	40.0	39.8	
70 4-Chloro-3-methylphenol	107	8.008	8.011	-0.003	91	852433	40.0	42.2	
72 2-Methylnaphthalene	142	8.179	8.182	-0.003	89	1713967	40.0	40.6	
75 1-Methylnaphthalene	142	8.275	8.273	0.002	90	1584070	40.0	40.2	
76 Hexachlorocyclopentadiene	237	8.328	8.331	-0.003	97	809179	40.0	42.9	
77 1,2,4,5-Tetrachlorobenzene	216	8.339	8.337	0.002	98	1071336	40.0	38.7	
78 2,4,6-Trichlorophenol	196	8.435	8.433	0.002	94	685914	40.0	43.8	
79 2,4,5-Trichlorophenol	196	8.467	8.465	0.002	93	735763	40.0	42.2	
80 1,1'-Biphenyl	154	8.606	8.599	0.007	96	2191504	40.0	38.9	
81 2-Chloronaphthalene	162	8.633	8.631	0.002	97	1850944	40.0	38.5	
82 2-Nitroaniline	65	8.713	8.711	0.002	76	639543	40.0	42.8	
86 Dimethyl phthalate	163	8.863	8.855	0.008	96	2179576	40.0	40.9	
87 1,3-Dinitrobenzene	168	8.895	8.892	0.003	83	356720	40.0	43.2	
88 2,6-Dinitrotoluene	165	8.927	8.919	0.008	89	483580	40.0	42.9	
89 Acenaphthylene	152	9.023	9.021	0.002	98	2844403	40.0	42.0	
90 3-Nitroaniline	138	9.087	9.085	0.002	90	483265	40.0	42.4	
92 2,4-Dinitrophenol	184	9.178	9.176	0.002	81	790945	80.0	80.7	
91 Acenaphthene	153	9.183	9.176	0.007	90	1810004	40.0	39.6	
93 4-Nitrophenol	109	9.215	9.208	0.007	89	947240	80.0	87.2	
94 2,4-Dinitrotoluene	165	9.301	9.293	0.008	88	707924	40.0	44.8	
95 Dibenzofuran	168	9.338	9.330	0.008	96	2862375	40.0	40.7	
97 2,3,5,6-Tetrachlorophenol	232	9.402	9.405	-0.003	92	659542	40.0	43.4	
99 2,3,4,6-Tetrachlorophenol	232	9.445	9.437	0.008	74	642702	40.0	43.5	
100 2-Naphthylamine	143	9.477	9.469	0.008	95	1799572	40.0	43.2	
101 Diethyl phthalate	149	9.504	9.496	0.008	97	2287018	40.0	41.1	
102 Hexadecane	57	9.509	9.501	0.008	90	956234	40.0	42.6	
104 4-Chlorophenyl phenyl ethe	204	9.632	9.630	0.002	94	1327216	40.0	41.4	
105 4-Nitroaniline	138	9.648	9.640	0.008	78	525678	40.0	43.3	
106 Fluorene	166	9.653	9.651	0.002	93	2158160	40.0	41.3	
108 4,6-Dinitro-2-methylphenol	198	9.680	9.678	0.002	86	1015498	80.0	79.7	
109 N-Nitrosodiphenylamine	169	9.739	9.731	0.008	63	1738610	40.0	41.2	
111 1,2-Diphenylhydrazine	77	9.781	9.774	0.007	99	2577925	40.0	40.3	
116 4-Bromophenyl phenyl ether	248	10.086	10.084	0.002	68	749175	40.0	41.5	
118 Hexachlorobenzene	284	10.171	10.169	0.002	94	794149	40.0	40.8	
119 Atrazine	200	10.203	10.201	0.002	93	654563	40.0	45.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.342	10.340	0.002	90	1166936	80.0	93.1	
121 n-Octadecane	57	10.348	10.345	0.003	89	1028101	40.0	42.7	
126 Phenanthrene	178	10.551	10.548	0.003	97	3655291	40.0	40.7	
128 Anthracene	178	10.604	10.597	0.008	96	3815910	40.0	41.6	
130 Carbazole	167	10.743	10.735	0.008	96	3361526	40.0	41.8	
132 Di-n-butyl phthalate	149	11.037	11.029	0.008	100	3873914	40.0	43.9	
137 Fluoranthene	202	11.854	11.847	0.007	96	4522174	40.0	43.4	
138 Benzidine	184	11.977	11.964	0.013	98	1903010	40.0	42.7	
139 Pyrene	202	12.159	12.151	0.008	98	4627495	40.0	42.0	
144 Butyl benzyl phthalate	149	13.008	13.000	0.008	98	1727562	40.0	44.1	
149 3,3'-Dichlorobenzidine	252	13.975	13.957	0.018	74	1533070	40.0	47.9	
151 Bis(2-ethylhexyl) phthalat	149	14.007	14.005	0.002	94	2385567	40.0	45.8	
152 Benzo[a]anthracene	228	14.055	14.042	0.013	96	4473221	40.0	42.5	
153 Chrysene	228	14.125	14.112	0.013	95	4290997	40.0	41.8	
156 Di-n-octyl phthalate	149	15.321	15.308	0.013	99	3979461	40.0	41.5	
157 7,12-Dimethylbenz(a)anthra	256	16.197	16.168	0.029	91	2012576	40.0	42.3	
158 Benzo[b]fluoranthene	252	16.213	16.184	0.029	96	4391529	40.0	42.2	
159 Benzo[k]fluoranthene	252	16.267	16.238	0.029	97	4530403	40.0	40.0	
176 Benzo[e]pyrene	252	16.790	16.772	0.018	0	4064811	40.0	40.6	
160 Benzo[a]pyrene	252	16.897	16.890	0.007	74	4238553	40.0	43.6	
163 Indeno[1,2,3-cd]pyrene	276	19.258	19.224	0.034	98	4813554	40.0	44.2	
164 Dibenz(a,h)anthracene	278	19.285	19.251	0.034	87	4122794	40.0	44.4	
165 Benzo[g,h,i]perylene	276	19.867	19.828	0.039	97	4132553	40.0	43.4	
S 206 Total Cresols	108				0		80.0	83.6	
S 208 Methyl Phenols,Total	108				0		80.0	83.6	

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

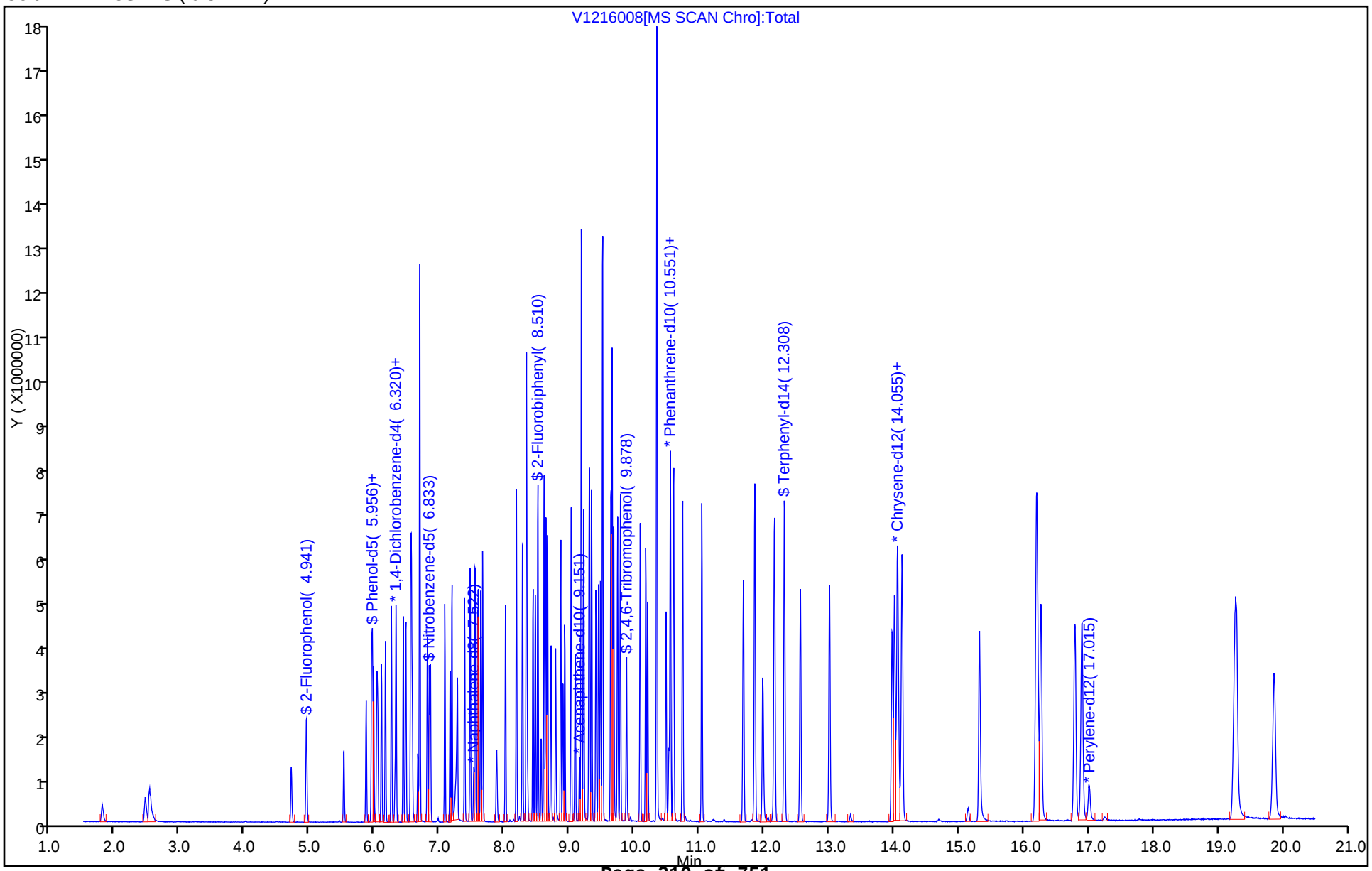
Report Date: 16-Dec-2014 09:20:59 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216008.D

Injection Date:	16-Dec-2014 06:41:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

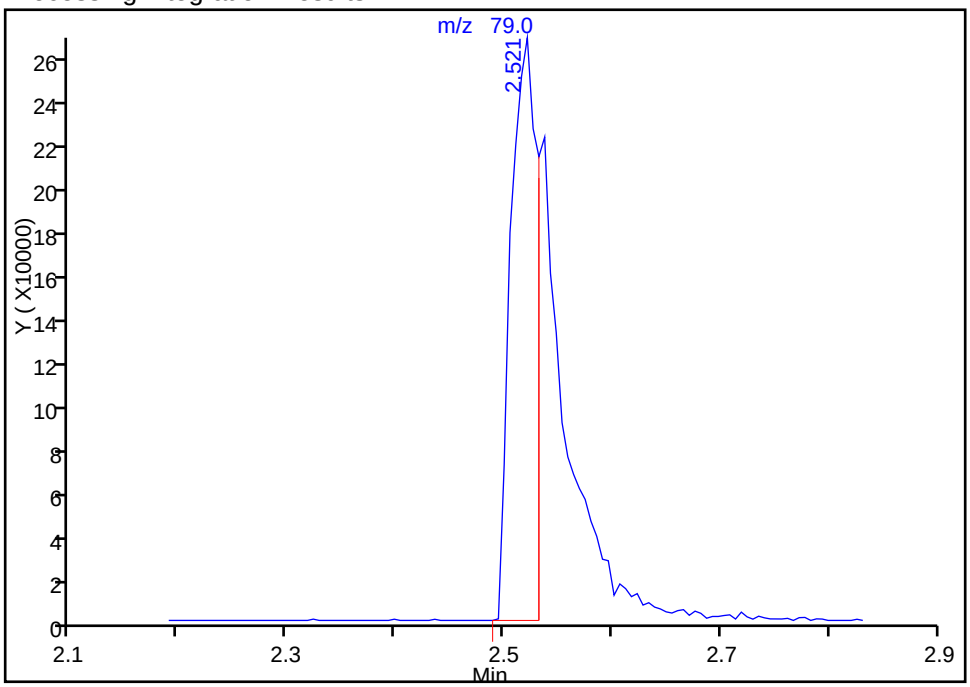
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216008.D				
Injection Date:	16-Dec-2014 06:41:30	Instrument ID:	CH731		
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_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

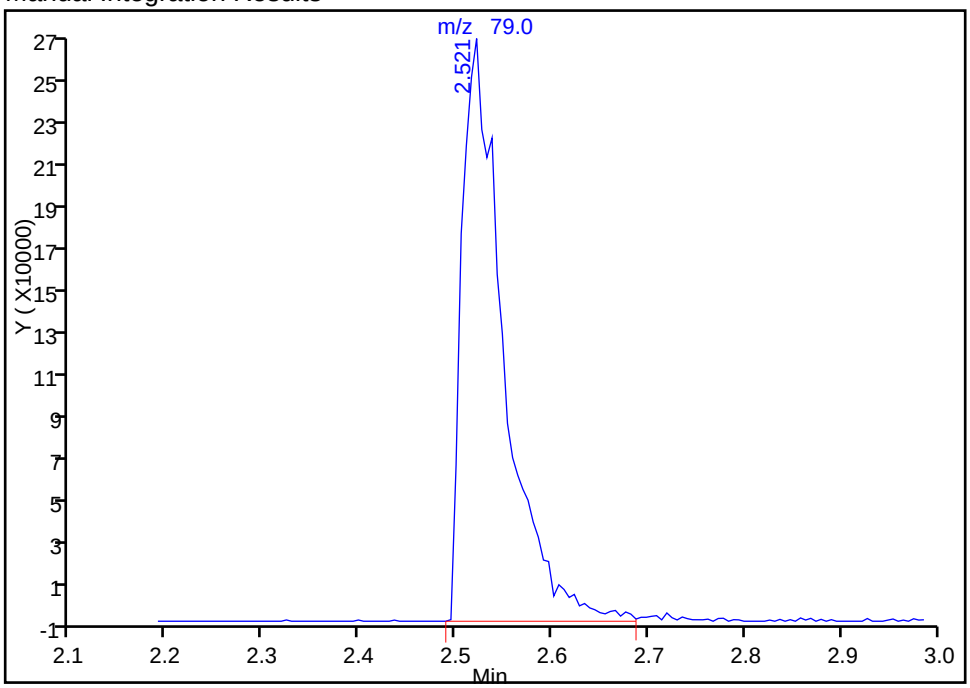
Processing Integration Results

RT: 2.52
Response: 446623
Amount: 23.581534



Manual Integration Results

RT: 2.52
Response: 798574
Amount: 41.022582



Reviewer: piccolinov, 16-Dec-2014 07:48:19
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216009.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-Dec-2014 07:09:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004887-009
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 16-Dec-2014 09:21:01 Calib Date: 16-Dec-2014 07:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: piccolinov Date: 16-Dec-2014 07:50:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.304	6.307	-0.003	83	120948	8.00	8.00	
* 2 Naphthalene-d8	136	7.522	7.519	0.003	98	448488	8.00	8.00	
* 3 Acenaphthene-d10	164	9.151	9.149	0.002	91	334930	8.00	8.00	
* 4 Phenanthrene-d10	188	10.530	10.522	0.008	96	686187	8.00	8.00	
* 5 Chrysene-d12	240	14.077	14.064	0.013	95	789390	8.00	8.00	
* 6 Perylene-d12	264	17.020	16.996	0.024	98	766227	8.00	8.00	
$ 7 2-Fluorophenol	112	4.942	4.939	0.003	92	1163513	60.0	66.7	
$ 8 Phenol-d5	99	5.946	5.949	-0.003	89	1449387	60.0	67.5	
$ 9 Nitrobenzene-d5	82	6.833	6.836	-0.003	89	1662573	60.0	62.0	
$ 10 2-Fluorobiphenyl	172	8.510	8.508	0.002	99	3639456	60.0	59.3	
$ 11 2,4,6-Tribromophenol	330	9.878	9.870	0.008	93	587339	60.0	68.4	
$ 12 Terphenyl-d14	244	12.314	12.311	0.003	98	4975594	60.0	62.1	
13 1,4-Dioxane	88	1.795	1.809	-0.014	89	490945	60.0	63.9	
14 N-Nitrosodimethylamine	74	2.458	2.503	-0.045	87	662888	60.0	61.6	
15 Pyridine	79	2.527	2.631	-0.104	95	1131883	60.0	59.6	
22 Methyl methanesulfonate	80	4.707	4.720	-0.013	91	871678	60.0	60.8	
26 Benzaldehyde	77	5.861	5.863	-0.002	90	844039	60.0	69.2	
27 Phenol	94	5.962	5.960	0.002	97	1647071	60.0	65.2	
28 Aniline	93	5.978	5.976	0.002	97	1767570	60.0	64.8	
29 Bis(2-chloroethyl)ether	93	6.042	6.040	0.002	93	1032644	60.0	60.9	
31 2-Chlorophenol	128	6.101	6.104	-0.003	94	1204472	60.0	67.0	
32 n-Decane	43	6.160	6.157	0.003	78	967043	60.0	62.0	
33 1,3-Dichlorobenzene	146	6.251	6.253	-0.002	93	1475381	60.0	63.5	
34 1,4-Dichlorobenzene	146	6.320	6.323	-0.003	89	1503785	60.0	62.5	
36 Benzyl alcohol	108	6.438	6.435	0.003	86	804109	60.0	69.7	
37 1,2-Dichlorobenzene	146	6.475	6.478	-0.003	91	1432450	60.0	62.8	
38 2-Methylphenol	108	6.550	6.542	0.008	95	1181474	60.0	66.8	
39 Indene	116	6.560	6.558	0.002	89	2169535	60.0	69.2	
40 2,2'-oxybis[1-chloropropan	45	6.571	6.569	0.002	77	1019003	60.0	60.4	
41 N-Nitrosopyrrolidine	100	6.662	6.654	0.008	76	515212	60.0	70.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 N-Nitrosodi-n-propylamine	70	6.689	6.686	0.003	64	1093238	60.0	65.5	
45 4-Methylphenol	108	6.689	6.686	0.003	61	1291515	60.0	66.7	
43 Acetophenone	105	6.689	6.691	-0.002	76	1894087	60.0	64.4	
47 Hexachloroethane	117	6.806	6.804	0.002	88	660774	60.0	62.8	
48 Nitrobenzene	77	6.854	6.852	0.002	86	1631491	60.0	58.2	
50 Isophorone	82	7.073	7.076	-0.003	98	2689710	60.0	65.3	
51 2-Nitrophenol	139	7.159	7.162	-0.003	92	695317	60.0	65.8	
52 2,4-Dimethylphenol	107	7.186	7.188	-0.002	97	1501296	60.0	62.7	
56 Benzoic acid	122	7.271	7.204	0.067	43	664913	60.0	64.0	
55 Bis(2-chloroethoxy)methane	93	7.271	7.268	0.003	98	1371144	60.0	62.3	
57 2,4-Dichlorophenol	162	7.383	7.386	-0.003	96	1236000	60.0	65.7	
61 Azobenzene	77		7.466				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.463	7.466	-0.003	92	1513060	60.0	60.0	
60 Naphthalene	128	7.543	7.541	0.002	98	3709182	60.0	60.7	
62 4-Chloroaniline	127	7.581	7.573	0.008	92	1549005	60.0	62.7	
63 2,6-Dichlorophenol	162	7.592	7.594	-0.002	95	1187491	60.0	61.4	
64 Hexachlorobutadiene	225	7.661	7.658	0.003	94	1035720	60.0	58.9	
67 Caprolactam	113	7.880	7.856	0.024	81	361248	60.0	60.7	
70 4-Chloro-3-methylphenol	107	8.014	8.011	0.003	91	1355085	60.0	65.6	
72 2-Methylnaphthalene	142	8.179	8.182	-0.003	90	2686689	60.0	62.1	
75 1-Methylnaphthalene	142	8.270	8.273	-0.003	91	2511584	60.0	62.2	
76 Hexachlorocyclopentadiene	237	8.329	8.331	-0.002	96	1247976	60.0	62.6	
77 1,2,4,5-Tetrachlorobenzene	216	8.339	8.337	0.002	98	1701616	60.0	58.1	
78 2,4,6-Trichlorophenol	196	8.436	8.433	0.003	93	1087681	60.0	65.7	
79 2,4,5-Trichlorophenol	196	8.473	8.465	0.008	94	1153849	60.0	62.6	
80 1,1'-Biphenyl	154	8.607	8.599	0.007	95	3542644	60.0	59.5	
81 2-Chloronaphthalene	162	8.633	8.631	0.002	96	2913304	60.0	57.3	
82 2-Nitroaniline	65	8.713	8.711	0.002	77	985344	60.0	62.4	
86 Dimethyl phthalate	163	8.863	8.855	0.008	97	3440833	60.0	61.1	
87 1,3-Dinitrobenzene	168	8.900	8.892	0.008	84	543605	60.0	62.3	
88 2,6-Dinitrotoluene	165	8.922	8.919	0.003	90	753630	60.0	63.2	
89 Acenaphthylene	152	9.023	9.021	0.002	97	4481496	60.0	62.6	
90 3-Nitroaniline	138	9.087	9.085	0.002	87	774740	60.0	64.4	
92 2,4-Dinitrophenol	184	9.178	9.176	0.002	83	1262853	120.0	120.4	
91 Acenaphthene	153	9.183	9.176	0.007	93	2870698	60.0	59.5	
93 4-Nitrophenol	109	9.221	9.208	0.013	89	1450090	120.0	126.3	
94 2,4-Dinitrotoluene	165	9.301	9.293	0.008	91	1097829	60.0	65.7	
95 Dibenzofuran	168	9.338	9.330	0.008	96	4572895	60.0	61.5	
97 2,3,5,6-Tetrachlorophenol	232	9.402	9.405	-0.003	92	1037102	60.0	64.7	
99 2,3,4,6-Tetrachlorophenol	232	9.445	9.437	0.008	73	1038811	60.0	66.6	
100 2-Naphthylamine	143	9.477	9.469	0.008	95	2763163	60.0	62.7	
101 Diethyl phthalate	149	9.504	9.496	0.008	97	3607046	60.0	61.4	
102 Hexadecane	57	9.509	9.501	0.008	88	1540218	60.0	66.9	
104 4-Chlorophenyl phenyl ethe	204	9.632	9.630	0.002	92	2073062	60.0	61.2	
105 4-Nitroaniline	138	9.654	9.640	0.014	75	841852	60.0	65.6	
106 Fluorene	166	9.654	9.651	0.003	94	3382051	60.0	61.2	
108 4,6-Dinitro-2-methylphenol	198	9.680	9.678	0.002	88	1672125	120.0	123.4	
109 N-Nitrosodiphenylamine	169	9.739	9.731	0.008	63	2749021	60.0	61.8	
111 1,2-Diphenylhydrazine	77	9.782	9.774	0.008	99	3981093	60.0	59.1	
116 4-Bromophenyl phenyl ether	248	10.086	10.084	0.002	68	1162368	60.0	61.1	
118 Hexachlorobenzene	284	10.172	10.169	0.003	95	1252125	60.0	61.0	
119 Atrazine	200	10.204	10.201	0.003	93	984201	60.0	64.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.343	10.340	0.003	91	1825372	120.0	138.0	
121 n-Octadecane	57	10.343	10.345	-0.002	90	1669234	60.0	71.2	
126 Phenanthrene	178	10.551	10.548	0.003	97	5890284	60.0	62.2	
128 Anthracene	178	10.604	10.597	0.008	96	6065710	60.0	62.8	
130 Carbazole	167	10.743	10.735	0.008	96	5352839	60.0	63.2	
132 Di-n-butyl phthalate	149	11.037	11.029	0.008	100	6249894	60.0	67.1	
137 Fluoranthene	202	11.855	11.847	0.008	96	6983880	60.0	63.5	
138 Benzidine	184	11.977	11.964	0.013	98	2996861	60.0	61.4	
139 Pyrene	202	12.159	12.151	0.008	99	7119320	60.0	60.4	
144 Butyl benzyl phthalate	149	13.003	13.000	0.003	96	2739625	60.0	65.4	
149 3,3'-Dichlorobenzidine	252	13.975	13.957	0.018	69	2419455	60.0	70.8	
151 Bis(2-ethylhexyl) phthalat	149	14.007	14.005	0.002	92	3775397	60.0	67.8	
152 Benzo[a]anthracene	228	14.061	14.042	0.019	92	6906260	60.0	61.4	
153 Chrysene	228	14.130	14.112	0.018	93	6749199	60.0	61.6	
156 Di-n-octyl phthalate	149	15.322	15.308	0.014	99	6334210	60.0	60.5	
157 7,12-Dimethylbenz(a)anthra	256	16.208	16.168	0.040	70	3187692	60.0	61.8	
158 Benzo[b]fluoranthene	252	16.219	16.184	0.035	86	6916860	60.0	61.4	
159 Benzo[k]fluoranthene	252	16.272	16.238	0.034	88	7397787	60.0	60.4	
176 Benzo[e]pyrene	252	16.796	16.772	0.024	0	6563130	60.0	60.5	
160 Benzo[a]pyrene	252	16.908	16.890	0.018	70	6806624	60.0	64.6	
163 Indeno[1,2,3-cd]pyrene	276	19.264	19.224	0.040	93	7650821	60.0	64.9	
164 Dibenz(a,h)anthracene	278	19.296	19.251	0.045	75	6720920	60.0	66.8	
165 Benzo[g,h,i]perylene	276	19.873	19.828	0.045	92	6670983	60.0	64.7	
S 206 Total Cresols	108				0		120.0	133.6	
S 208 Methyl Phenols,Total	108				0		120.0	133.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD60i_00005 Amount Added: 1.00 Units: mL

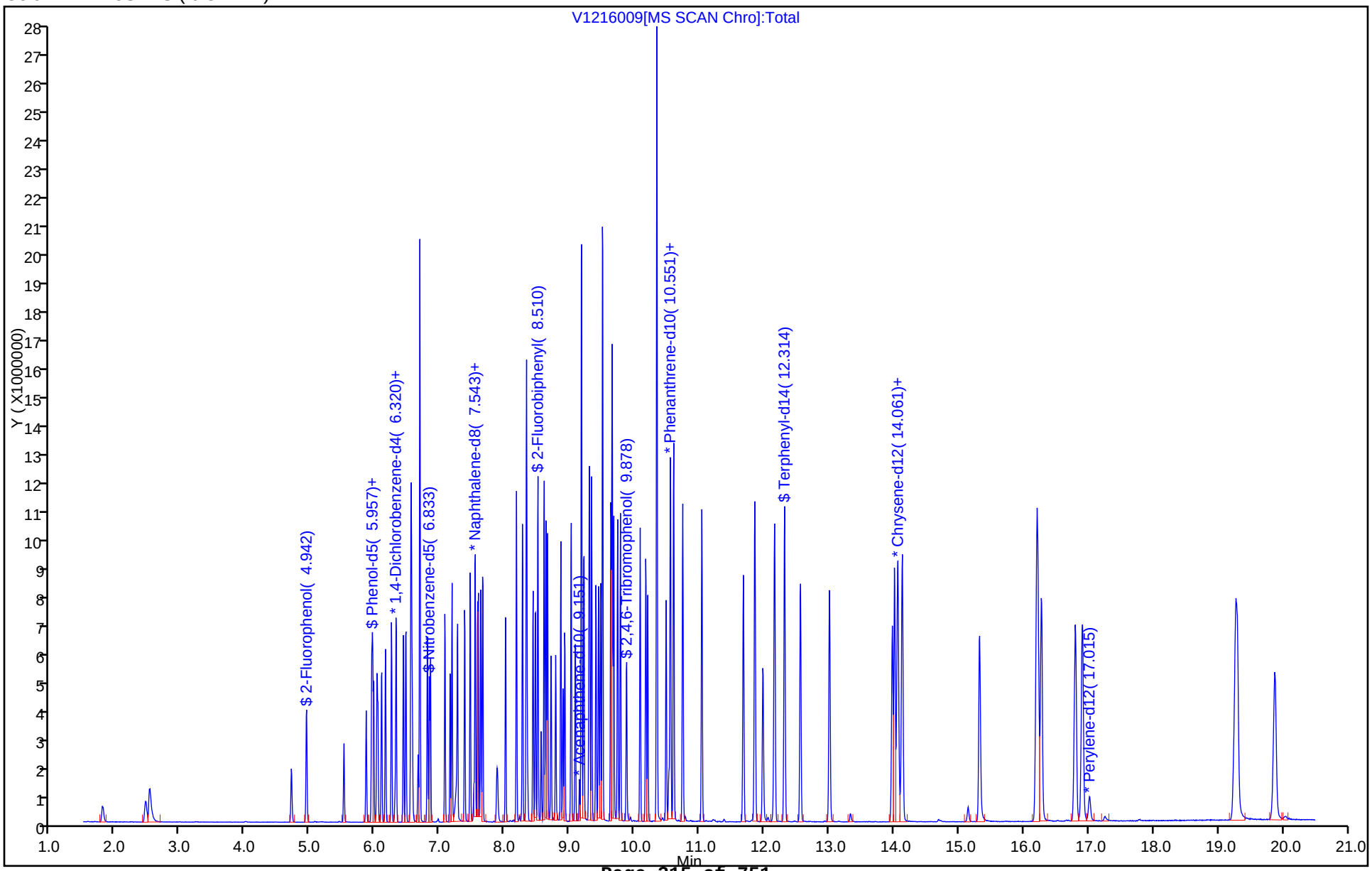
Report Date: 16-Dec-2014 09:21:01 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216009.D

Injection Date:	16-Dec-2014 07:09:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Report Date: 16-Dec-2014 09:21:03 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 16-Dec-2014 07:37:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004887-010
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 16-Dec-2014 09:21:03 Calib Date: 16-Dec-2014 07:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: piccolinov Date: 16-Dec-2014 08:31:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.307	6.307	0.000	90	134268	8.00	8.00	
* 2 Naphthalene-d8	136	7.525	7.519	0.006	98	449214	8.00	8.00	
* 3 Acenaphthene-d10	164	9.154	9.149	0.005	90	335203	8.00	8.00	
* 4 Phenanthrene-d10	188	10.533	10.522	0.011	96	725933	8.00	8.00	
* 5 Chrysene-d12	240	14.085	14.064	0.021	96	802751	8.00	8.00	
* 6 Perylene-d12	264	17.029	16.996	0.033	97	789621	8.00	8.00	
$ 7 2-Fluorophenol	112	4.939	4.939	0.000	92	1565093	80.0	80.8	
$ 8 Phenol-d5	99	5.949	5.949	0.000	91	1957432	80.0	82.1	
$ 9 Nitrobenzene-d5	82	6.836	6.836	0.000	89	2248963	80.0	83.7	
$ 10 2-Fluorobiphenyl	172	8.513	8.508	0.005	100	4847792	80.0	78.9	
$ 11 2,4,6-Tribromophenol	330	9.881	9.870	0.011	93	835535	80.0	92.0	
$ 12 Terphenyl-d14	244	12.322	12.311	0.011	98	6818938	80.0	83.7	
13 1,4-Dioxane	88	1.788	1.809	-0.021	90	653681	80.0	76.7	
14 N-Nitrosodimethylamine	74	2.461	2.503	-0.042	88	943143	80.0	78.9	
15 Pyridine	79	2.509	2.631	-0.122	94	1628782	80.0	77.3	
22 Methyl methanesulfonate	80	4.710	4.720	-0.010	91	1181042	80.0	74.3	
26 Benzaldehyde	77	5.864	5.863	0.001	89	1071312	80.0	79.1	
27 Phenol	94	5.960	5.960	0.000	98	2192881	80.0	78.2	
28 Aniline	93	5.976	5.976	0.000	96	2466533	80.0	81.5	
29 Bis(2-chloroethyl)ether	93	6.045	6.040	0.005	94	1385827	80.0	73.6	
31 2-Chlorophenol	128	6.099	6.104	-0.005	94	1609545	80.0	80.7	
32 n-Decane	43	6.157	6.157	0.000	79	1362709	80.0	78.7	
33 1,3-Dichlorobenzene	146	6.254	6.253	0.001	93	2006476	80.0	77.7	
34 1,4-Dichlorobenzene	146	6.323	6.323	0.000	89	2053443	80.0	76.8	
36 Benzyl alcohol	108	6.435	6.435	0.000	86	1101222	80.0	85.9	
37 1,2-Dichlorobenzene	146	6.473	6.478	-0.005	91	1910238	80.0	75.4	
38 2-Methylphenol	108	6.553	6.542	0.011	96	1632214	80.0	83.2	
39 Indene	116	6.558	6.558	0.000	89	2915718	80.0	83.8	
40 2,2'-oxybis[1-chloropropan	45	6.574	6.569	0.005	77	1417547	80.0	75.7	
41 N-Nitrosopyrrolidine	100	6.665	6.654	0.011	78	686341	80.0	84.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 N-Nitrosodi-n-propylamine	70	6.692	6.686	0.006	65	1476778	80.0	79.7	
45 4-Methylphenol	108	6.692	6.686	0.006	63	1789089	80.0	83.3	
43 Acetophenone	105	6.692	6.691	0.001	76	2584958	80.0	79.1	
47 Hexachloroethane	117	6.804	6.804	0.000	88	896112	80.0	76.8	
48 Nitrobenzene	77	6.857	6.852	0.005	86	2231060	80.0	79.4	
50 Isophorone	82	7.076	7.076	0.000	98	3684067	80.0	89.4	
51 2-Nitrophenol	139	7.162	7.162	0.000	93	960718	80.0	90.8	
52 2,4-Dimethylphenol	107	7.188	7.188	0.000	98	1998360	80.0	83.3	
56 Benzoic acid	122	7.279	7.204	0.075	89	875487	80.0	83.5	
55 Bis(2-chloroethoxy)methane	93	7.274	7.268	0.006	98	1850147	80.0	83.9	
57 2,4-Dichlorophenol	162	7.381	7.386	-0.005	95	1653805	80.0	87.8	
61 Azobenzene	77		7.466				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.466	7.466	0.000	92	2018647	80.0	79.9	
60 Naphthalene	128	7.546	7.541	0.005	98	5058620	80.0	82.6	
62 4-Chloroaniline	127	7.584	7.573	0.011	94	2147523	80.0	86.8	
63 2,6-Dichlorophenol	162	7.594	7.594	0.000	93	1652702	80.0	85.3	
64 Hexachlorobutadiene	225	7.659	7.658	0.001	95	1359593	80.0	77.1	
67 Caprolactam	113	7.894	7.856	0.038	81	506683	80.0	84.6	
70 4-Chloro-3-methylphenol	107	8.016	8.011	0.005	92	1786377	80.0	86.3	
72 2-Methylnaphthalene	142	8.182	8.182	0.000	91	3654225	80.0	84.3	
75 1-Methylnaphthalene	142	8.278	8.273	0.005	91	3418471	80.0	84.5	
76 Hexachlorocyclopentadiene	237	8.332	8.331	0.001	97	1725997	80.0	86.5	
77 1,2,4,5-Tetrachlorobenzene	216	8.342	8.337	0.005	98	2223080	80.0	75.9	
78 2,4,6-Trichlorophenol	196	8.439	8.433	0.005	93	1479266	80.0	89.3	
79 2,4,5-Trichlorophenol	196	8.476	8.465	0.011	93	1565556	80.0	84.8	
80 1,1'-Biphenyl	154	8.609	8.599	0.010	95	4869270	80.0	81.7	
81 2-Chloronaphthalene	162	8.636	8.631	0.005	96	4373049	80.0	86.0	
82 2-Nitroaniline	65	8.716	8.711	0.005	76	1292456	80.0	81.8	
86 Dimethyl phthalate	163	8.866	8.855	0.011	97	4700991	80.0	83.4	
87 1,3-Dinitrobenzene	168	8.903	8.892	0.011	85	780571	80.0	89.4	
88 2,6-Dinitrotoluene	165	8.930	8.919	0.011	90	1028601	80.0	86.2	
89 Acenaphthylene	152	9.026	9.021	0.005	98	6165633	80.0	86.1	
90 3-Nitroaniline	138	9.090	9.085	0.005	88	1031948	80.0	85.7	
92 2,4-Dinitrophenol	184	9.186	9.176	0.010	73	1731009	160.0	163.7	
91 Acenaphthene	153	9.186	9.176	0.010	84	3923335	80.0	81.2	
93 4-Nitrophenol	109	9.224	9.208	0.016	89	1970605	160.0	171.5	
94 2,4-Dinitrotoluene	165	9.304	9.293	0.011	90	1517678	80.0	90.8	
95 Dibenzofuran	168	9.341	9.330	0.011	96	6160741	80.0	82.8	
97 2,3,5,6-Tetrachlorophenol	232	9.411	9.405	0.006	92	1439285	80.0	89.7	
99 2,3,4,6-Tetrachlorophenol	232	9.448	9.437	0.011	73	1436493	80.0	92.0	
100 2-Naphthylamine	143	9.480	9.469	0.011	96	3827235	80.0	86.8	
101 Diethyl phthalate	149	9.512	9.496	0.016	97	4949520	80.0	84.2	
102 Hexadecane	57	9.512	9.501	0.011	70	2126398	80.0	92.3	
104 4-Chlorophenyl phenyl ethe	204	9.640	9.630	0.010	89	2863196	80.0	84.5	
105 4-Nitroaniline	138	9.657	9.640	0.016	59	1120631	80.0	87.3	
106 Fluorene	166	9.657	9.651	0.005	95	4691094	80.0	84.8	
108 4,6-Dinitro-2-methylphenol	198	9.683	9.678	0.005	90	2326155	160.0	161.6	
109 N-Nitrosodiphenylamine	169	9.742	9.731	0.011	63	3772553	80.0	80.2	
111 1,2-Diphenylhydrazine	77	9.785	9.774	0.011	98	5364895	80.0	75.2	
116 4-Bromophenyl phenyl ether	248	10.089	10.084	0.005	68	1603508	80.0	79.6	
118 Hexachlorobenzene	284	10.180	10.169	0.011	94	1688252	80.0	77.7	
119 Atrazine	200	10.207	10.201	0.006	93	1366593	80.0	85.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.351	10.340	0.011	91	2491946	160.0	178.1	
121 n-Octadecane	57	10.346	10.345	0.001	93	2426424	80.0	93.2	
126 Phenanthrene	178	10.559	10.548	0.011	96	8065990	80.0	80.5	
128 Anthracene	178	10.607	10.597	0.011	96	8523172	80.0	83.4	
130 Carbazole	167	10.746	10.735	0.011	96	7476482	80.0	83.4	
132 Di-n-butyl phthalate	149	11.040	11.029	0.011	100	8421447	80.0	85.5	
137 Fluoranthene	202	11.863	11.847	0.016	96	9669336	80.0	83.1	
138 Benzidine	184	11.986	11.964	0.022	98	3963395	80.0	78.9	
139 Pyrene	202	12.167	12.151	0.016	99	9813281	80.0	81.9	
144 Butyl benzyl phthalate	149	13.017	13.000	0.017	96	3728562	80.0	87.6	
149 3,3'-Dichlorobenzidine	252	13.984	13.957	0.027	69	3212343	80.0	92.4	
151 Bis(2-ethylhexyl) phthalat	149	14.016	14.005	0.011	93	5197725	80.0	91.8	
152 Benzo[a]anthracene	228	14.069	14.042	0.027	91	9504313	80.0	83.1	
153 Chrysene	228	14.139	14.112	0.027	93	9258006	80.0	83.1	
156 Di-n-octyl phthalate	149	15.330	15.308	0.022	99	8926506	80.0	82.4	
157 7,12-Dimethylbenz(a)anthra	256	16.217	16.168	0.049	73	4281900	80.0	80.5	
158 Benzo[b]fluoranthene	252	16.238	16.184	0.054	86	9409469	80.0	81.0	
159 Benzo[k]fluoranthene	252	16.291	16.238	0.053	97	10087447	80.0	79.9	
176 Benzo[e]pyrene	252	16.810	16.772	0.038	0	8997048	80.0	80.4	
160 Benzo[a]pyrene	252	16.922	16.890	0.032	71	9468112	80.0	87.2	
163 Indeno[1,2,3-cd]pyrene	276	19.288	19.224	0.064	95	10559433	80.0	86.9	
164 Dibenz(a,h)anthracene	278	19.310	19.251	0.059	59	9279384	80.0	89.5	
165 Benzo[g,h,i]perylene	276	19.892	19.828	0.064	94	9169214	80.0	86.3	
S 206 Total Cresols	108				0		160.0	166.4	
S 208 Methyl Phenols,Total	108				0		160.0	166.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD80i_00005 Amount Added: 1.00 Units: mL

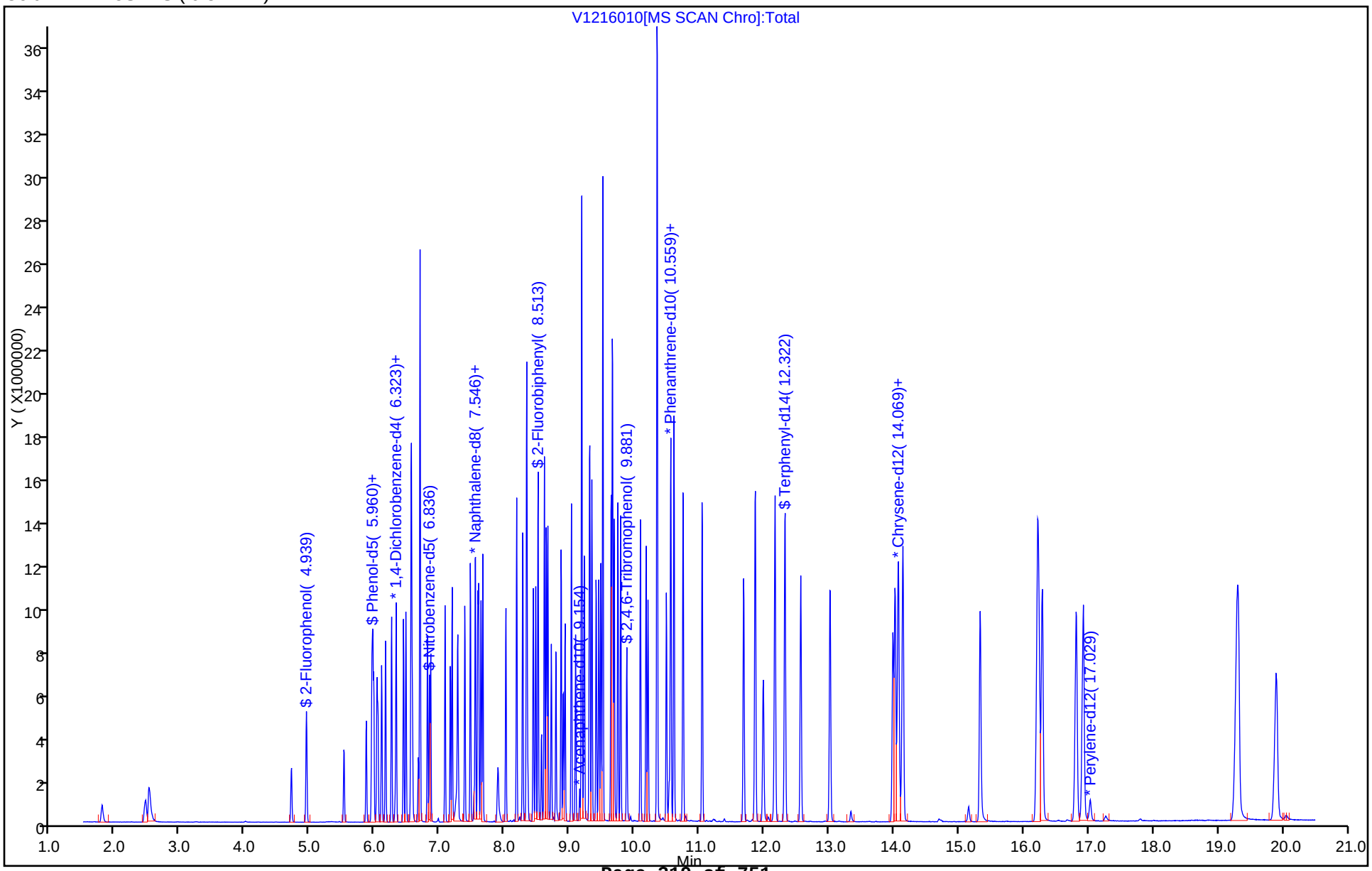
Report Date: 16-Dec-2014 09:21:03 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D

Injection Date:	16-Dec-2014 07:37:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
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.: 180-43220-1 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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Methylphenol	1.2615 1.1778	1.2521 1.1518	1.3156 1.0897	1.2215	1.1588	Ave		1.2036			0.7000	6.0		20.0			
Indene	2.3133 2.1398	2.2209 2.1085	2.3406 1.9870	2.2347	2.1387	Ave		2.1854			0.0100	5.3		20.0			
2,2'-oxybis[1-chloropropane]	2.5131 2.2628	2.5045 2.2085	2.6347 2.0194	2.4316	2.3000	Ave		2.3593			0.0100	8.4		20.0			
N-Nitrosopyrrolidine	0.5262 0.5893	0.6009 0.5880	0.6401 0.5653	0.5954	0.5859	Ave		0.5864			0.0100	5.5		20.0			
Acetophenone	2.0369 1.7219	1.9688 1.6379	2.0045 1.5364	1.8680	1.7454	Ave		1.8150			0.0100	10.0		20.0			
N-Nitrosodi-n-propylamine	0.9492 0.7944	0.9543 0.7526	0.9805 0.7006	0.8774	0.8314	Ave		0.8551			0.5000	12.0		20.0			
Methylphenol, 3 & 4	1.2641 1.1848	1.3320 1.1393	1.3945 1.0530	1.2967	1.2224	Ave		1.2358			0.6000	8.9		20.0			
Hexachloroethane	0.7385 0.6865	0.7117 0.6822	0.7467 0.6648	0.7026	0.6776	Ave		0.7013			0.3000	4.2		20.0			
Nitrobenzene	0.3271 0.3336	0.3446 0.3293	0.3443 0.3120	0.3390	0.3372	Ave		0.3334			0.2000	3.2		20.0			
Isophorone	0.5945 0.5873	0.5897 0.5783	0.6005 0.5621	0.6022	0.5816	Ave		0.5870			0.4000	2.2		20.0			
2-Nitrophenol	0.1657 0.1902	0.1840 0.1903	0.1844 0.1819	0.1896	0.1897	Ave		0.1845			0.1000	4.5		20.0			
2,4-Dimethylphenol	0.3280 0.3348	0.3513 0.3350	0.3524 0.3006	0.3537	0.3374	Ave		0.3367			0.2000	5.2		20.0			
Benzoic acid	+++++ 0.1987	0.1125 0.2033	0.1360 0.2048	0.1402	0.1689	Lin1	-0.274	0.2037			0.0100				0.9960		0.9900
Bis(2-chloroethoxy)methane	0.3834 0.3557	0.3759 0.3474	0.3766 0.3299	0.3693	0.3508	Ave		0.3611			0.3000	5.0		20.0			
2,4-Dichlorophenol	0.2934 0.2950	0.2935 0.2893	0.2980 0.2824	0.3042	0.2969	Ave		0.2941			0.2000	2.2		20.0			
1,2,4-Trichlorobenzene	0.3394 0.3347	0.3522 0.3268	0.3505 0.3188	0.3506	0.3259	Ave		0.3374			0.0100	3.8		20.0			
Naphthalene	1.0933 1.0643	1.1149 1.0677	1.1083 1.0388	1.0934	1.0774	Ave		1.0823			0.7000	2.3		20.0			
4-Chloroaniline	0.4263 0.4369	0.4351 0.4265	0.4505 0.4043	0.4433	0.4460	Ave		0.4336			0.0100	3.4		20.0			
2,6-Dichlorophenol	0.2615 0.2923	0.3132 0.2825	0.3169 0.2731	0.3025	0.2976	Ave		0.2924			0.0100	6.6		20.0			
Hexachlorobutadiene	0.2188 0.1970	0.2056 0.1955	0.2032 0.1917	0.2049	0.1985	Ave		0.2019			0.0100	4.2		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Caprolactam	0.0936 0.0987	0.1004 0.1006	0.1010 0.0967	0.0971	0.1001	Ave		0.0985			0.0100	2.6		20.0			
4-Chloro-3-methylphenol	0.3259 0.3032	0.3118 0.3010	0.3190 0.2893	0.3127	0.3048	Ave		0.3085			0.2000	3.7		20.0			
2-Methylnaphthalene	0.7854 0.7616	0.7970 0.7409	0.7819 0.7178	0.7854	0.7530	Ave		0.7654			0.4000	3.5		20.0			
1-Methylnaphthalene	0.7588 0.7095	0.7356 0.6944	0.7462 0.6677	0.7283	0.7014	Ave		0.7177			0.0100	4.2		20.0			
Hexachlorocyclopentadiene	0.2878 0.3872	0.3363 0.3718	0.3406 0.3157	0.3633	0.3814	Ave		0.3480			0.0500	9.9		20.0			
1,2,4,5-Tetrachlorobenzene	0.5271 0.5157	0.5490 0.4843	0.5616 0.4793	0.5356	0.5187	Ave		0.5214			0.0100	5.5		20.0			
2,4,6-Trichlorophenol	0.3384 0.3625	0.3491 0.3512	0.3640 0.3551	0.3670	0.3587	Ave		0.3558			0.2000	2.6		20.0			
2,4,5-Trichlorophenol	0.3632 0.3897	0.3616 0.3754	0.3889 0.3774	0.3794	0.3834	Ave		0.3774			0.2000	2.8		20.0			
1,1'-Biphenyl	1.4675 1.5500	1.5477 1.4658	1.5307 1.4591	1.5290	1.4933	Ave		1.5054			0.0100	2.5		20.0			
2-Chloronaphthalene	1.2012 1.2780	1.2764 1.1651	1.2437 1.1616	1.2325	1.1984	Ave		1.2196			0.8000	3.7		20.0			
2-Nitroaniline	0.3160 0.3609	0.3422 0.3402	0.3641 0.3482	0.3507	0.3502	Ave		0.3466			0.0100	4.3		20.0			
Dimethyl phthalate	1.2918 1.2997	1.2696 1.2239	1.3080 1.2415	1.2660	1.2604	Ave		1.2701			0.0100	2.3		20.0			
1,3-Dinitrobenzene	0.1398 0.2093	0.1828 0.2040	0.1949 0.1996	0.1986	0.2017	Ave		0.1913			0.0100	12.0		20.0			
2,6-Dinitrotoluene	0.2531 0.2910	0.2768 0.2735	0.2901 0.2792	0.2856	0.2829	Ave		0.2790			0.2000	4.4		20.0			
Acenaphthylene	1.9319 1.9727	1.8890 1.9400	1.9822 1.9233	1.9235	1.9095	Ave		1.9340			0.9000	1.6		20.0			
3-Nitroaniline	0.3033 0.3545	0.3298 0.3468	0.3443 0.3405	0.3513	0.3466	Ave		0.3396			0.0100	4.8		20.0			
2,4-Dinitrophenol	0.0832 0.1969	0.1126 0.1883	0.1416 0.1859	0.1702	0.1865	Lin1	-0.142	0.1889			0.0100				0.9980		0.9900
Acenaphthene	1.2341 1.1644	1.2375 1.0882	1.2536 1.0424	1.2271	1.1994	Ave		1.1808			0.9000	6.5		20.0			
4-Nitrophenol	0.1449 0.2049	0.1773 0.1990	0.1858 0.1985	0.1926	0.2002	Ave		0.1879			0.0100	10.0		20.0			
2,4-Dinitrotoluene	0.3258 0.3820	0.3710 0.3605	0.3746 0.3591	0.3785	0.3817	Ave		0.3667			0.2000	5.1		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibenzofuran	1.7039 1.6974	1.7236 1.6717	1.7324 1.6535	1.6806	1.6861	Ave		1.6936			0.8000	1.6		20.0			
2,3,5,6-Tetrachlorophenol	0.2784 0.3522	0.3231 0.3411	0.3288 0.3332	0.3290	0.3409	Ave		0.3283			0.0100	6.7		20.0			
2,3,4,6-Tetrachlorophenol	0.2692 0.3331	0.3234 0.3255	0.3364 0.3231	0.3274	0.3351	Ave		0.3217			0.0100	6.8		20.0			
2-Naphthylamine	1.1143 1.2587	1.2501 1.2075	1.2670 1.1115	1.2281	1.2187	Ave		1.2070			0.0100	5.1		20.0			
Diethyl phthalate	1.3162 1.2963	1.3893 1.2225	1.3466 1.1760	1.3204	1.3148	Ave		1.2978			0.0100	5.2		20.0			
Hexadecane	0.6523 0.5660	0.6318 0.5102	0.6572 0.4522	0.6386	0.6137	Ave		0.5903				13.0		20.0			
4-Chlorophenyl phenyl ether	0.6117 0.6273	0.6466 0.6042	0.6486 0.5941	0.6234	0.6183	Ave		0.6218			0.4000	3.1		20.0			
4-Nitroaniline	0.2857 0.3410	0.3374 0.3366	0.3445 0.3302	0.3513	0.3549	Ave		0.3352			0.0100	6.4		20.0			
Fluorene	1.3053 1.3254	1.3617 1.2560	1.3725 1.2546	1.3428	1.3245	Ave		1.3179			0.9000	3.3		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1432	0.0985 0.1462	0.1142 0.1453	0.1268	0.1361	Ave		0.1300			0.0100	14.0		20.0			
N-Nitrosodiphenylamine	0.5815 0.5842	0.5335 0.5775	0.5631 0.5899	0.5591	0.5578	Ave		0.5683			0.0100	3.3		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.7667 0.8428	0.8041 0.8121	0.8471 0.8091	0.8166	0.8146	Ave		0.8141			0.0100	3.0		20.0			
4-Bromophenyl phenyl ether	0.2046 0.2116	0.1971 0.2114	0.2124 0.2103	0.2105	0.2134	Ave		0.2089			0.1000	2.6		20.0			
Hexachlorobenzene	0.1992 0.2131	0.2049 0.2119	0.2145 0.2089	0.2091	0.2086	Ave		0.2088			0.1000	2.3		20.0			
Atrazine	0.1508 0.1701	0.1598 0.1692	0.1695 0.1557	0.1710	0.1740	Ave		0.1650			0.0100	5.1		20.0			
Pentachlorophenol	0.1520 0.1572	0.1371 0.1550	0.1337 0.1472	0.1463	0.1491	Ave		0.1472			0.0500	5.6		20.0			
n-Octadecane	2.9279 2.7791	2.9973 2.6531	3.2672 2.3073	3.0215	2.8258	Ave		2.8474				10.0		20.0			
Phenanthrene	1.2333 1.2156	1.1493 1.2158	1.2014 1.2428	1.1714	1.1853	Ave		1.2019			0.7000	2.6		20.0			
Anthracene	1.1639 1.2594	1.1596 1.2828	1.2305 1.2914	1.2094	1.2361	Ave		1.2292			0.7000	4.0		20.0			
Carbazole	0.9973 1.0904	1.0318 1.1270	1.0917 1.1210	1.0590	1.0898	Ave		1.0760			0.0100	4.1		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Di-n-butyl phthalate	1.2435 1.4028	1.2478 1.4108	1.2963 1.4534	1.3362	1.3749	Ave		1.3457			0.0100	5.8		20.0			
Fluoranthene	1.2269 1.2465	1.1395 1.2579	1.1842 1.2493	1.1722	1.2253	Ave		1.2127			0.6000	3.5		20.0			
Benzidine	+++++ 0.6087	0.3381 0.5884	0.3417 +++++	0.4319	0.5499	Lin1	-0.796	0.6014			0.0100				0.9950		0.9900
Pyrene	1.2316 1.3821	1.3123 1.3377	1.3222 1.3790	1.3011	1.2959	Ave		1.3202			0.6000	3.7		20.0			
Butyl benzyl phthalate	0.5641 0.6167	0.5570 0.6045	0.5764 0.6090	0.5730	0.5894	Ave		0.5863			0.0100	3.8		20.0			
3,3'-Dichlorobenzidine	0.3540 0.4211	0.3483 0.4265	0.3548 0.4206	0.3825	0.3790	Ave		0.3859			0.0100	8.5		20.0			
Bis(2-ethylhexyl) phthalate	0.7021 0.8761	0.7843 0.8596	0.7648 0.8725	0.8242	0.8129	Ave		0.8121			0.0100	7.4		20.0			
Benzo[a]anthracene	1.1208 1.1714	1.1533 1.1649	1.1486 1.1975	1.1557	1.1481	Ave		1.1575			0.8000	1.9		20.0			
Chrysene	1.0300 1.1228	1.0963 1.1040	1.0801 1.1217	1.0966	1.0755	Ave		1.0909			0.7000	2.7		20.0			
Di-n-octyl phthalate	1.2730 1.7268	1.3219 1.7538	1.4451 1.7590	1.5535	1.6017	Ave		1.5544			0.0100	12.0		20.0			
7,12-Dimethylbenz(a)anthracene	0.4916 0.5923	0.5158 0.5834	0.5403 0.5803	0.5553	0.5564	Ave		0.5519			0.0100	6.3		20.0			
Benzo[b]fluoranthene	1.1665 1.3564	1.2427 1.3265	1.3292 1.3265	1.2863	1.3392	Ave		1.2967			0.7000	4.9		20.0			
Benzo[k]fluoranthene	1.1740 1.3060	1.2282 1.3366	1.2104 1.3323	1.2992	1.2796	Ave		1.2708			0.7000	4.7		20.0			
Benzo[e]pyrene	1.0767 1.2070	1.1193 1.2216	1.1574 1.2121	1.1816	1.1791	Ave		1.1694			0.0100	4.3		20.0			
Benzo[a]pyrene	1.0264 1.2368	1.1216 1.2146	1.1478 1.2456	1.1816	1.1717	Ave		1.1682			0.7000	6.1		20.0			
Indeno[1,2,3-cd]pyrene	1.0328 1.3270	1.1037 1.3836	1.1196 1.4315	1.2105	1.2218	Ave		1.2288			0.5000	12.0		20.0			
Dibenz(a,h)anthracene	0.8585 1.1035	0.9322 1.1407	0.9486 1.1741	1.0061	1.0090	Ave		1.0216			0.4000	11.0		20.0			
Benzo[g,h,i]perylene	0.9029 1.1236	0.9484 1.1747	0.9727 1.2283	1.0095	1.0273	Ave		1.0484			0.5000	11.0		20.0			
2-Fluorophenol (Surr)	0.9661 1.0450	1.0460 1.0420	1.0861 1.0374	1.0544	1.0213	Ave		1.0373				3.3		20.0			
Phenol-d5 (Surr)	1.2867 1.4119	1.3965 1.3682	1.5097 1.3500	1.4614	1.3893	Ave		1.3967				4.9		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Nitrobenzene-d5 (Surr)	0.3197 0.3403	0.3409 0.3398	0.3393 0.3237	0.3449	0.3373	Ave		0.3358				2.7		20.0			
2-Fluorobiphenyl	1.2937 1.3368	1.3465 1.2809	1.3527 1.2654	1.3156	1.3177	Ave		1.3136				2.4		20.0			
2,4,6-Tribromophenol (Surr)	0.0707 0.0958	0.0803 0.0956	0.0889 0.0947	0.0887	0.0888	Ave		0.0879			0.0100	9.8		20.0			
Terphenyl-d14 (Surr)	0.8113 0.8873	0.8676 0.8789	0.8868 0.8883	0.8805	0.8663	Ave		0.8709				2.9		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCB	Ave	1934 209470	11737 302556	23830 408930	55464	109242	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCB	Ave	2670 284868	15503 415506	30743 570621	74663	147321	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCB	Ave	4214 507054	26410 740621	55290 993662	131501	264484	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methyl methanesulfonate	DCB	Ave	3907 385315	22793 562394	46560 750302	105679	203934	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCB	Ave	4208 517593	21743 682953	45208 827212	107077	258918	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCB	Ave	11070 1005636	60095 1423572	120902 1910430	270314	537943	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCB	Ave	11813 1146158	64483 1627756	132805 2127696	301857	596247	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCB	Ave	8179 701627	41584 1010724	84668 1360669	190003	372868	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCB	Ave	8829 887214	48891 1264905	102500 1719757	233051	458905	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCB	Ave	11924 996855	61014 1358551	122092 1778933	273969	543602	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	10209 1034697	58818 1463480	117189 1969048	274959	534786	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	11017 1041084	58452 1517829	124324 2013954	272903	544982	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCB	Ave	5381 548480	31167 798172	67422 1052255	148867	285603	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	11014 1006967	58062 1438910	117889 1943533	267807	530899	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCB	Ave	8430 763283	45068 1091611	94232 1418095	207591	398202	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1 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.: 180-43220-1 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.: 180-43220-1 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.: 180-43220-1 Analy Batch No.: 132436

SDG No.:

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

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

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Butyl benzyl phthalate	CRY	Ave	18708 1660263	93839 2464856	194904 3249211	434962	886116	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	11741 1133566	58677 1739062	119990 2244278	290343	569808	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	23285 2358686	132135 3504948	258611 4655604	625648	1221960	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	37171 3153612	194307 4749712	388390 6389372	877303	1725874	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	34157 3022852	184718 4501660	365240 5985101	832413	1616774	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Ave	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.: 180-43220-1 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

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 Dibenz(a,h)anthracene	-16.0	-8.8	-7.1	-1.5	-1.2	8.0	11.7	14.9

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-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: piccolinov Date: 04-Feb-2015 06:38:29

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

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

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt 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

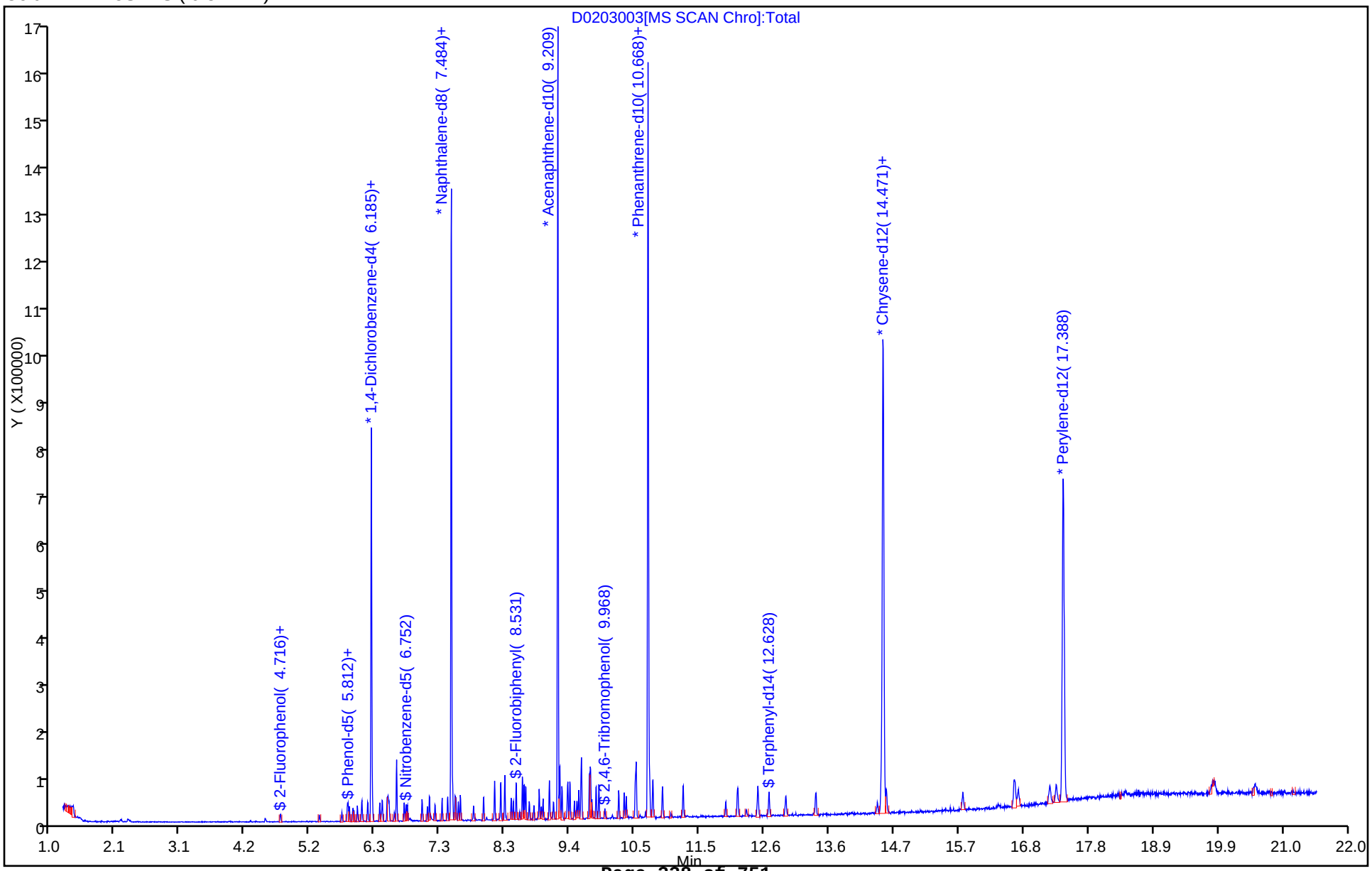
Report Date: 04-Feb-2015 06:40:53 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

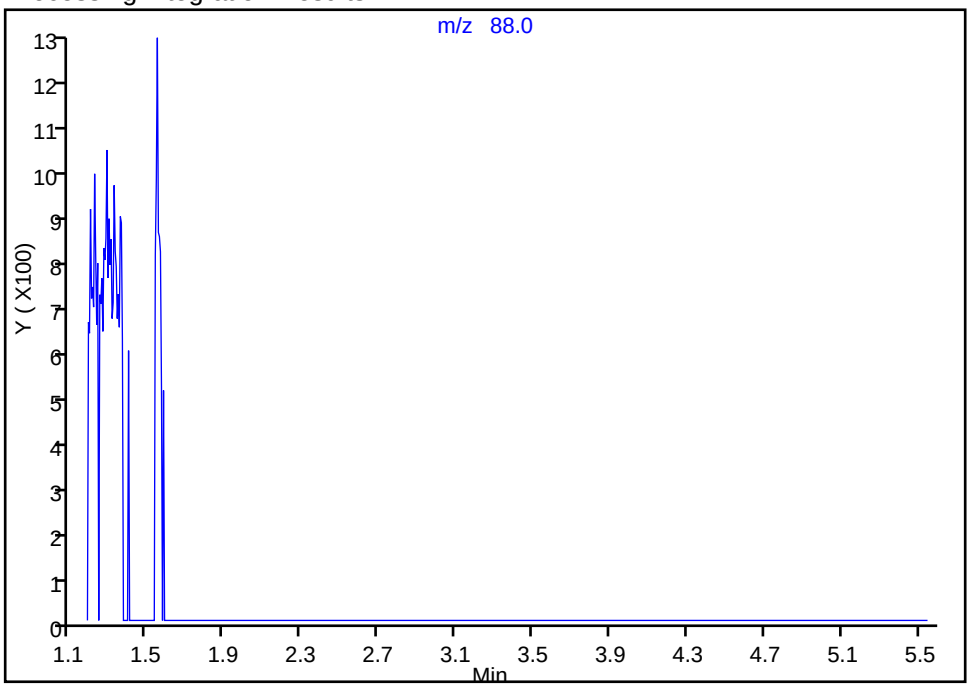
TestAmerica Pittsburgh

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		

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

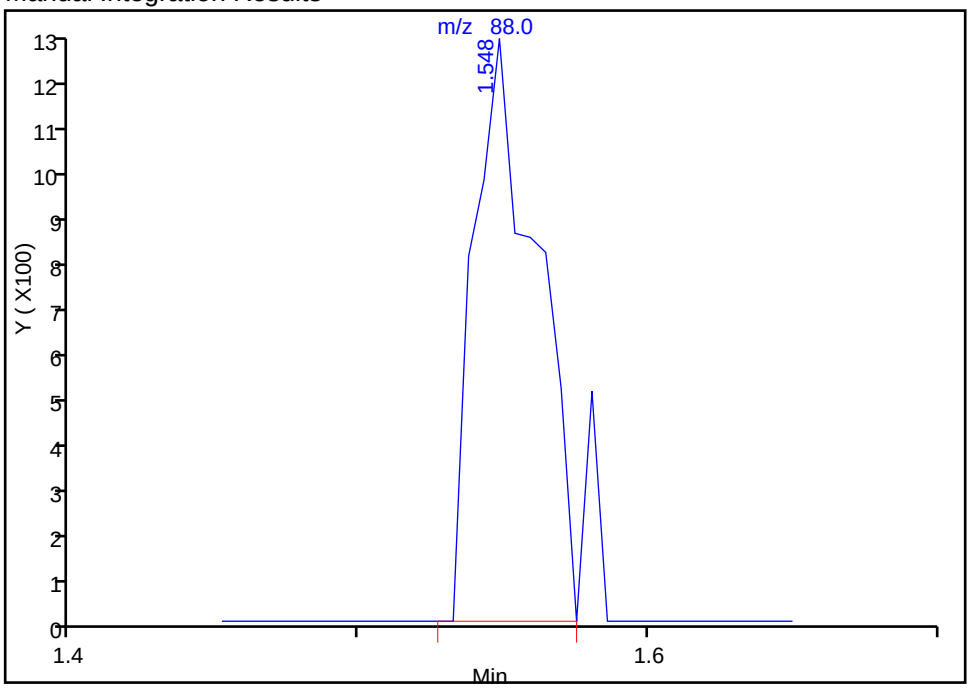
Not Detected
Expected RT: 1.55

Processing Integration Results



Manual Integration Results

RT: 1.55
Area: 1934
Amount: 0.363312
Amount Units: ng



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

Manual Integration/User Assign Peak Report

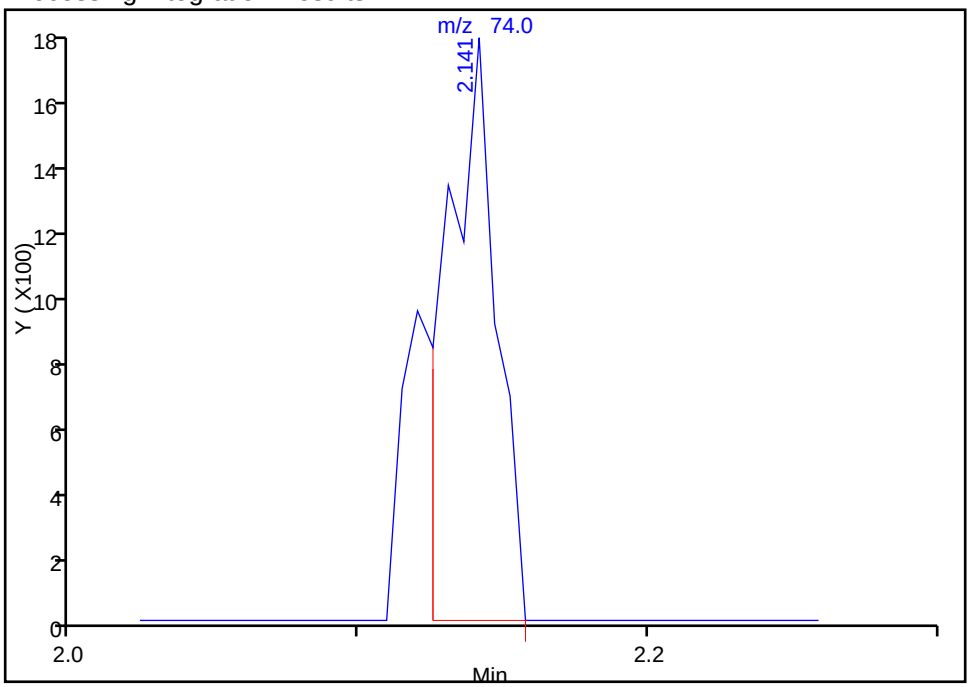
TestAmerica Pittsburgh

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

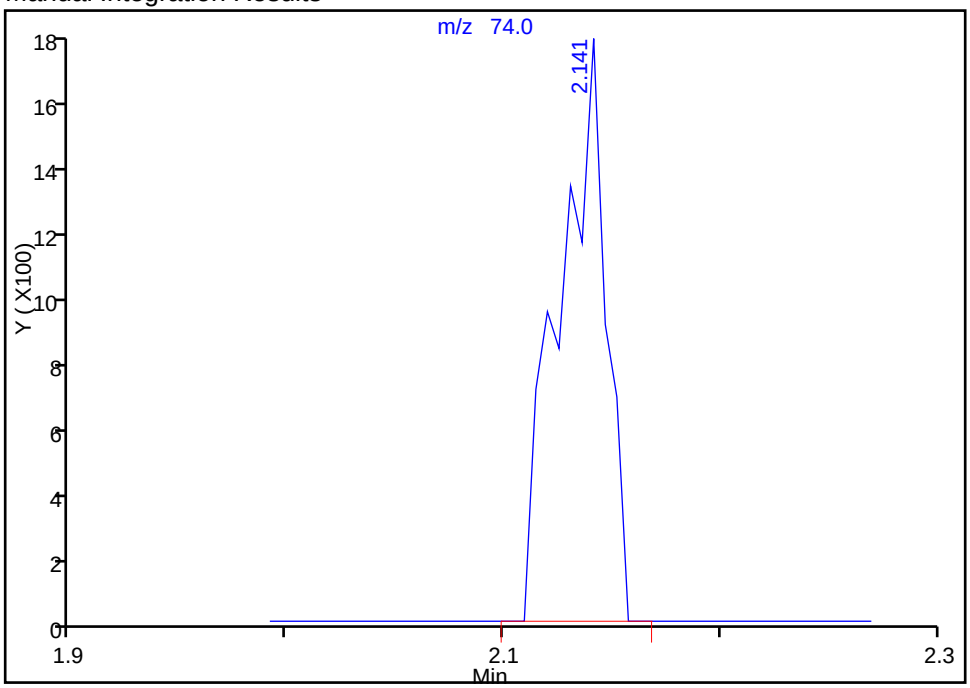
Processing Integration Results

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



Manual Integration Results

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



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

Manual Integration/User Assign Peak Report

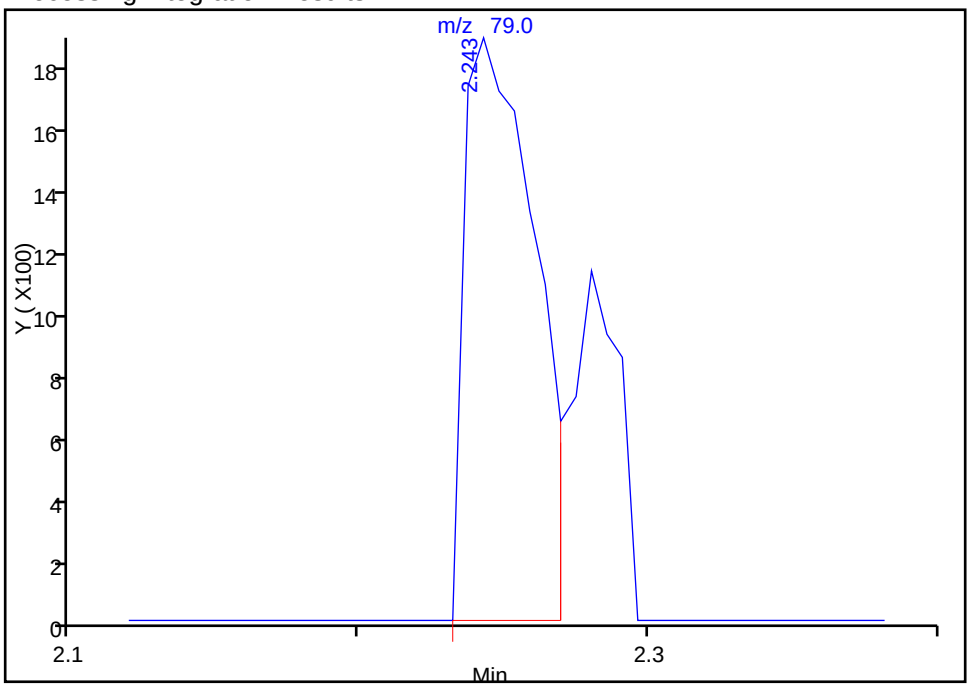
TestAmerica Pittsburgh

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

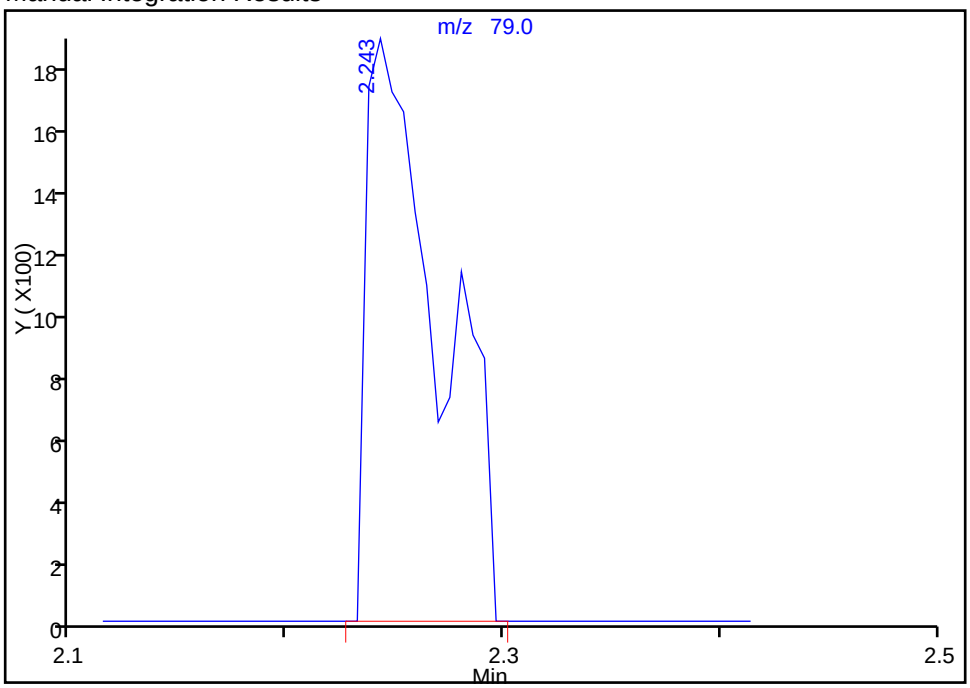
Processing Integration Results

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



Manual Integration Results

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



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

Manual Integration/User Assign Peak Report

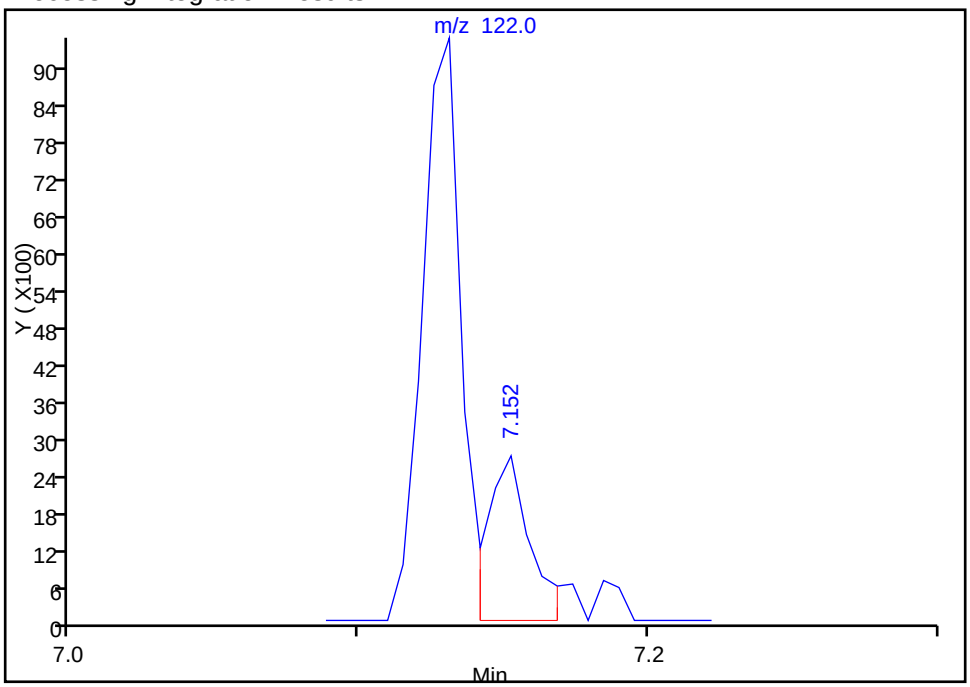
TestAmerica Pittsburgh

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		

52 Benzoic acid, CAS: 65-85-0

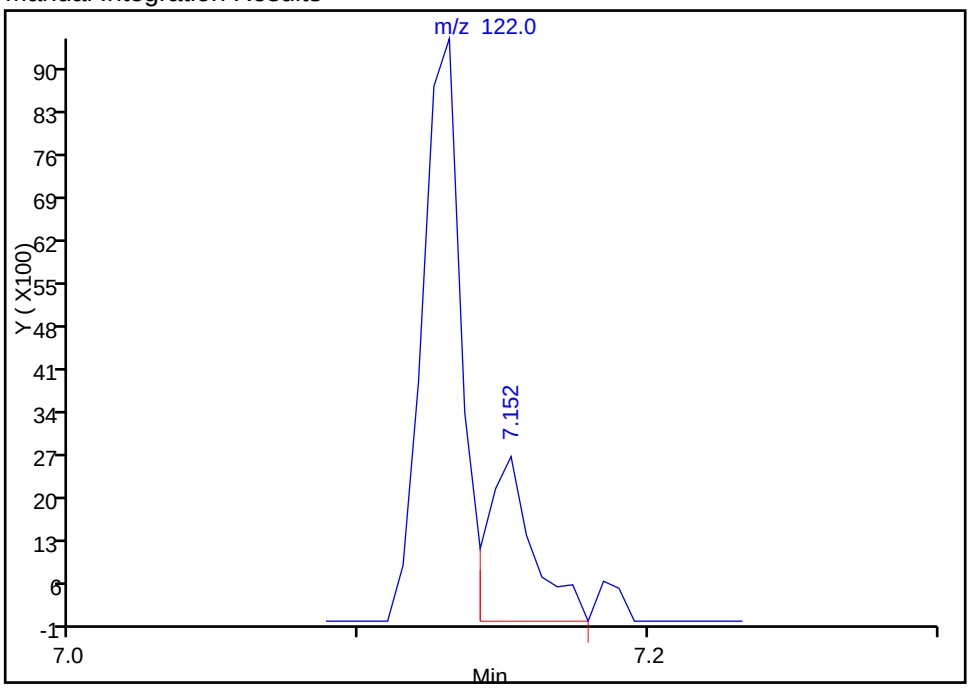
Processing Integration Results

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



Manual Integration Results

RT: 7.15
Area: 2959
Amount: 1.535991
Amount Units: ng



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

Manual Integration/User Assign Peak Report

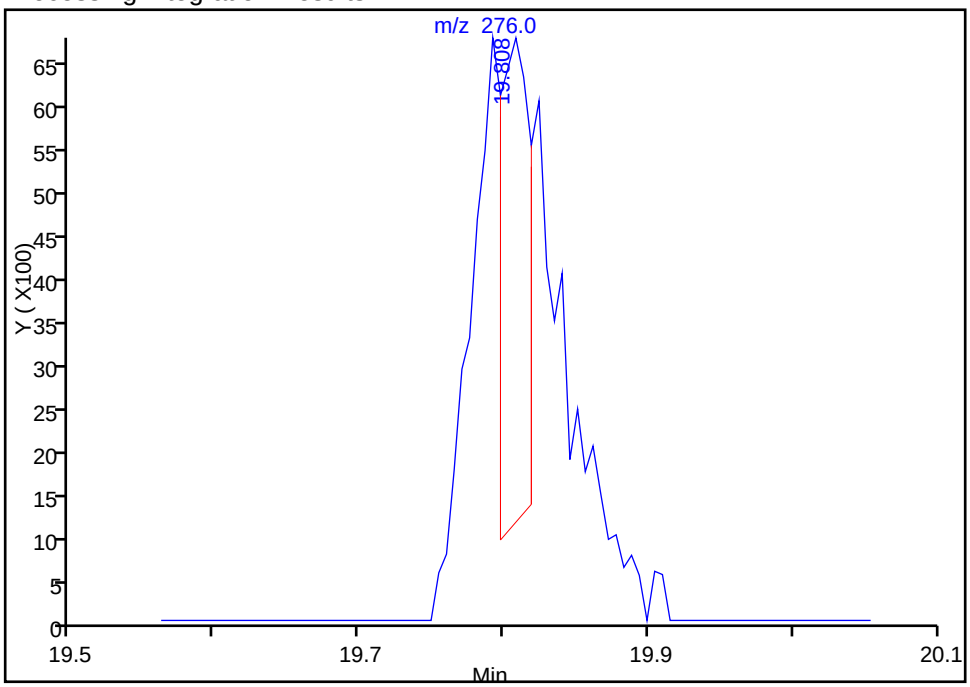
TestAmerica Pittsburgh

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		

157 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

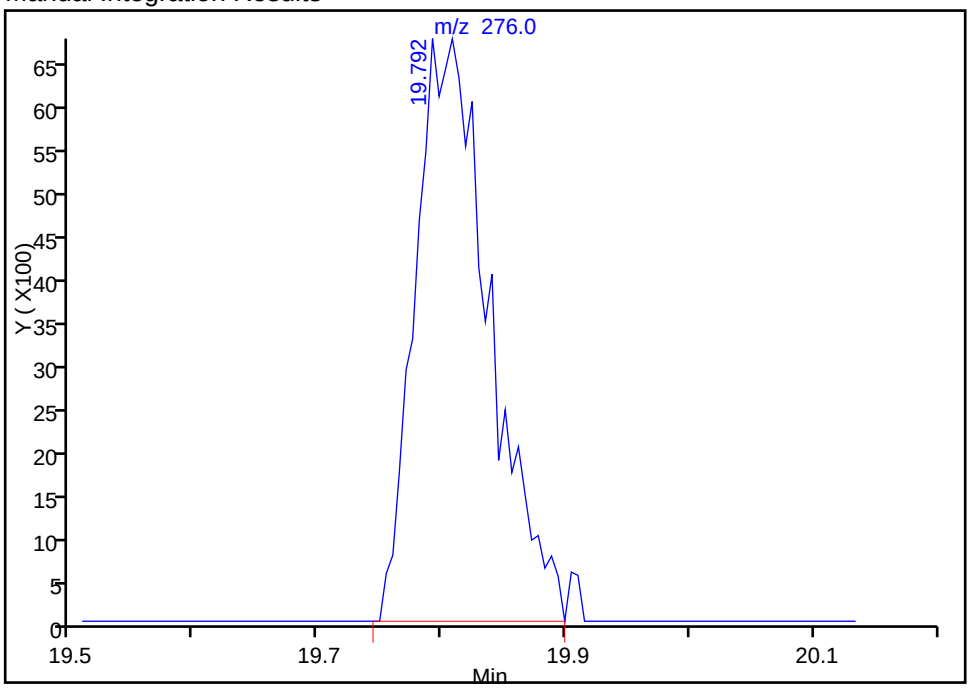
Processing Integration Results

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

Manual Integration/User Assign Peak Report

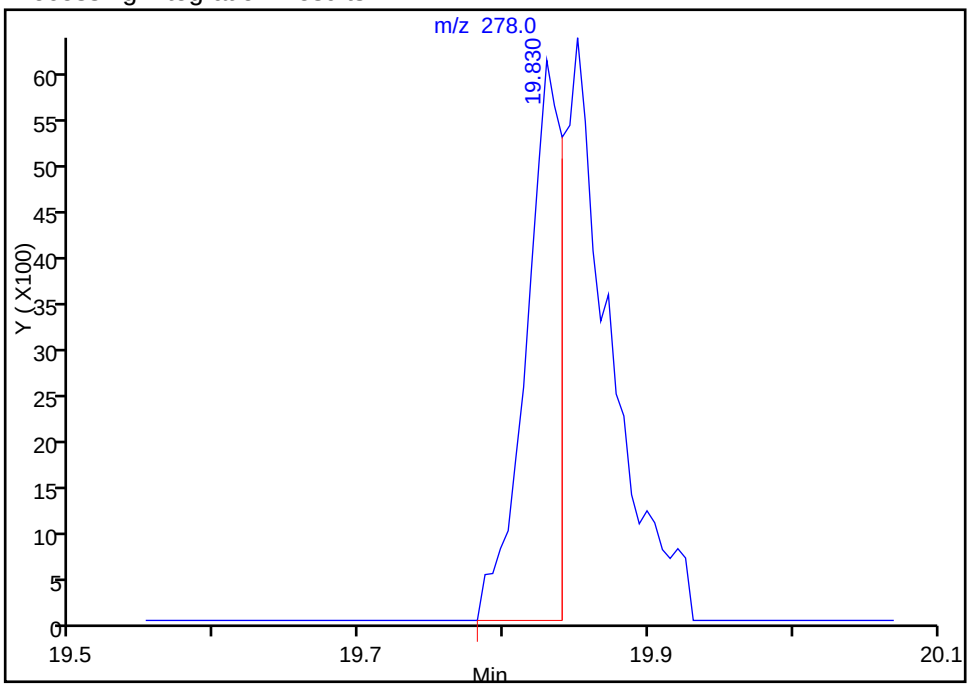
TestAmerica Pittsburgh

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

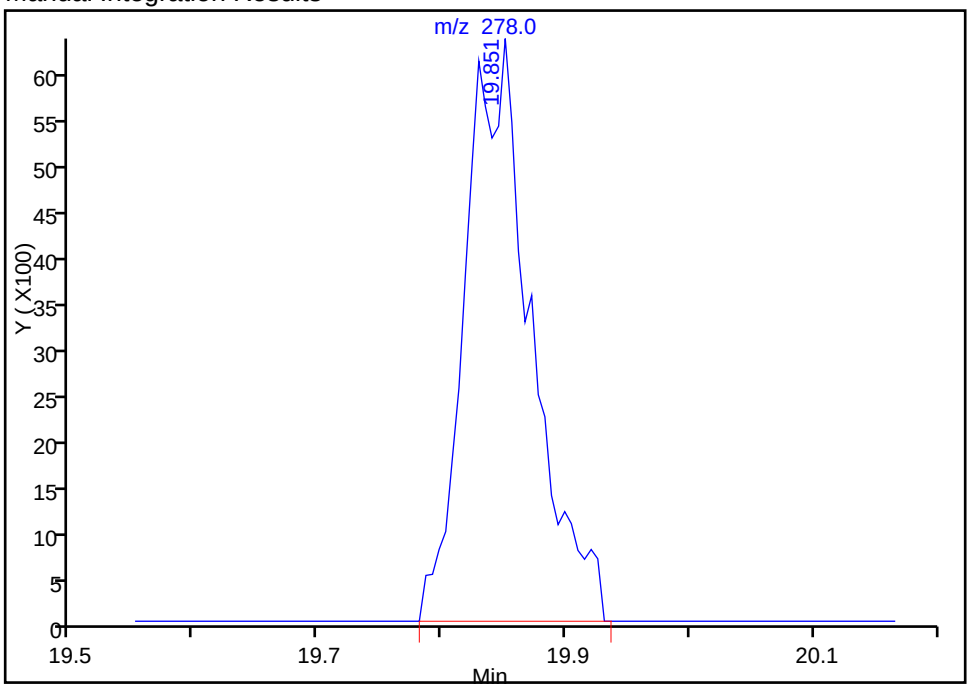
Processing Integration Results

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



Manual Integration Results

RT: 19.85
Area: 23584
Amount: 0.336134
Amount Units: ng



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

Manual Integration/User Assign Peak Report

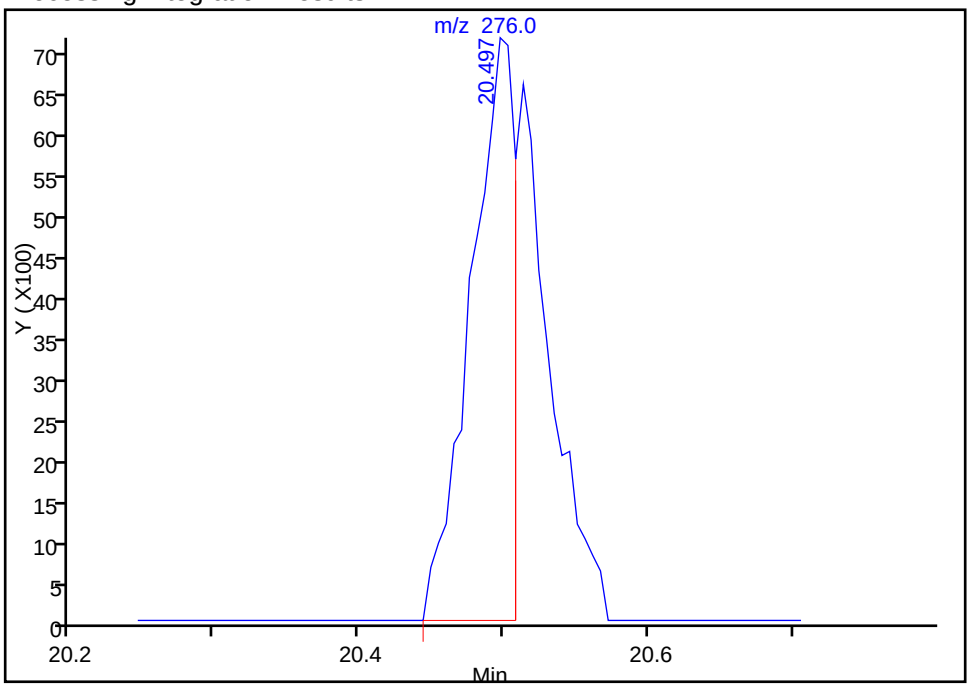
TestAmerica Pittsburgh

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		

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

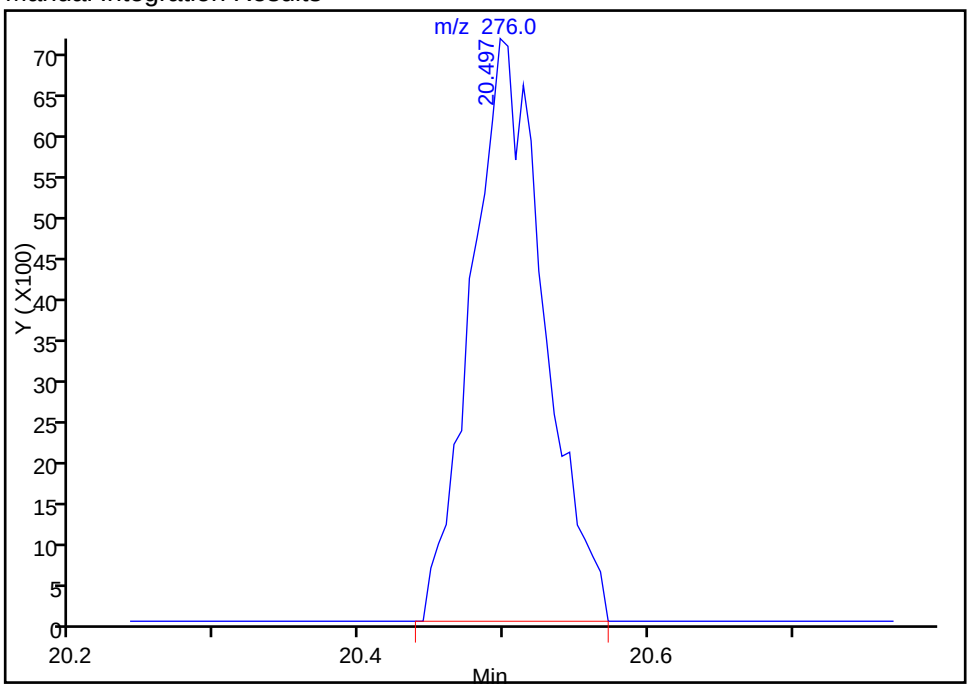
Processing Integration Results

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



Manual Integration Results

RT: 20.50
Area: 24806
Amount: 0.344484
Amount Units: ng



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-5SilMS (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

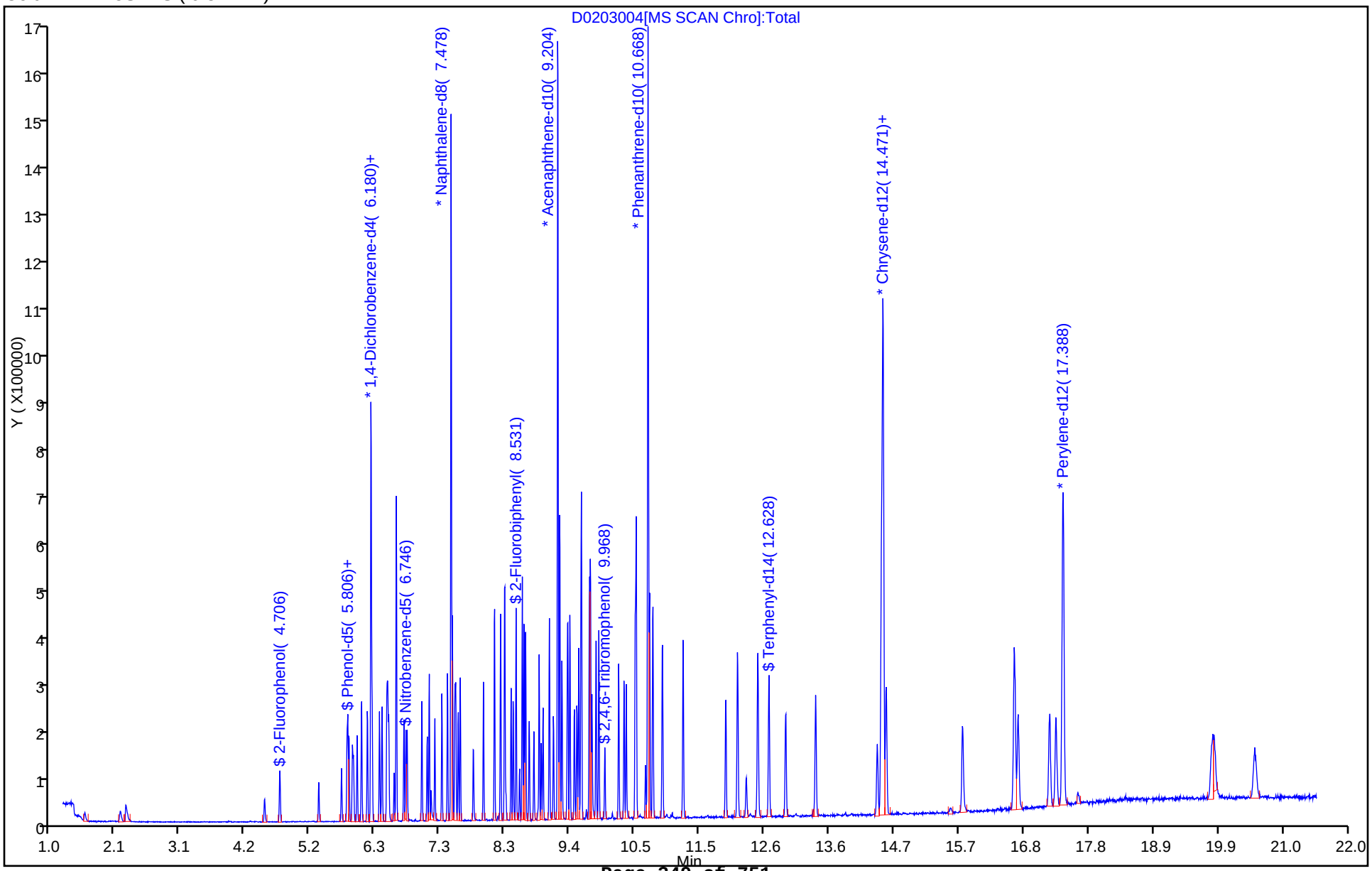
Report Date: 04-Feb-2015 06:40:58 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

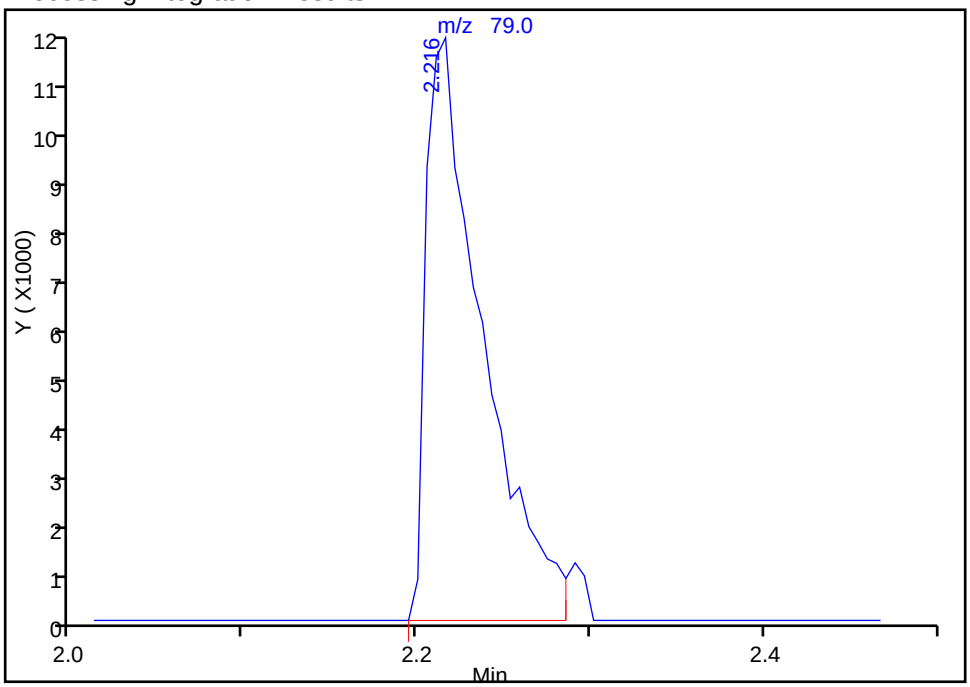
TestAmerica Pittsburgh

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

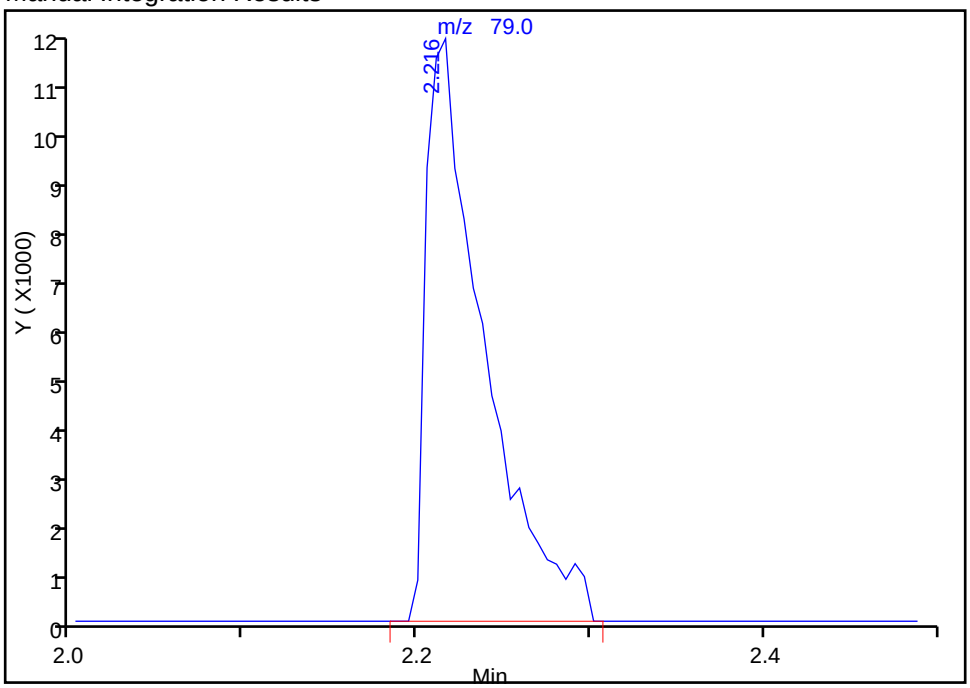
Processing Integration Results

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



Manual Integration Results

RT: 2.22
Area: 26410
Amount: 1.954321
Amount Units: ng



Reviewer: piccolinov, 03-Feb-2015 08:48:35
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

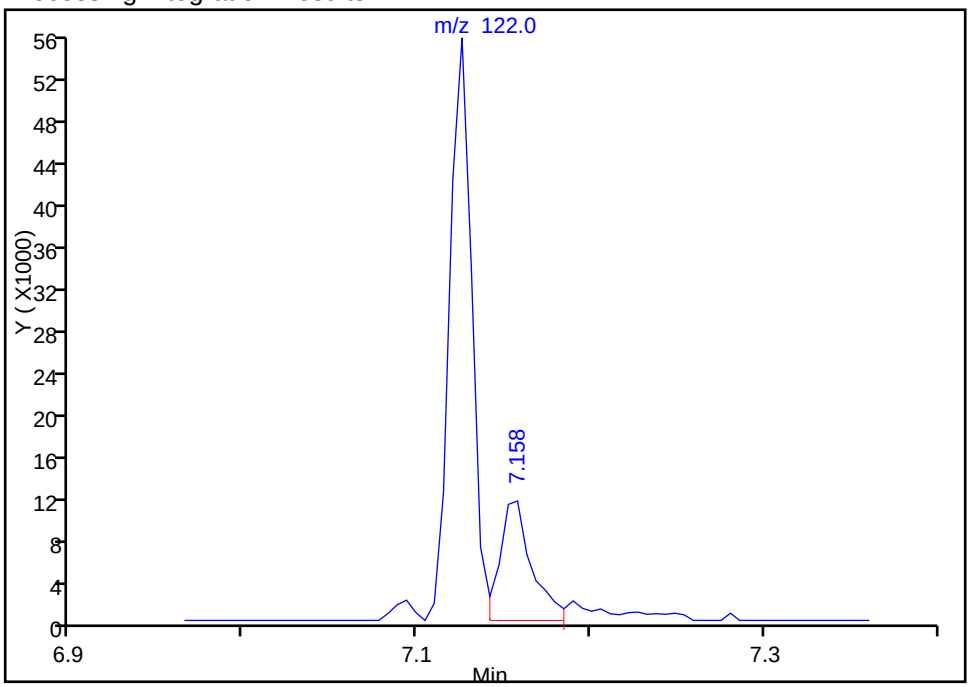
TestAmerica Pittsburgh

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		

52 Benzoic acid, CAS: 65-85-0

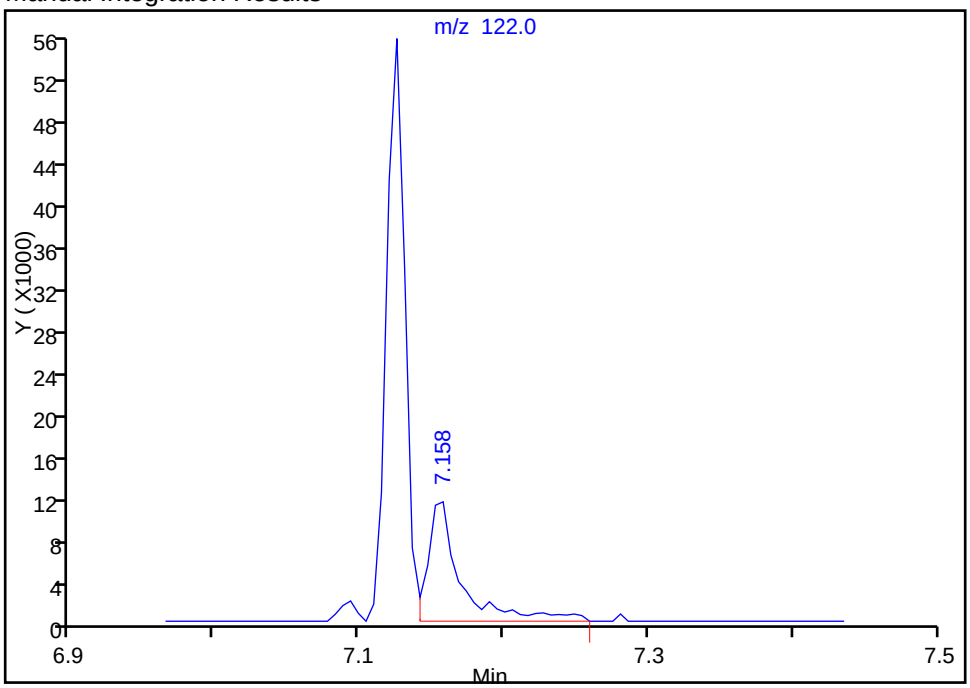
Processing Integration Results

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



Manual Integration Results

RT: 7.16
Area: 18161
Amount: 2.449653
Amount Units: ng



Reviewer: piccolinov, 03-Feb-2015 08:48:35
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

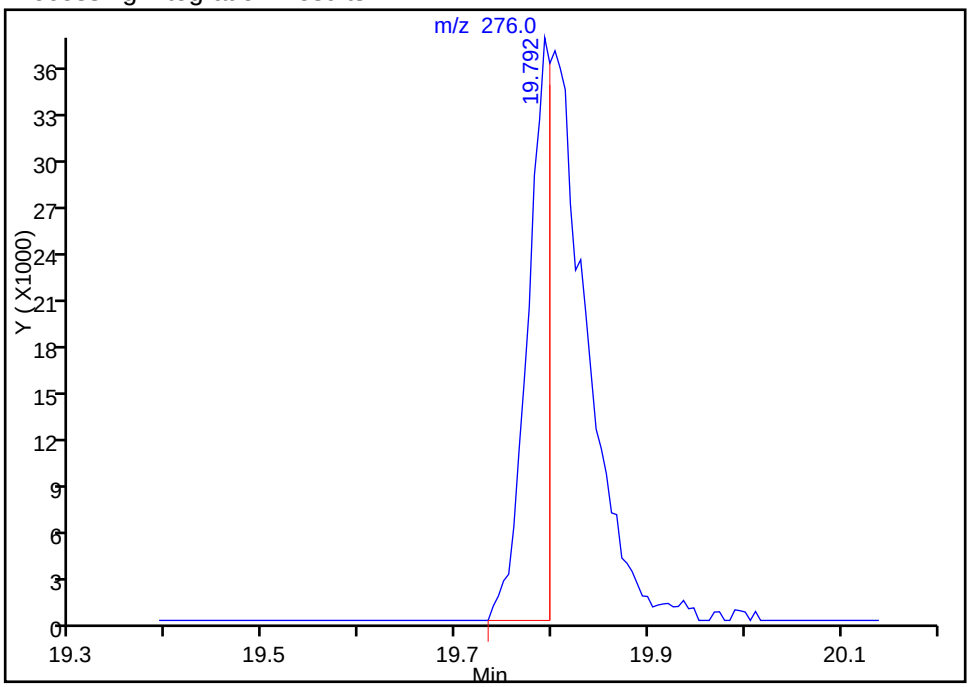
TestAmerica Pittsburgh

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		

157 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

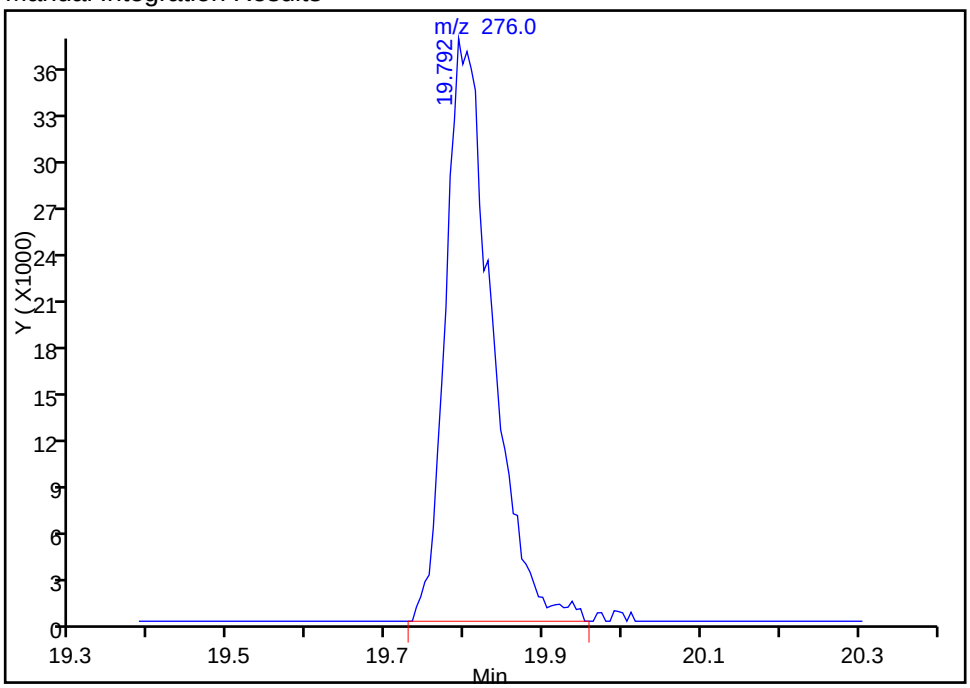
Processing Integration Results

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

Manual Integration/User Assign Peak Report

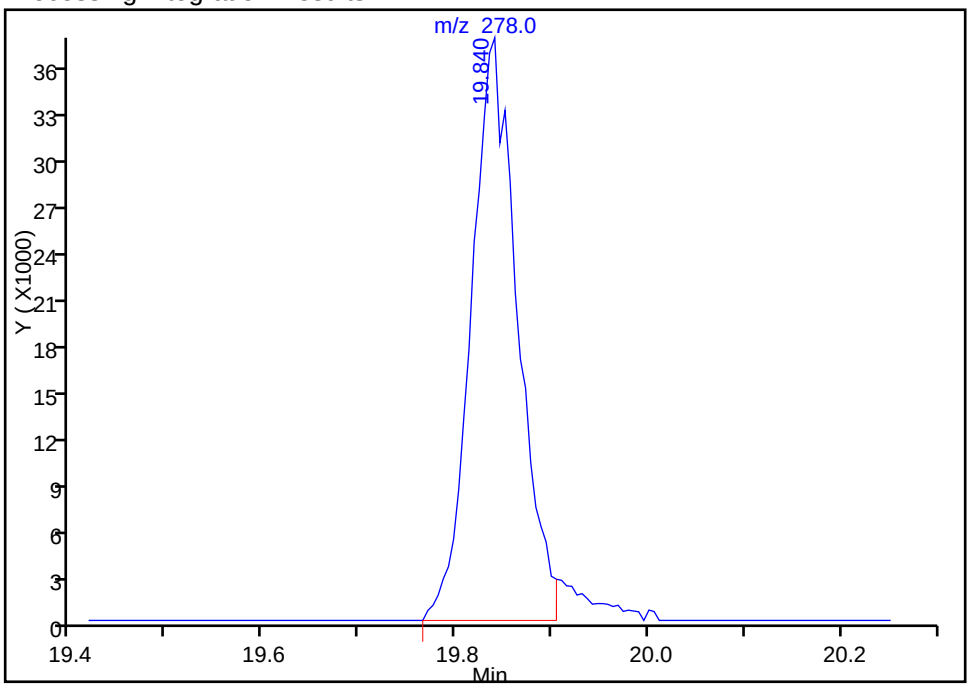
TestAmerica Pittsburgh

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		

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

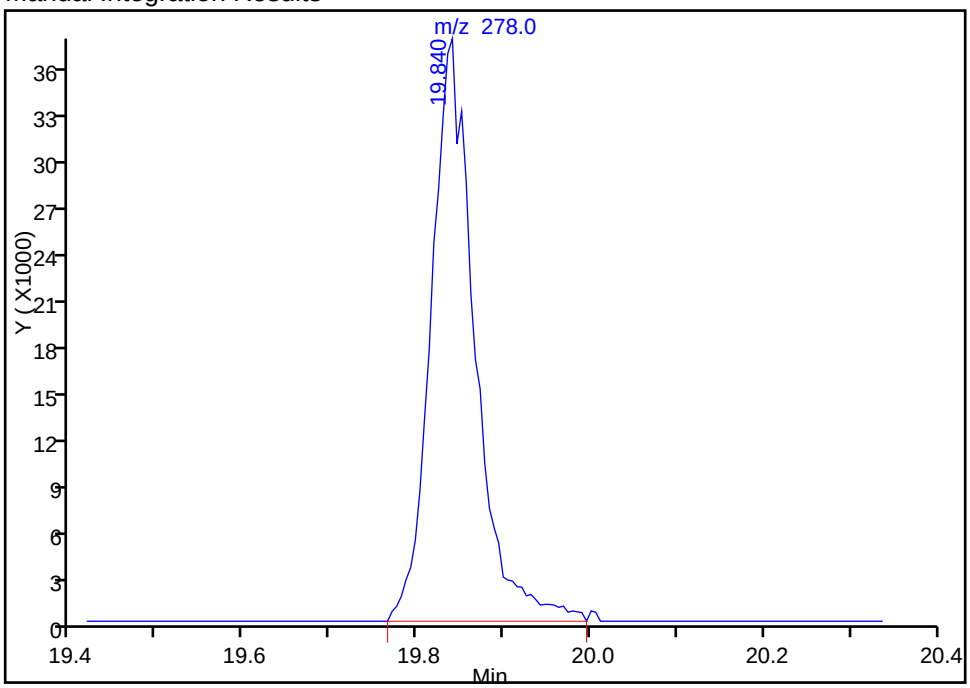
Processing Integration Results

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



Manual Integration Results

RT: 19.84
Area: 130639
Amount: 1.824963
Amount Units: ng



Reviewer: piccolinov, 03-Feb-2015 08:48:35
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

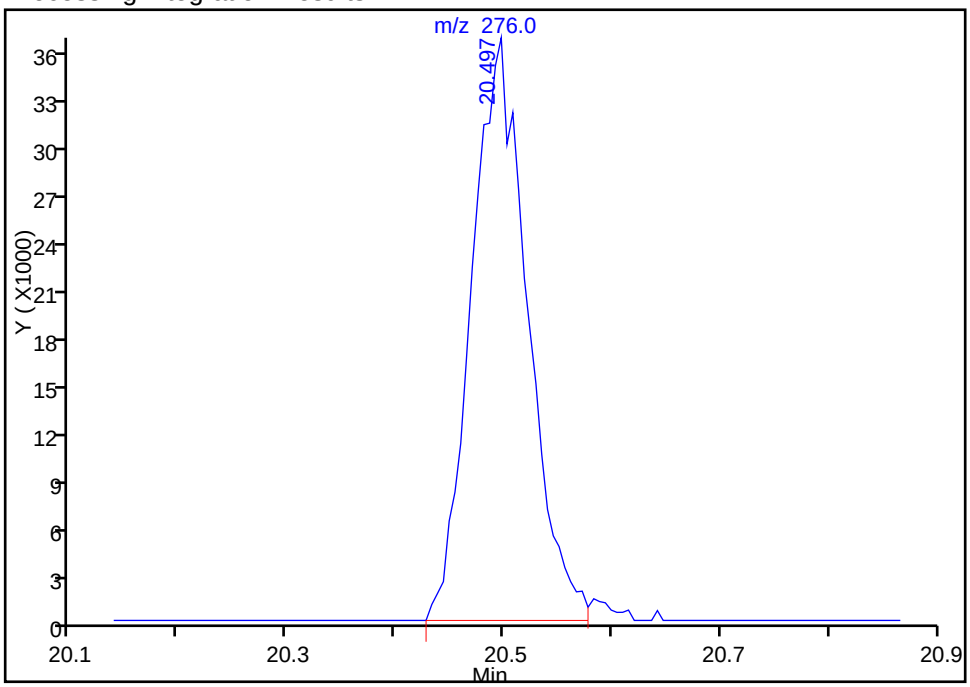
TestAmerica Pittsburgh

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		

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

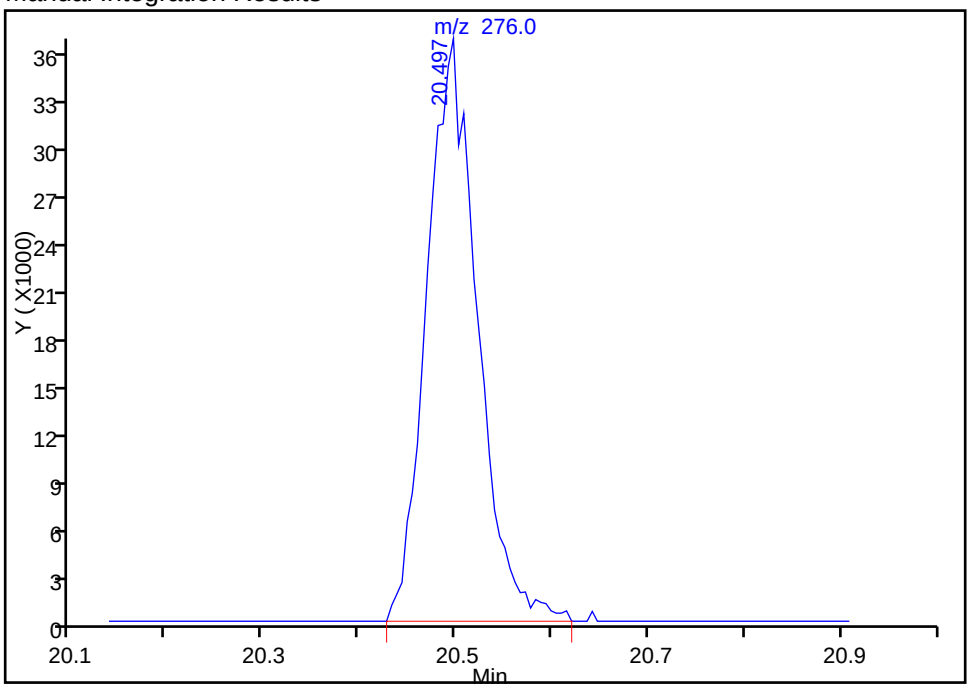
Processing Integration Results

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-5SilMS (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

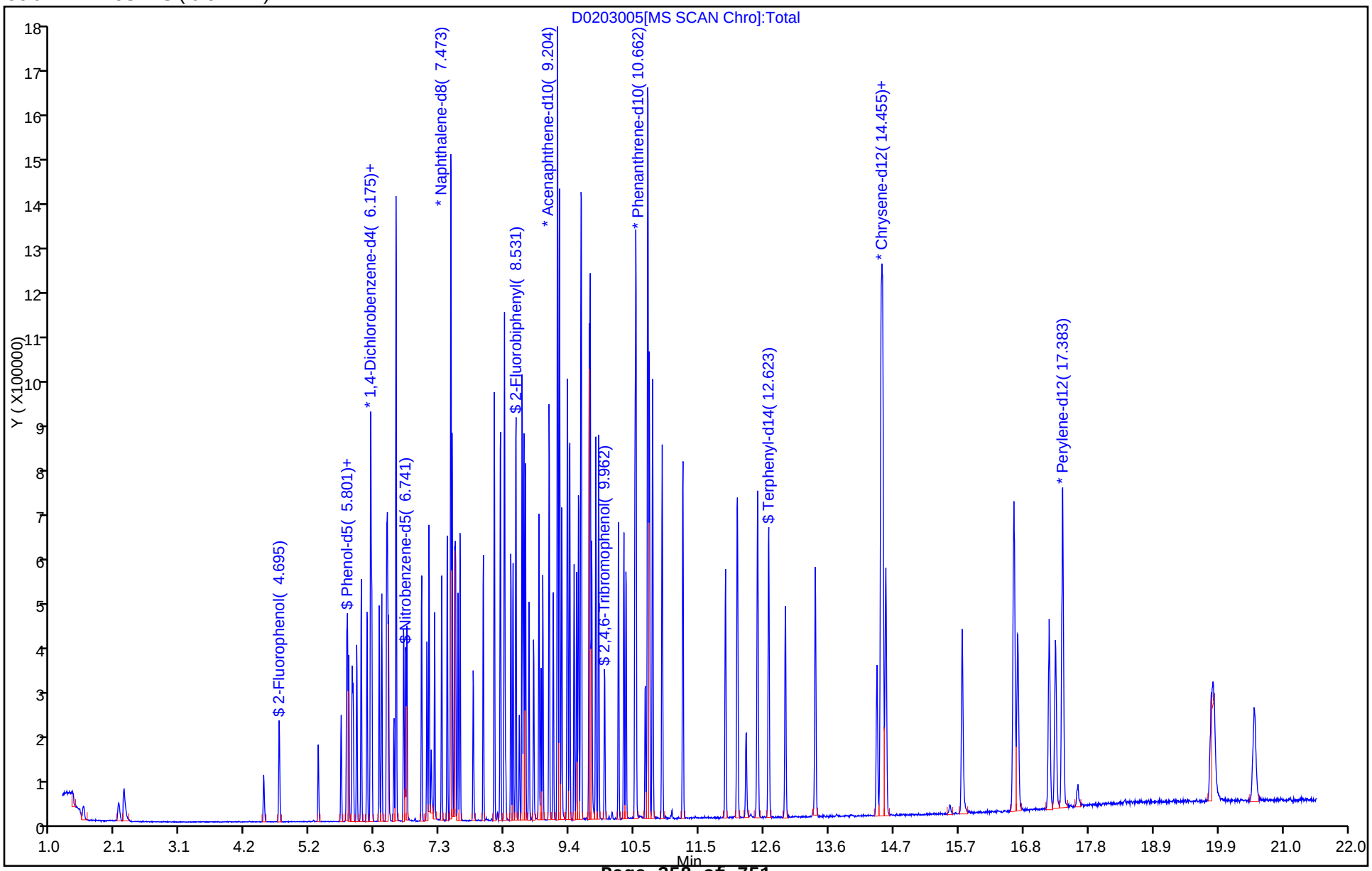
Report Date: 04-Feb-2015 06:41:05 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

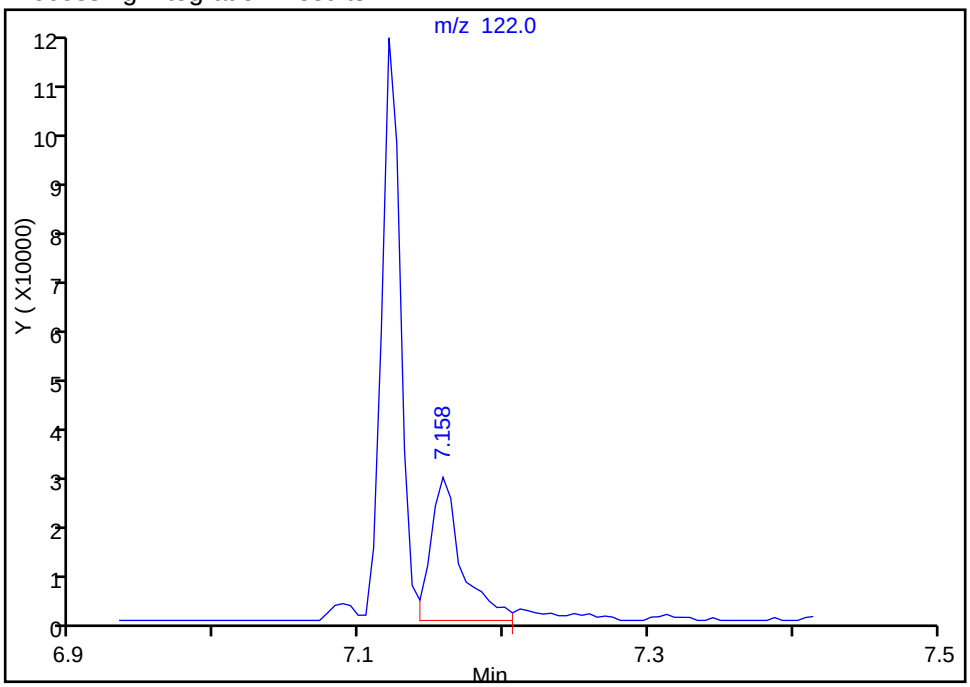
TestAmerica Pittsburgh

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

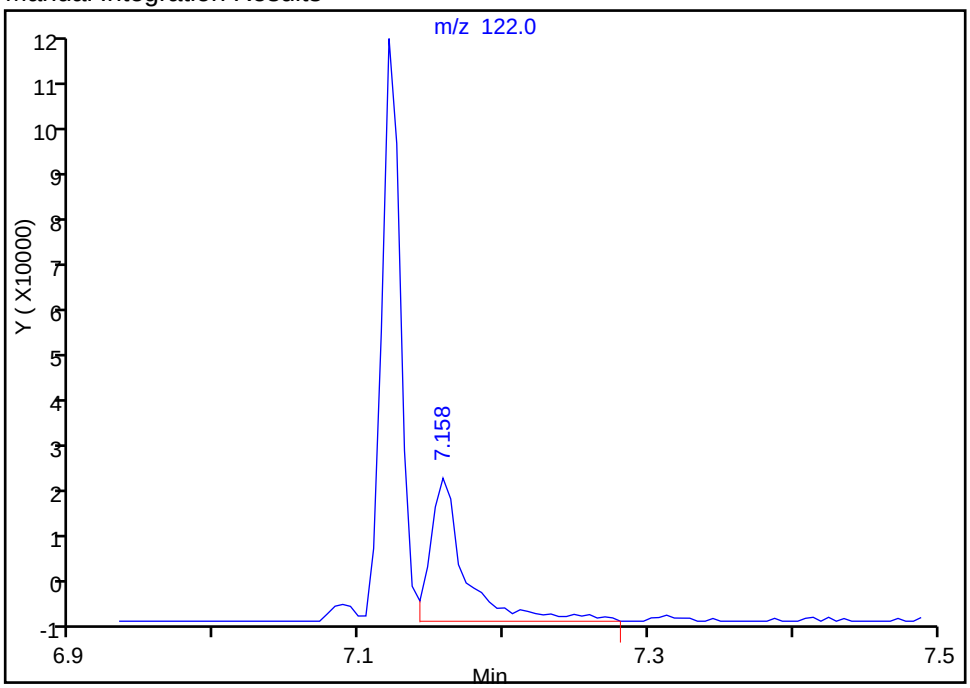
Processing Integration Results

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



Manual Integration Results

RT: 7.16
Area: 45351
Amount: 4.015151
Amount Units: ng



Reviewer: piccolinov, 03-Feb-2015 08:50:34
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

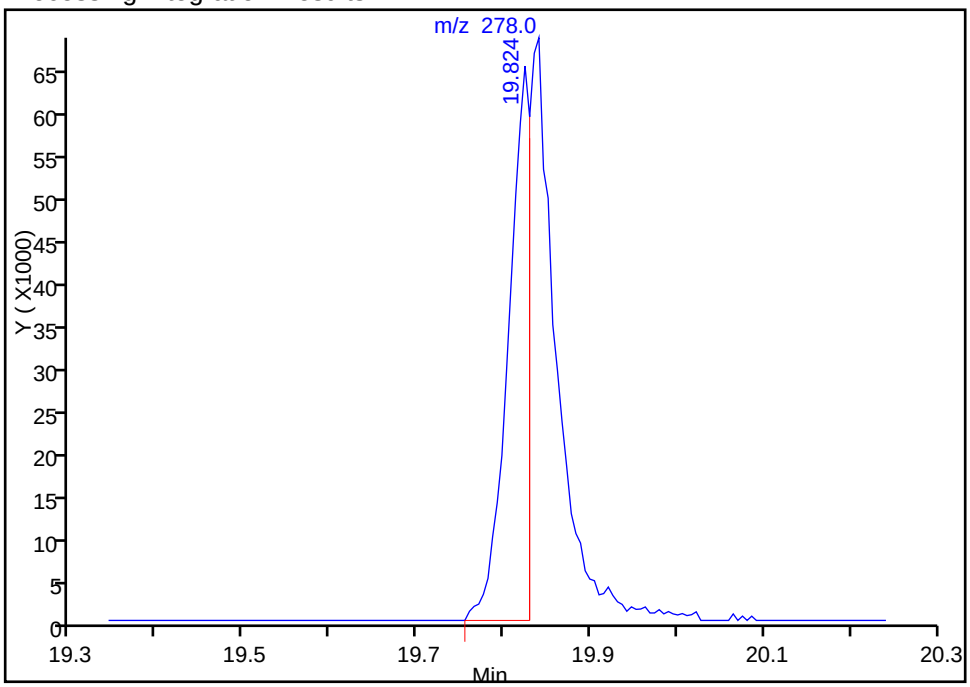
TestAmerica Pittsburgh

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		

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

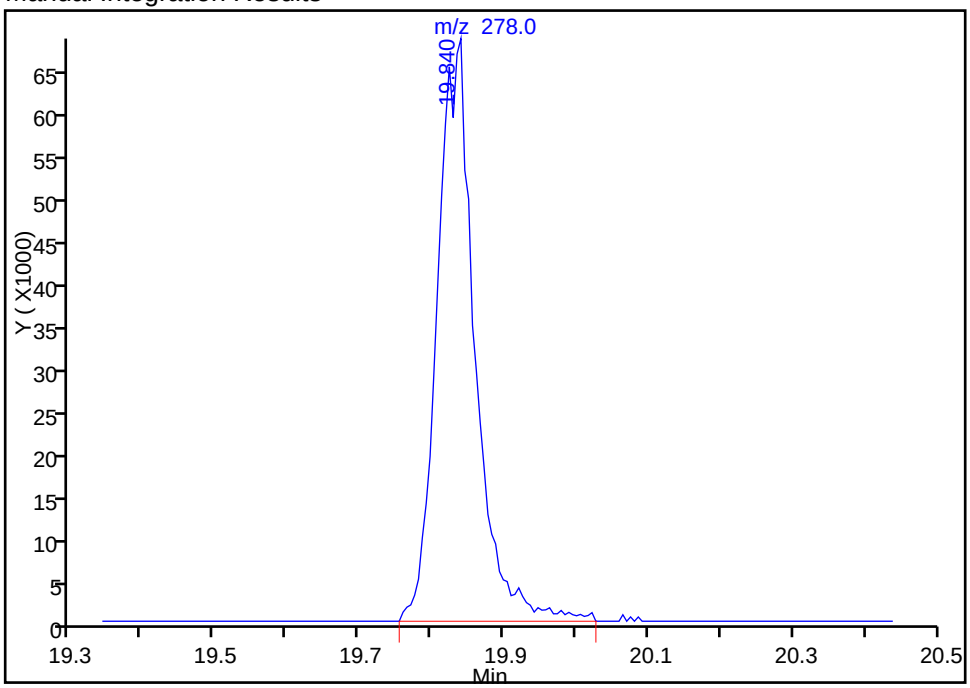
Processing Integration Results

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



Manual Integration Results

RT: 19.84
Area: 250943
Amount: 3.714140
Amount Units: ng



Reviewer: piccolinov, 03-Feb-2015 08:50:34
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Report Date: 04-Feb-2015 06:41:11 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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-5SilMS (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 ethe	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

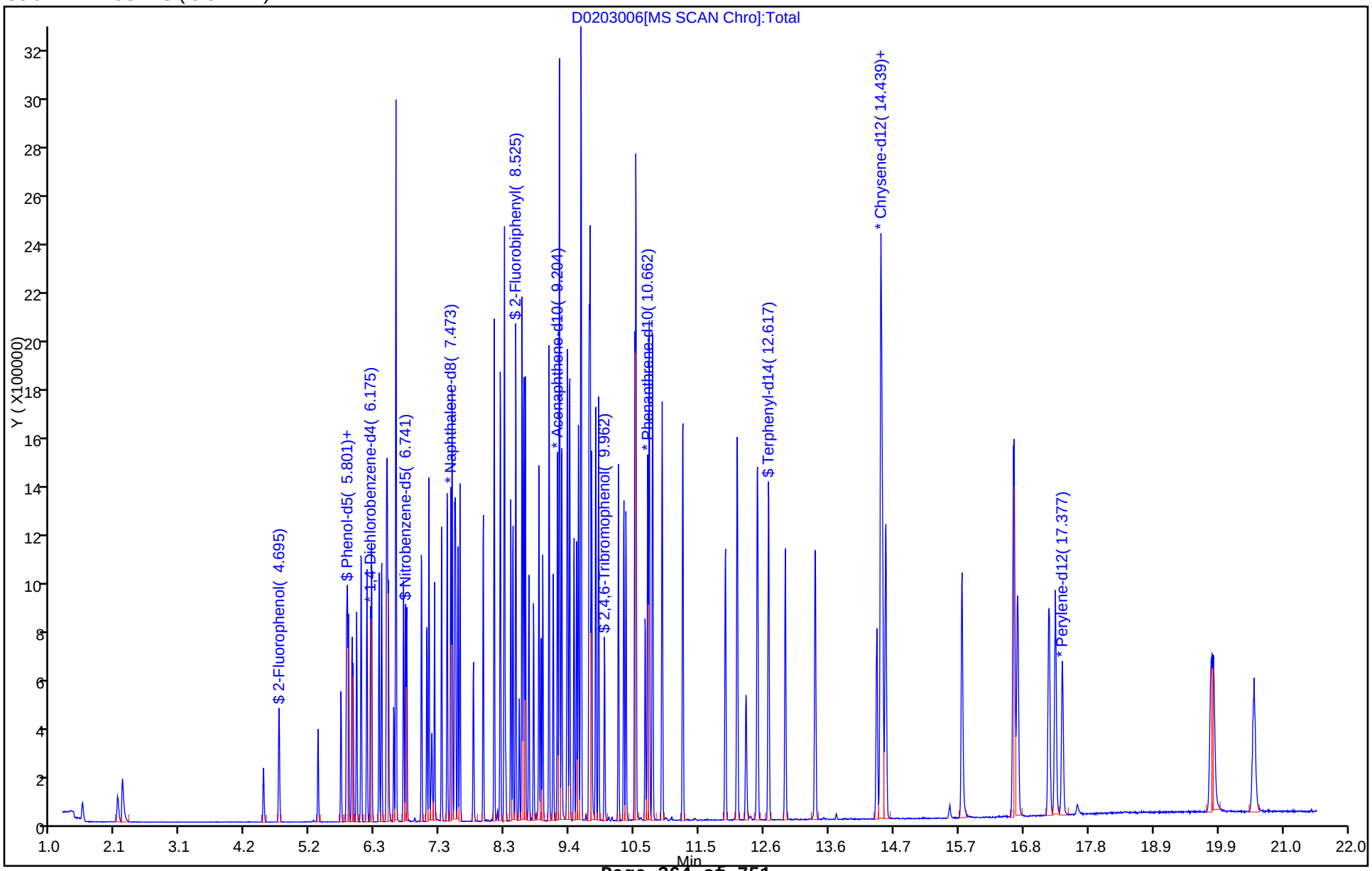
Report Date: 04-Feb-2015 06:41:11 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203006.D

Injection Date:	03-Feb-2015 07:13:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	ICIS			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

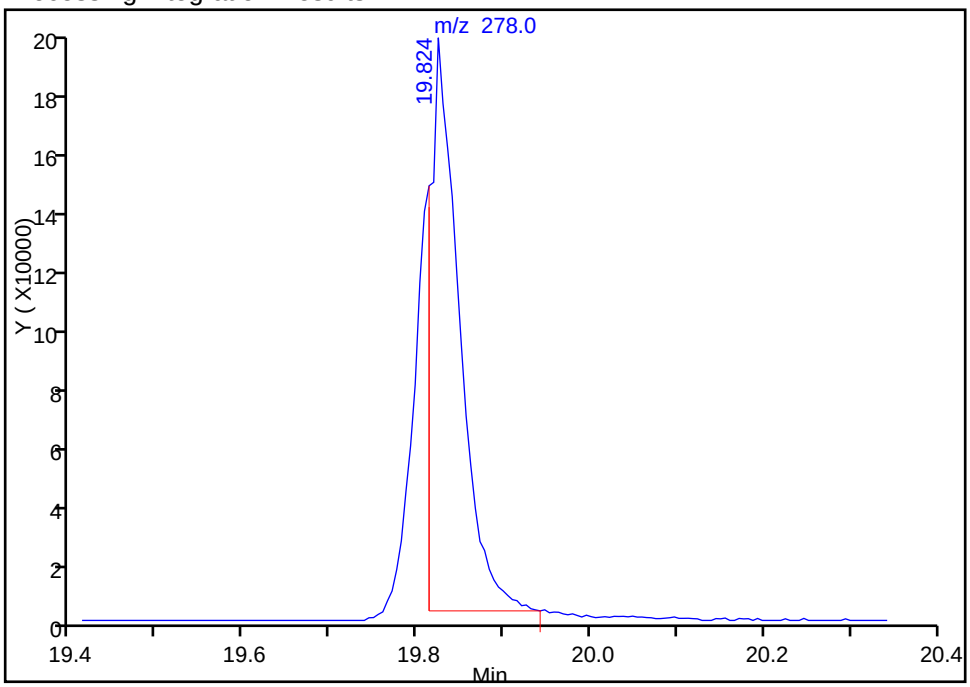
TestAmerica Pittsburgh

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-5SilMS (0.32 mm)	Detector	MS SCAN		

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

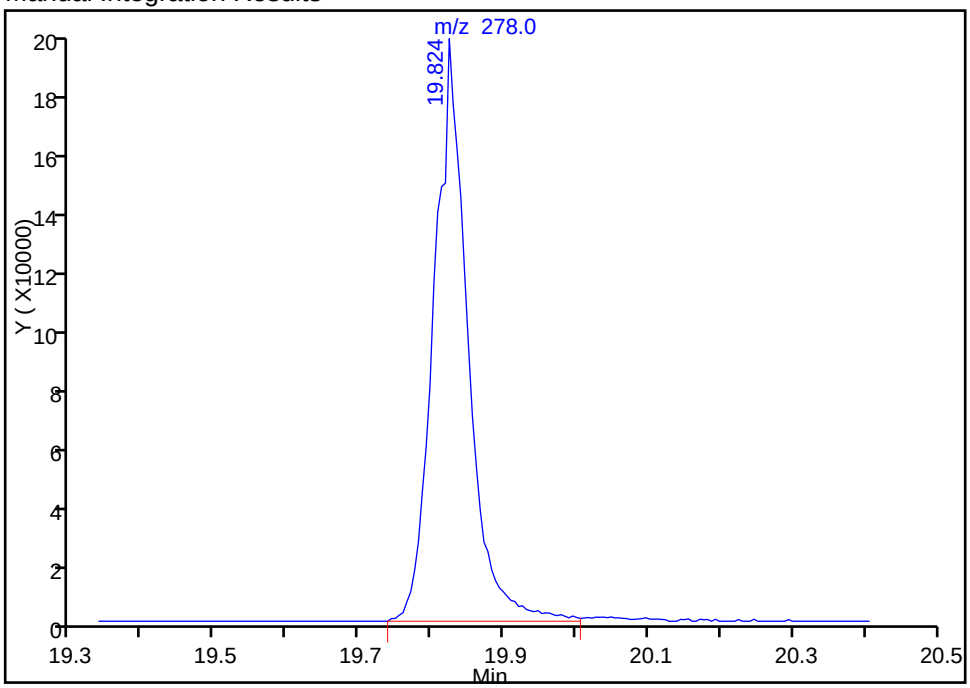
Processing Integration Results

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

Report Date: 04-Feb-2015 06:41:16 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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-5SilMS (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

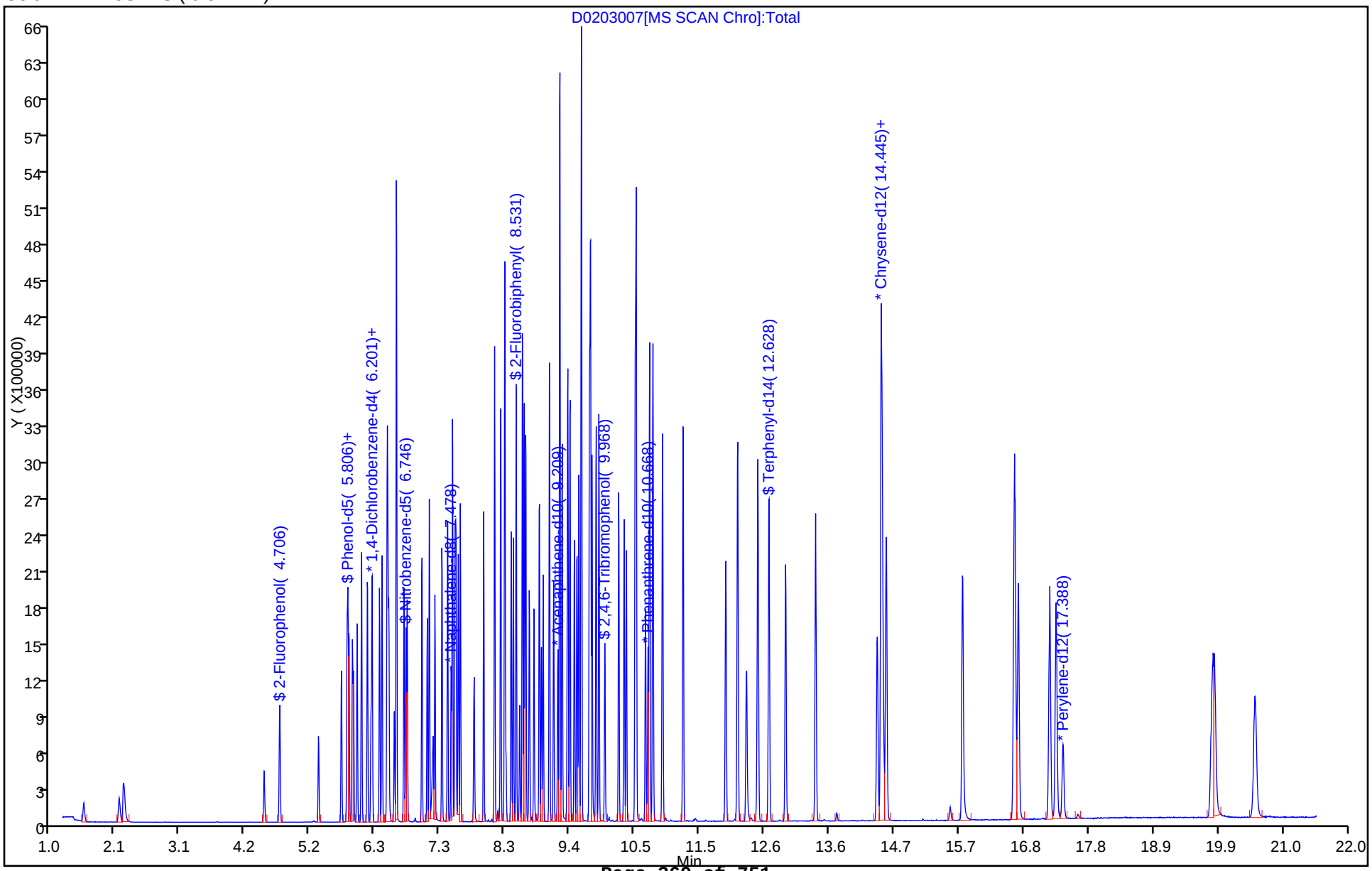
Report Date: 04-Feb-2015 06:41:16 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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-5SilMS (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-5SilMS (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

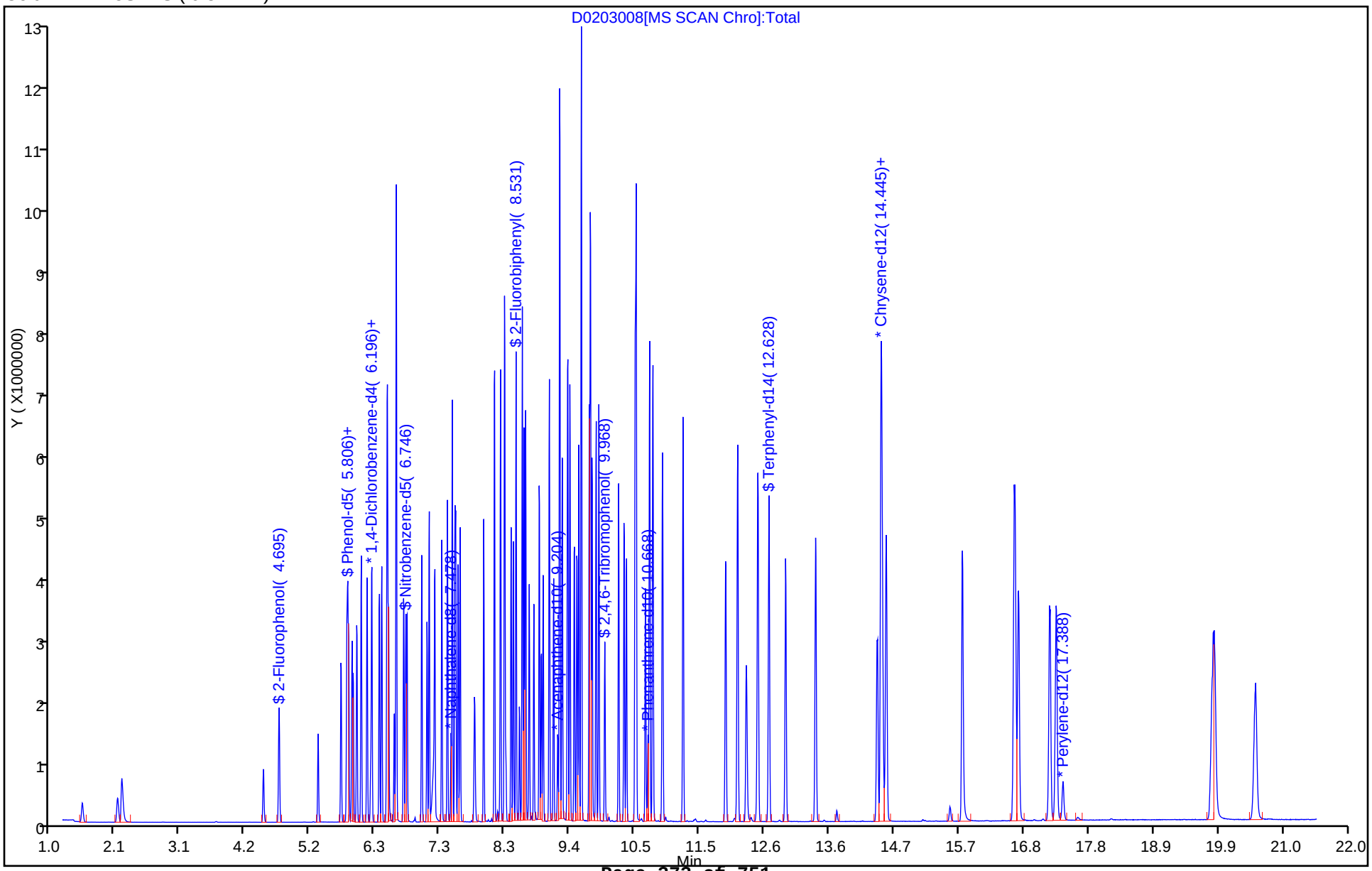
Report Date: 04-Feb-2015 06:41:25 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

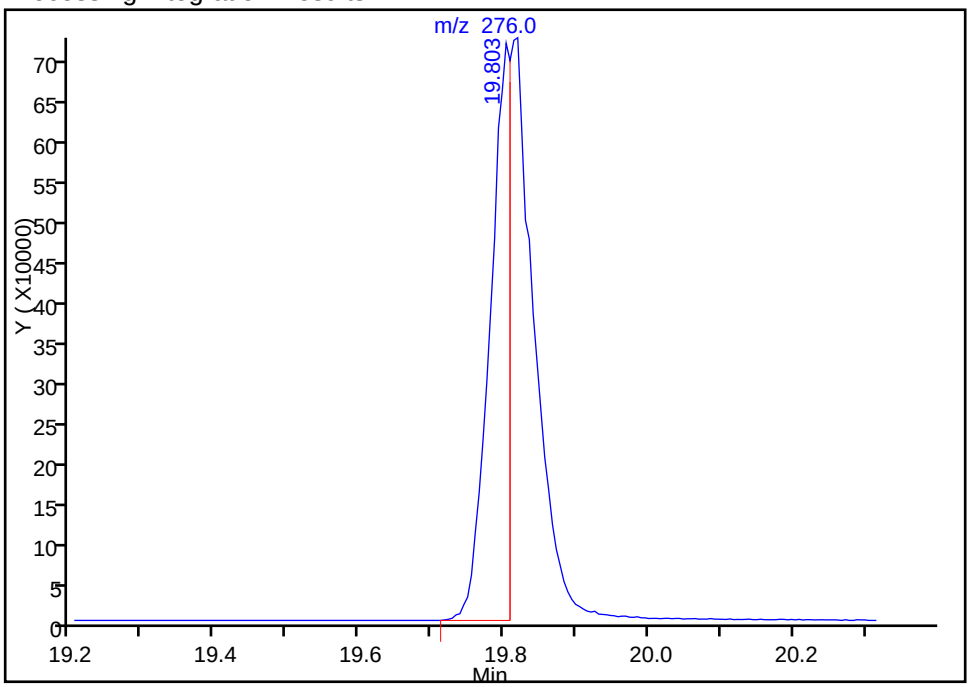
TestAmerica Pittsburgh

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-5SilMS (0.32 mm)	Detector	MS SCAN		

157 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

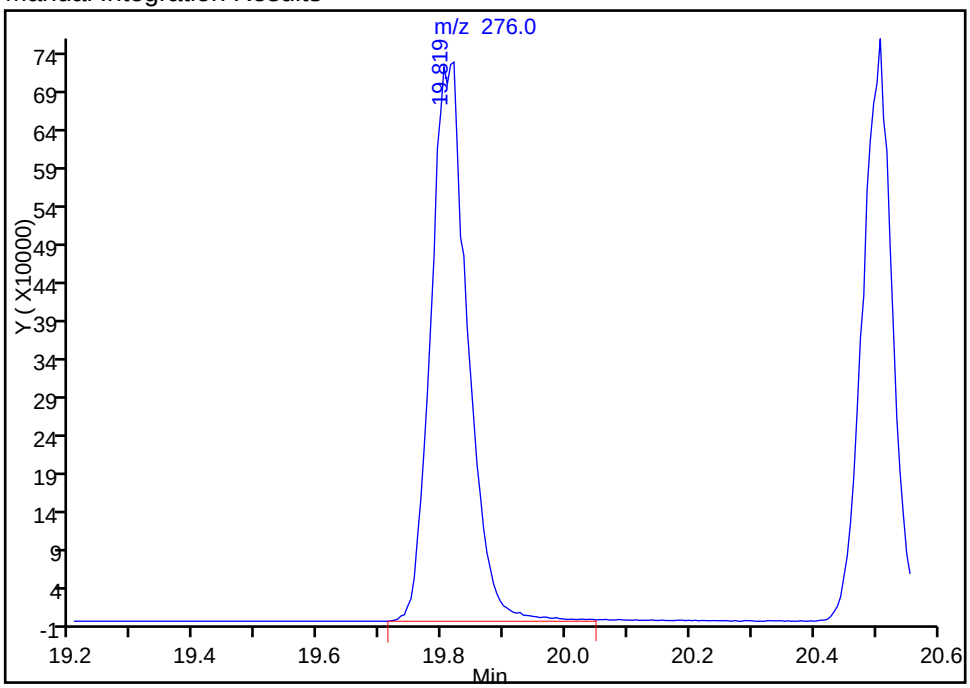
Processing Integration Results

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-5SilMS (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

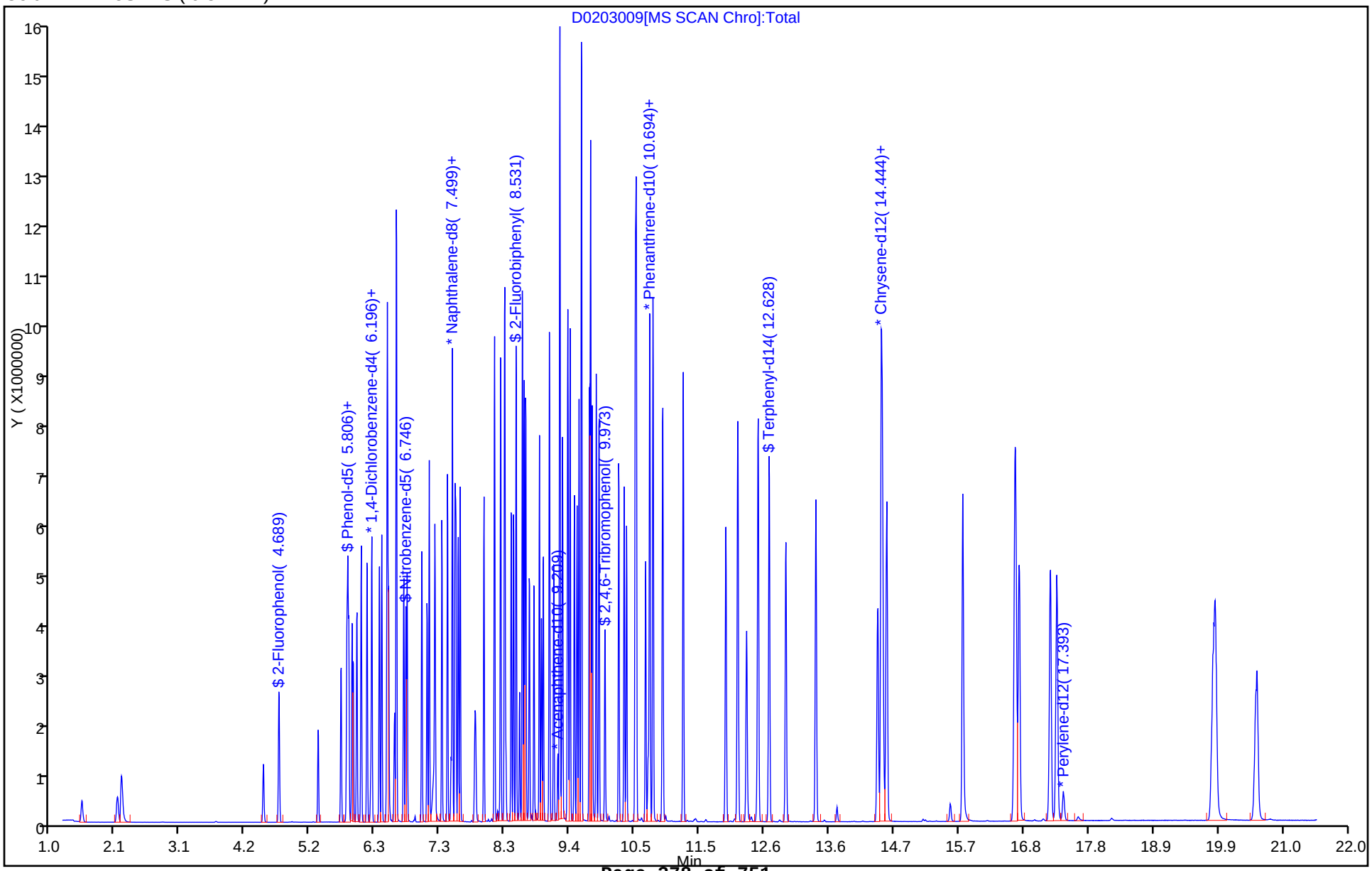
Report Date: 04-Feb-2015 06:41:32 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

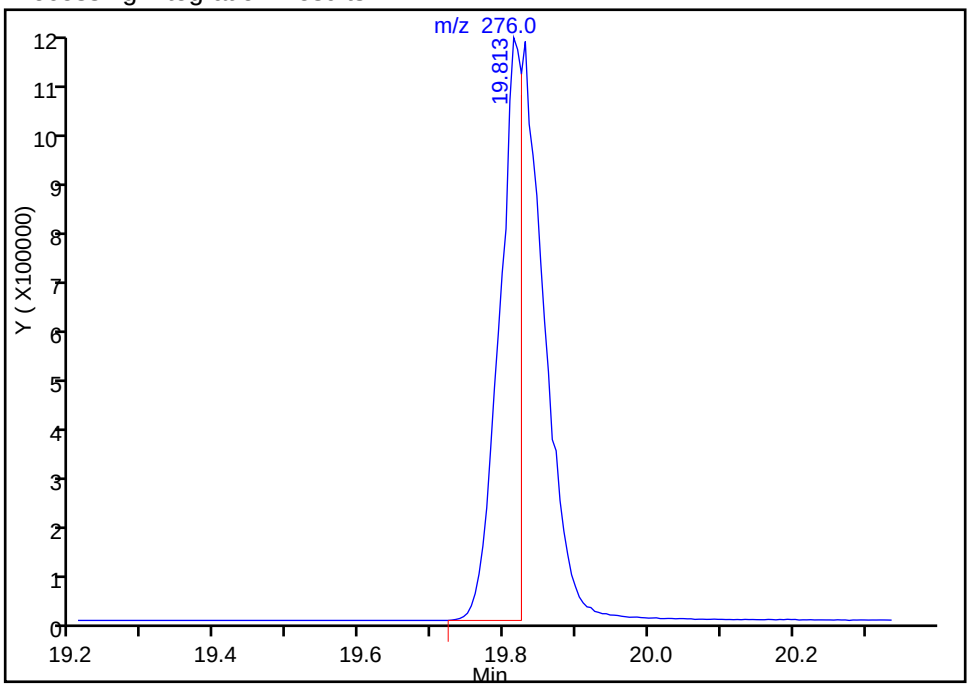
TestAmerica Pittsburgh

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-5SilMS (0.32 mm)	Detector	MS SCAN		

157 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

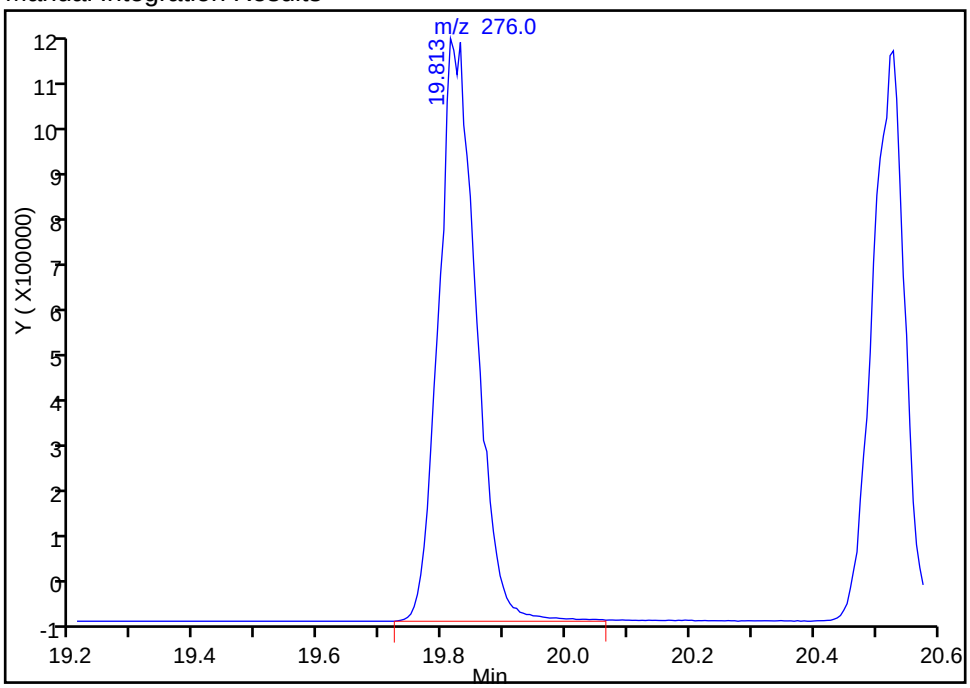
Processing Integration Results

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-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: piccolinov Date: 03-Feb-2015 09:33:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.185	6.175	0.010	95	130134	8.00	8.00	
* 2 Naphthalene-d8	136	7.483	7.473	0.010	100	562776	8.00	8.00	
* 3 Acenaphthene-d10	164	9.209	9.204	0.005	91	336979	8.00	8.00	
* 4 Phenanthrene-d10	188	10.673	10.662	0.011	56	562981	8.00	8.00	
* 5 Chrysene-d12	240	14.487	14.471	0.016	75	533575	8.00	8.00	
* 6 Perylene-d12	264	17.399	17.377	0.022	95	473099	8.00	8.00	
$ 7 2-Fluorophenol	112	4.706	4.695	0.011	91	1350034	80.0	80.0	
$ 8 Phenol-d5	99	5.801	5.785	0.016	96	1756748	80.0	77.3	
$ 9 Nitrobenzene-d5	82	6.757	6.741	0.016	89	1821929	80.0	77.1	
$ 10 2-Fluorobiphenyl	172	8.536	8.525	0.011	92	4264201	80.0	77.1	
$ 11 2,4,6-Tribromophenol	330	9.978	9.962	0.016	92	533212	80.0	86.2	
$ 12 Terphenyl-d14	244	12.633	12.617	0.016	98	4739579	80.0	81.6	
13 1,4-Dioxane	88	1.532	1.511	0.021	94	408930	80.0	78.9	
14 N-Nitrosodimethylamine	74	2.115	2.077	0.037	83	570621	80.0	81.5	
15 Pyridine	79	2.173	2.157	0.016	93	993662	80.0	81.3	
21 Methyl methanesulfonate	80	4.460	4.438	0.022	90	750302	80.0	76.1	
25 Benzaldehyde	77	5.704	5.694	0.010	85	827212	80.0	75.3	
26 Phenol	94	5.817	5.801	0.016	94	1910430	80.0	74.0	
27 Aniline	93	5.833	5.817	0.016	95	2127696	80.0	74.5	
29 Bis(2-chloroethyl)ether	93	5.908	5.892	0.016	92	1360669	80.0	74.7	
30 2-Chlorophenol	128	5.961	5.950	0.011	96	1719757	80.0	78.0	
31 n-Decane	43	6.030	6.020	0.010	92	1778933	80.0	68.8	
32 1,3-Dichlorobenzene	146	6.127	6.116	0.011	98	1969048	80.0	76.7	
33 1,4-Dichlorobenzene	146	6.201	6.191	0.010	94	2013954	80.0	76.4	
34 Benzyl alcohol	108	6.330	6.314	0.016	89	1052255	80.0	75.9	
35 1,2-Dichlorobenzene	146	6.362	6.356	0.006	91	1943533	80.0	75.9	
36 2-Methylphenol	108	6.452	6.431	0.021	69	1418095	80.0	72.4	
37 Indene	116	6.458	6.447	0.011	76	2585818	80.0	72.7	
38 2,2'-oxybis[1-chloropropan	45	6.474	6.463	0.011	91	2627938	80.0	68.5	
39 N-Nitrosopyrrolidine	100	6.575	6.549	0.026	79	735704	80.0	77.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 N-Nitrosodi-n-propylamine	70	6.602	6.586	0.016	44	911733	80.0	65.5	
40 Acetophenone	105	6.602	6.586	0.016	84	1999395	80.0	67.7	
42 4-Methylphenol	108	6.602	6.586	0.016	73	1370355	80.0	68.2	
45 Hexachloroethane	117	6.720	6.709	0.011	97	865068	80.0	75.8	
46 Nitrobenzene	77	6.773	6.762	0.011	90	1755924	80.0	74.9	
48 Isophorone	82	7.013	6.997	0.016	96	3163519	80.0	76.6	
49 2-Nitrophenol	139	7.099	7.088	0.011	97	1023420	80.0	78.9	
50 2,4-Dimethylphenol	107	7.131	7.120	0.011	53	1691801	80.0	71.4	
52 Benzoic acid	122	7.243	7.168	0.075	84	1152352	80.0	81.8	
53 Bis(2-chloroethoxy)methane	93	7.222	7.211	0.011	96	1856791	80.0	73.1	
54 2,4-Dichlorophenol	162	7.334	7.323	0.011	94	1589300	80.0	76.8	
56 1,2,4-Trichlorobenzene	180	7.425	7.414	0.011	94	1794324	80.0	75.6	
58 Naphthalene	128	7.505	7.494	0.011	96	5845912	80.0	76.8	
59 4-Chloroaniline	127	7.548	7.537	0.011	79	2275054	80.0	74.6	
60 2,6-Dichlorophenol	162	7.564	7.553	0.011	97	1537038	80.0	74.7	
62 Hexachlorobutadiene	225	7.633	7.622	0.011	53	1078670	80.0	75.9	
64 Caprolactam	113	7.889	7.841	0.048	72	544085	80.0	78.5	
67 4-Chloro-3-methylphenol	107	8.018	8.002	0.016	94	1628392	80.0	75.0	
69 2-Methylnaphthalene	142	8.189	8.178	0.011	87	4039867	80.0	75.0	
71 1-Methylnaphthalene	142	8.285	8.274	0.011	83	3757680	80.0	74.4	
72 Hexachlorocyclopentadiene	237	8.349	8.338	0.011	95	1063917	80.0	72.6	
73 1,2,4,5-Tetrachlorobenzene	216	8.354	8.344	0.010	98	1614990	80.0	73.5	
74 2,4,6-Trichlorophenol	196	8.461	8.445	0.016	91	1196597	80.0	79.9	
75 2,4,5-Trichlorophenol	196	8.498	8.482	0.016	95	1271911	80.0	80.0	
76 1,1'-Biphenyl	154	8.637	8.627	0.010	94	4916975	80.0	77.5	
77 2-Chloronaphthalene	162	8.669	8.659	0.010	77	3914388	80.0	76.2	
79 2-Nitroaniline	65	8.750	8.739	0.011	81	1173309	80.0	80.4	
82 Dimethyl phthalate	163	8.915	8.899	0.016	98	4183619	80.0	78.2	
83 1,3-Dinitrobenzene	168	8.947	8.937	0.010	60	672638	80.0	83.5	
84 2,6-Dinitrotoluene	165	8.979	8.963	0.016	72	940800	80.0	80.0	
85 Acenaphthylene	152	9.075	9.065	0.010	90	6481156	80.0	79.6	
86 3-Nitroaniline	138	9.145	9.134	0.011	93	1147441	80.0	80.2	
87 2,4-Dinitrophenol	184	9.246	9.230	0.016	66	1253184	160.0	158.3	
88 Acenaphthene	153	9.246	9.236	0.010	86	3512775	80.0	70.6	
89 4-Nitrophenol	109	9.294	9.273	0.021	39	1337557	160.0	169.0	
91 2,4-Dinitrotoluene	165	9.369	9.359	0.010	89	1210224	80.0	78.4	
93 Dibenzofuran	168	9.412	9.401	0.011	79	5571795	80.0	78.1	
95 2,3,5,6-Tetrachlorophenol	232	9.481	9.471	0.010	89	1122675	80.0	81.2	
96 2,3,4,6-Tetrachlorophenol	232	9.524	9.514	0.010	72	1088782	80.0	80.4	
97 2-Naphthylamine	143	9.556	9.540	0.016	88	3745510	80.0	73.7	
98 Diethyl phthalate	149	9.594	9.578	0.016	92	3962742	80.0	72.5	
99 Hexadecane	57	9.599	9.588	0.011	92	2544862	80.0	61.3	
100 4-Chlorophenyl phenyl ethe	204	9.722	9.711	0.011	94	2002066	80.0	76.4	
101 4-Nitroaniline	138	9.743	9.722	0.021	55	1112682	80.0	78.8	
103 Fluorene	166	9.743	9.733	0.010	73	4227850	80.0	76.2	
104 4,6-Dinitro-2-methylphenol	198	9.775	9.754	0.021	66	1636050	160.0	178.8	
105 N-Nitrosodiphenylamine	169	9.834	9.823	0.011	60	3320829	80.0	83.0	
90 1,2-Diphenylhydrazine	77	9.877	9.866	0.011	99	4555078	80.0	79.5	
110 4-Bromophenyl phenyl ether	248	10.197	10.192	0.005	65	1183915	80.0	80.5	
112 Hexachlorobenzene	284	10.288	10.277	0.011	93	1175832	80.0	80.0	
113 Atrazine	200	10.326	10.310	0.016	73	876625	80.0	75.5	
116 Pentachlorophenol	266	10.470	10.454	0.016	90	1657954	160.0	160.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.480	10.470	0.010	92	3002594	80.0	64.8	
121 Phenanthrene	178	10.699	10.689	0.010	96	6996513	80.0	82.7	
122 Anthracene	178	10.753	10.742	0.011	96	7270383	80.0	84.1	
124 Carbazole	167	10.908	10.897	0.011	82	6310858	80.0	83.3	
126 Di-n-butyl phthalate	149	11.239	11.234	0.005	99	8182573	80.0	86.4	
57 Azobenzene	77		11.923				ND	ND	
131 Fluoranthene	202	12.126	12.110	0.016	97	7033592	80.0	82.4	
132 Benzidine	184	12.270	12.254	0.016	99	2219269	80.0	56.6	
133 Pyrene	202	12.452	12.441	0.011	98	7357760	80.0	83.6	
138 Butyl benzyl phthalate	149	13.392	13.376	0.016	96	3249211	80.0	83.1	
144 3,3'-Dichlorobenzidine	252	14.391	14.375	0.016	72	2244278	80.0	87.2	
145 Bis(2-ethylhexyl) phthalat	149	14.444	14.434	0.010	95	4655604	80.0	86.0	
146 Benzo[a]anthracene	228	14.466	14.450	0.016	93	6389372	80.0	82.8	
147 Chrysene	228	14.535	14.519	0.016	93	5985101	80.0	82.3	
150 Di-n-octyl phthalate	149	15.769	15.753	0.016	99	8321767	80.0	90.5	
151 7,12-Dimethylbenz(a)anthra	256	16.613	16.581	0.032	70	2745346	80.0	84.1	
152 Benzo[b]fluoranthene	252	16.629	16.597	0.032	94	6275756	80.0	81.8	
153 Benzo[k]fluoranthene	252	16.683	16.656	0.027	95	6303252	80.0	83.9	
219 Benzo[e]pyrene	252	17.190	17.158	0.032	0	5734616	80.0	82.9	
154 Benzo[a]pyrene	252	17.297	17.265	0.032	75	5893073	80.0	85.3	
157 Indeno[1,2,3-cd]pyrene	276	19.829	19.787	0.042	97	6772582	80.0	93.2	
158 Dibenz(a,h)anthracene	278	19.867	19.824	0.043	69	5554542	80.0	91.9	
159 Benzo[g,h,i]perylene	276	20.535	20.481	0.054	91	5811207	80.0	93.7	
S 197 Methyl Phenols,Total	108				0		160.0	140.6	
S 199 Total Cresols	108				0		160.0	140.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD80i_00005 Amount Added: 1.00 Units: mL

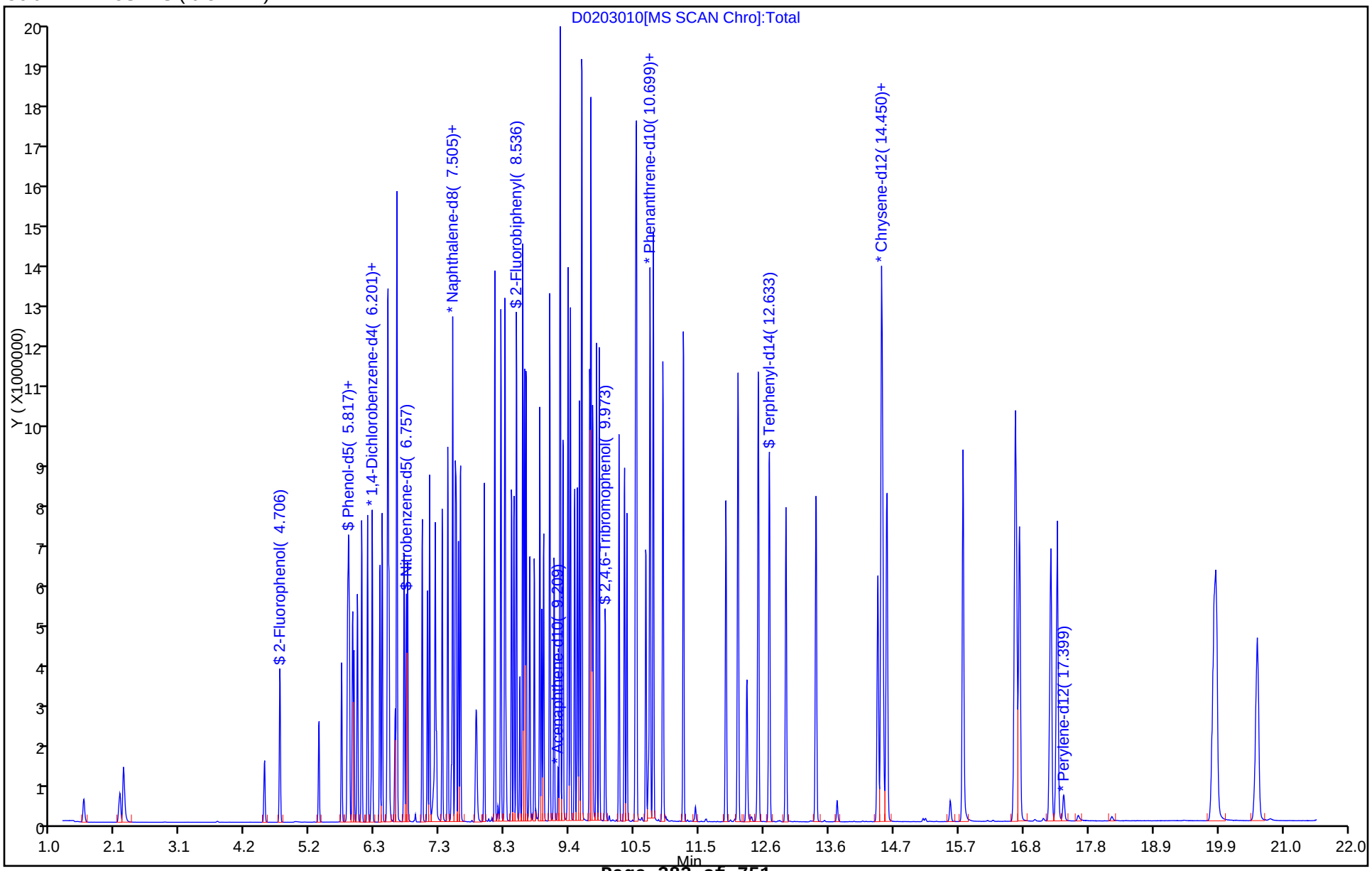
Report Date: 04-Feb-2015 06:41:39 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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-5SilMS (0.32 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab Sample ID: CCVIS 180-139416/3 Calibration Date: 04/23/2015 09:24

Instrument ID: CH731 Calib Start Date: 12/16/2014 04:19

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 12/16/2014 07:37

Lab File ID: V0423003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5080	0.6127	0.0100	6.03	5.00	20.6*	20.0
N-Nitrosodimethylamine	Ave	0.7118	0.7630	0.0100	5.36	5.00	7.2	20.0
Pyridine	Ave	1.256	1.299	0.0100	5.17	5.00	3.5	20.0
Methyl methanesulfonate	Ave	0.9475	1.020	0.0100	5.38	5.00	7.6	20.0
Benzaldehyde	Ave	0.8071	0.9677	0.0100	5.99	5.00	19.9	20.0
Aniline	Ave	1.803	1.813	0.0100	5.03	5.00	0.6	20.0
Phenol	Ave	1.670	1.599	0.8000	4.79	5.00	-4.2	20.0
Bis(2-chloroethyl)ether	Ave	1.122	1.137	0.7000	5.07	5.00	1.3	20.0
2-Chlorophenol	Ave	1.188	1.245	0.8000	5.24	5.00	4.8	20.0
n-Decane	Ave	1.031	1.017		4.93	5.00	-1.4	20.0
1,3-Dichlorobenzene	Ave	1.538	1.525	0.0100	4.96	5.00	-0.8	20.0
1,4-Dichlorobenzene	Ave	1.593	1.596	0.0100	5.01	5.00	0.2	20.0
Benzyl alcohol	Ave	0.7635	0.6656	0.0100	4.36	5.00	-12.8	20.0
1,2-Dichlorobenzene	Ave	1.509	1.480	0.0100	4.90	5.00	-2.0	20.0
2-Methylphenol	Ave	1.169	1.170	0.7000	5.00	5.00	0.0	20.0
Indene	Ave	2.074	2.153	0.0100	5.19	5.00	3.8	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.115	1.059	0.0100	4.75	5.00	-5.0	20.0
N-Nitrosopyrrolidine	Ave	0.4870	0.5122	0.0100	5.26	5.00	5.2	20.0
Acetophenone	Ave	1.946	1.907	0.0100	4.90	5.00	-2.0	20.0
N-Nitrosodi-n-propylamine	Ave	1.104	1.102	0.5000	4.99	5.00	-0.2	20.0
Methylphenol, 3 & 4	Ave	1.280	1.198	0.6000	4.68	5.00	-6.5	20.0
Hexachloroethane	Ave	0.6956	0.6811	0.3000	4.90	5.00	-2.1	20.0
Nitrobenzene	Ave	0.5001	0.5448	0.2000	5.45	5.00	8.9	20.0
Isophorone	Ave	0.7343	0.7912	0.4000	5.39	5.00	7.7	20.0
2-Nitrophenol	Ave	0.1884	0.2028	0.1000	5.38	5.00	7.7	20.0
2,4-Dimethylphenol	Ave	0.4270	0.4365	0.2000	5.11	5.00	2.2	20.0
Benzoic acid	Lin2		0.2078	0.0100	6.50	5.00	30.0*	20.0
Bis(2-chloroethoxy)methane	Ave	0.3925	0.3971	0.3000	5.06	5.00	1.2	20.0
2,4-Dichlorophenol	Ave	0.3356	0.3715	0.2000	5.54	5.00	10.7	20.0
1,2,4-Trichlorobenzene	Ave	0.4498	0.4778	0.0100	5.31	5.00	6.2	20.0
Naphthalene	Ave	1.090	1.078	0.7000	4.94	5.00	-1.1	20.0
4-Chloroaniline	Ave	0.4404	0.4419	0.0100	5.02	5.00	0.3	20.0
2,6-Dichlorophenol	Ave	0.3449	0.3567	0.0100	5.17	5.00	3.4	20.0
Hexachlorobutadiene	Ave	0.3139	0.3346	0.0100	5.33	5.00	6.6	20.0
Caprolactam	Lin2		0.0991	0.0100	5.08	5.00	1.6	20.0
4-Chloro-3-methylphenol	Ave	0.3687	0.3750	0.2000	5.08	5.00	1.7	20.0
2-Methylnaphthalene	Ave	0.7717	0.7575	0.4000	4.91	5.00	-1.8	20.0
1-Methylnaphthalene	Ave	0.7202	0.7120	0.0100	4.94	5.00	-1.1	20.0
Hexachlorocyclopentadiene	Ave	0.4764	0.5114	0.0500	5.37	5.00	7.3	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6993	0.7725	0.0100	5.52	5.00	10.5	20.0
2,4,6-Trichlorophenol	Ave	0.3953	0.4516	0.2000	5.71	5.00	14.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab Sample ID: CCVIS 180-139416/3 Calibration Date: 04/23/2015 09:24

Instrument ID: CH731 Calib Start Date: 12/16/2014 04:19

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 12/16/2014 07:37

Lab File ID: V0423003.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	0.4404	0.4630	0.2000	5.26	5.00	5.1	20.0
1,1'-Biphenyl	Ave	1.422	1.420	0.0100	4.99	5.00	-0.2	20.0
2-Chloronaphthalene	Ave	1.214	1.353	0.8000	5.58	5.00	11.5	20.0
2-Nitroaniline	Ave	0.3769	0.4162	0.0100	5.52	5.00	10.4	20.0
Dimethyl phthalate	Ave	1.345	1.310	0.0100	4.87	5.00	-2.6	20.0
1,3-Dinitrobenzene	Ave	0.2083	0.2044	0.0100	4.91	5.00	-1.9	20.0
2,6-Dinitrotoluene	Ave	0.2847	0.2998	0.2000	5.26	5.00	5.3	20.0
Acenaphthylene	Ave	1.710	1.726	0.9000	5.05	5.00	1.0	20.0
3-Nitroaniline	Ave	0.2875	0.2787	0.0100	4.85	5.00	-3.0	20.0
2,4-Dinitrophenol	Lin1		0.1973	0.0100	9.28	10.0	-7.2	20.0
Acenaphthene	Ave	1.153	1.129	0.9000	4.90	5.00	-2.1	20.0
4-Nitrophenol	Ave	0.2742	0.2844	0.0100	10.4	10.0	3.7	20.0
2,4-Dinitrotoluene	Ave	0.3991	0.4311	0.2000	5.40	5.00	8.0	20.0
Dibenzofuran	Ave	1.776	1.741	0.8000	4.90	5.00	-2.0	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3831	0.3815	0.0100	4.98	5.00	-0.4	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3728	0.3908	0.0100	5.24	5.00	4.8	20.0
2-Naphthylamine	Ave	1.052	0.9941	0.0100	4.73	5.00	-5.5	20.0
Diethyl phthalate	Ave	1.403	1.376	0.0100	4.91	5.00	-1.9	20.0
Hexadecane	Ave	0.4104	0.3898		4.75	5.00	-5.0	20.0
4-Chlorophenyl phenyl ether	Ave	0.8089	0.8224	0.4000	5.08	5.00	1.7	20.0
4-Nitroaniline	Ave	0.3065	0.3102	0.0100	5.06	5.00	1.2	20.0
Fluorene	Ave	1.320	1.291	0.9000	4.89	5.00	-2.2	20.0
4,6-Dinitro-2-methylphenol	Lin2		0.1540	0.0100	10.6	10.0	6.0	20.0
N-Nitrosodiphenylamine	Ave	0.5184	0.5597	0.0100	5.40	5.00	8.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.7859	0.8565	0.0100	5.45	5.00	9.0	20.0
4-Bromophenyl phenyl ether	Ave	0.2219	0.2511	0.1000	5.66	5.00	13.2	20.0
Hexachlorobenzene	Ave	0.2394	0.2591	0.1000	5.41	5.00	8.2	20.0
Atrazine	Ave	0.1771	0.2224	0.0100	6.28	5.00	25.6*	20.0
n-Octadecane	Ave	1.552	1.428		4.60	5.00	-8.0	20.0
Pentachlorophenol	Ave	0.1542	0.1491	0.0500	9.67	10.0	-3.3	20.0
Phenanthrene	Ave	1.104	1.112	0.7000	5.04	5.00	0.8	20.0
Anthracene	Ave	1.127	1.181	0.7000	5.24	5.00	4.8	20.0
Carbazole	Ave	0.9879	1.001	0.0100	5.07	5.00	1.3	20.0
Di-n-butyl phthalate	Ave	1.086	1.199	0.0100	5.52	5.00	10.4	20.0
Fluoranthene	Ave	1.282	1.405	0.6000	5.48	5.00	9.6	20.0
Benzidine	Lin1		0.3837	0.0100	5.22	5.00	4.5	20.0
Pyrene	Ave	1.195	1.158	0.6000	4.85	5.00	-3.1	20.0
Butyl benzyl phthalate	Ave	0.4243	0.4486	0.0100	5.29	5.00	5.7	20.0
3,3'-Dichlorobenzidine	Ave	0.3466	0.3891	0.0100	5.37	5.00	12.3	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.5645	0.6131	0.0100	5.43	5.00	8.6	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab Sample ID: CCVIS 180-139416/3 Calibration Date: 04/23/2015 09:24

Instrument ID: CH731 Calib Start Date: 12/16/2014 04:19

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 12/16/2014 07:37

Lab File ID: V0423003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.140	1.178	0.8000	5.17	5.00	3.4	20.0
Chrysene	Ave	1.111	1.126	0.7000	5.07	5.00	1.3	20.0
Di-n-octyl phthalate	Lin2		1.082	0.0100	5.36	5.00	7.1	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5386	0.5109	0.0100	4.74	5.00	-5.1	20.0
Benzo[b]fluoranthene	Ave	1.177	1.203	0.7000	5.11	5.00	2.2	20.0
Benzo[k]fluoranthene	Ave	1.280	1.195	0.7000	4.67	5.00	-6.6	20.0
Benzo[e]pyrene	Ave	1.133	1.144	0.0100	5.05	5.00	0.9	20.0
Benzo[a]pyrene	Ave	1.100	1.158	0.7000	5.26	5.00	5.3	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.231	1.378	0.5000	5.60	5.00	12.0	20.0
Dibenz(a,h)anthracene	Ave	1.050	1.209	0.4000	5.76	5.00	15.1	20.0
Benzo[g,h,i]perylene	Ave	1.077	1.174	0.5000	5.45	5.00	9.0	20.0
2-Fluorophenol (Surr)	Ave	1.154	1.207		5.23	5.00	4.5	20.0
Phenol-d5 (Surr)	Ave	1.421	1.494		5.26	5.00	5.1	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4784	0.5307		5.55	5.00	10.9	20.0
2-Fluorobiphenyl	Ave	1.466	1.465		5.00	5.00	-0.0	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1001	0.1118	0.0100	5.59	5.00	11.7	20.0
Terphenyl-d14 (Surr)	Ave	0.8122	0.8315		5.12	5.00	2.4	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423003.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 23-Apr-2015 09:24:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006603-003
Misc. Info.: CCVIS
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20150423-6603.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 24-Apr-2015 05:56:24 Calib Date: 05-Feb-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20150205-5565.b\V0205010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: piccolinov Date: 23-Apr-2015 12:11:47

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	6.304	6.304	0.000	91	97902	8.00	8.00	
* 2 Naphthalene-d8	136	7.512	7.512	0.000	98	326986	8.00	8.00	
* 3 Acenaphthene-d10	164	9.141	9.141	0.000	91	228967	8.00	8.00	
* 4 Phenanthrene-d10	188	10.519	10.519	0.000	97	432618	8.00	8.00	
* 5 Chrysene-d12	240	14.072	14.072	0.000	96	520788	8.00	8.00	
* 6 Perylene-d12	264	17.031	17.031	0.000	96	484233	8.00	8.00	
$ 7 2-Fluorophenol	112	4.979	4.979	0.000	90	147674	10.0	10.5	
$ 8 Phenol-d5	99	5.968	5.968	0.000	87	182778	10.0	10.5	
$ 9 Nitrobenzene-d5	82	6.828	6.828	0.000	91	216900	10.0	11.1	
$ 10 2-Fluorobiphenyl	172	8.500	8.500	0.000	99	419238	10.0	10.0	
$ 11 2,4,6-Tribromophenol	330	9.867	9.867	0.000	88	60481	10.0	11.2	
$ 12 Terphenyl-d14	244	12.298	12.298	0.000	98	541283	10.0	10.2	
13 1,4-Dioxane	88	1.811	1.811	0.000	88	74977	10.0	12.1	
14 N-Nitrosodimethylamine	74	2.479	2.479	0.000	82	93374	10.0	10.7	
15 Pyridine	79	2.554	2.554	0.000	93	159015	10.0	10.3	M
22 Methyl methanesulfonate	80	4.723	4.723	0.000	91	124776	10.0	10.8	
26 Benzaldehyde	77	5.861	5.861	0.000	88	118426	10.0	12.0	
28 Aniline	93	5.978	5.978	0.000	64	221902	10.0	10.1	
27 Phenol	94	5.978	5.978	0.000	69	195722	10.0	9.58	
29 Bis(2-chloroethyl)ether	93	6.037	6.037	0.000	94	139201	10.0	10.1	
31 2-Chlorophenol	128	6.107	6.107	0.000	91	152390	10.0	10.5	
32 n-Decane	43	6.155	6.155	0.000	76	124481	10.0	9.86	
33 1,3-Dichlorobenzene	146	6.245	6.245	0.000	89	186605	10.0	9.92	
34 1,4-Dichlorobenzene	146	6.320	6.320	0.000	88	195266	10.0	10.0	
36 Benzyl alcohol	108	6.438	6.438	0.000	84	81455	10.0	8.72	M
37 1,2-Dichlorobenzene	146	6.470	6.470	0.000	89	181064	10.0	9.80	
38 2-Methylphenol	108	6.550	6.550	0.000	91	143144	10.0	10.0	
39 Indene	116	6.555	6.555	0.000	87	263501	10.0	10.4	
40 2,2'-oxybis[1-chloropropan	45	6.566	6.566	0.000	69	129643	10.0	9.50	
41 N-Nitrosopyrrolidine	100	6.651	6.651	0.000	72	62683	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
43 Acetophenone	105	6.684	6.684	0.000	88	233401	10.0	9.80	
44 N-Nitrosodi-n-propylamine	70	6.684	6.684	0.000	81	134877	10.0	9.98	
45 4-Methylphenol	108	6.689	6.689	0.000	92	146550	10.0	9.35	
47 Hexachloroethane	117	6.796	6.796	0.000	84	83346	10.0	9.79	
48 Nitrobenzene	77	6.849	6.849	0.000	87	222666	10.0	10.9	
50 Isophorone	82	7.068	7.068	0.000	97	323375	10.0	10.8	
51 2-Nitrophenol	139	7.148	7.148	0.000	76	82900	10.0	10.8	
52 2,4-Dimethylphenol	107	7.180	7.180	0.000	95	178414	10.0	10.2	
56 Benzoic acid	122	7.244	7.244	0.000	86	84953	10.0	13.0	
55 Bis(2-chloroethoxy)methane	93	7.260	7.260	0.000	95	162297	10.0	10.1	
57 2,4-Dichlorophenol	162	7.378	7.378	0.000	94	151852	10.0	11.1	
61 Azobenzene	77		7.452				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.458	7.458	0.000	91	195291	10.0	10.6	
60 Naphthalene	128	7.533	7.533	0.000	98	440479	10.0	9.89	
62 4-Chloroaniline	127	7.570	7.570	0.000	91	180635	10.0	10.0	
63 2,6-Dichlorophenol	162	7.586	7.586	0.000	90	145813	10.0	10.3	
64 Hexachlorobutadiene	225	7.650	7.650	0.000	95	136756	10.0	10.7	
67 Caprolactam	113	7.859	7.859	0.000	79	40507	10.0	10.2	
70 4-Chloro-3-methylphenol	107	8.008	8.008	0.000	89	153273	10.0	10.2	
72 2-Methylnaphthalene	142	8.174	8.174	0.000	87	309594	10.0	9.82	
75 1-Methylnaphthalene	142	8.265	8.265	0.000	90	291008	10.0	9.89	
76 Hexachlorocyclopentadiene	237	8.318	8.318	0.000	96	146359	10.0	10.7	
77 1,2,4,5-Tetrachlorobenzene	216	8.329	8.329	0.000	98	221081	10.0	11.0	
78 2,4,6-Trichlorophenol	196	8.425	8.425	0.000	93	129243	10.0	11.4	
79 2,4,5-Trichlorophenol	196	8.462	8.462	0.000	92	132522	10.0	10.5	
80 1,1'-Biphenyl	154	8.596	8.596	0.000	96	406306	10.0	9.98	
81 2-Chloronaphthalene	162	8.623	8.623	0.000	97	387365	10.0	11.2	
82 2-Nitroaniline	65	8.703	8.703	0.000	73	119132	10.0	11.0	
86 Dimethyl phthalate	163	8.852	8.852	0.000	95	374974	10.0	9.74	
87 1,3-Dinitrobenzene	168	8.890	8.890	0.000	80	58493	10.0	9.81	
88 2,6-Dinitrotoluene	165	8.917	8.917	0.000	86	85810	10.0	10.5	
89 Acenaphthylene	152	9.013	9.013	0.000	98	494095	10.0	10.1	
90 3-Nitroaniline	138	9.077	9.077	0.000	85	79779	10.0	9.70	
91 Acenaphthene	153	9.173	9.173	0.000	85	323108	10.0	9.79	
92 2,4-Dinitrophenol	184	9.173	9.173	0.000	72	112948	20.0	18.6	
93 4-Nitrophenol	109	9.221	9.221	0.000	85	162796	20.0	20.7	
94 2,4-Dinitrotoluene	165	9.290	9.290	0.000	86	123383	10.0	10.8	
95 Dibenzofuran	168	9.328	9.328	0.000	95	498170	10.0	9.80	
97 2,3,5,6-Tetrachlorophenol	232	9.397	9.397	0.000	91	109188	10.0	9.96	
99 2,3,4,6-Tetrachlorophenol	232	9.440	9.440	0.000	73	111855	10.0	10.5	
100 2-Naphthylamine	143	9.467	9.467	0.000	93	284508	10.0	9.45	
102 Hexadecane	57	9.493	9.493	0.000	86	159315	10.0	9.50	
101 Diethyl phthalate	149	9.493	9.493	0.000	97	393848	10.0	9.81	
104 4-Chlorophenyl phenyl ethe	204	9.627	9.627	0.000	90	235389	10.0	10.2	
105 4-Nitroaniline	138	9.643	9.643	0.000	72	88789	10.0	10.1	
106 Fluorene	166	9.643	9.643	0.000	93	369404	10.0	9.78	
108 4,6-Dinitro-2-methylphenol	198	9.670	9.670	0.000	84	166540	20.0	21.2	
109 N-Nitrosodiphenylamine	169	9.729	9.729	0.000	64	302642	10.0	10.8	
111 1,2-Diphenylhydrazine	77	9.771	9.771	0.000	99	463143	10.0	10.9	
116 4-Bromophenyl phenyl ether	248	10.076	10.076	0.000	69	135799	10.0	11.3	
118 Hexachlorobenzene	284	10.161	10.161	0.000	93	140099	10.0	10.8	
119 Atrazine	200	10.193	10.193	0.000	92	120267	10.0	12.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
121 n-Octadecane	57	10.332	10.332	0.000	85	174714	10.0	9.20	
122 Pentachlorophenol	266	10.338	10.338	0.000	89	161302	20.0	19.3	
126 Phenanthrene	178	10.541	10.541	0.000	97	601556	10.0	10.1	
128 Anthracene	178	10.594	10.594	0.000	97	638792	10.0	10.5	
130 Carbazole	167	10.733	10.733	0.000	97	541209	10.0	10.1	
132 Di-n-butyl phthalate	149	11.021	11.021	0.000	99	648276	10.0	11.0	
137 Fluoranthene	202	11.844	11.844	0.000	96	759657	10.0	11.0	
138 Benzidine	184	11.967	11.967	0.000	98	249782	10.0	10.4	
139 Pyrene	202	12.143	12.143	0.000	97	753780	10.0	9.69	
144 Butyl benzyl phthalate	149	12.993	12.993	0.000	95	292028	10.0	10.6	
149 3,3'-Dichlorobenzidine	252	13.970	13.970	0.000	73	253273	10.0	10.7	
151 Bis(2-ethylhexyl) phthalat	149	14.002	14.002	0.000	94	399086	10.0	10.9	
152 Benzo[a]anthracene	228	14.050	14.050	0.000	96	767109	10.0	10.3	
153 Chrysene	228	14.120	14.120	0.000	95	732896	10.0	10.1	
156 Di-n-octyl phthalate	149	15.322	15.322	0.000	99	654880	10.0	10.7	
157 7,12-Dimethylbenz(a)anthra	256	16.203	16.203	0.000	91	309246	10.0	9.49	
158 Benzo[b]fluoranthene	252	16.219	16.219	0.000	95	727869	10.0	10.2	
159 Benzo[k]fluoranthene	252	16.273	16.273	0.000	95	723283	10.0	9.34	
176 Benzo[e]pyrene	252	16.802	16.802	0.000	0	692307	10.0	10.1	
160 Benzo[a]pyrene	252	16.908	16.908	0.000	73	700807	10.0	10.5	
163 Indeno[1,2,3-cd]pyrene	276	19.275	19.275	0.000	95	834237	10.0	11.2	
164 Dibenz(a,h)anthracene	278	19.307	19.307	0.000	86	731538	10.0	11.5	
165 Benzo[g,h,i]perylene	276	19.884	19.884	0.000	95	710644	10.0	10.9	
S 206 Total Cresols	108				0		20.0	19.4	
S 208 Methyl Phenols,Total	108				0		20.0	19.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD10i_00098 Amount Added: 1.00 Units: mL

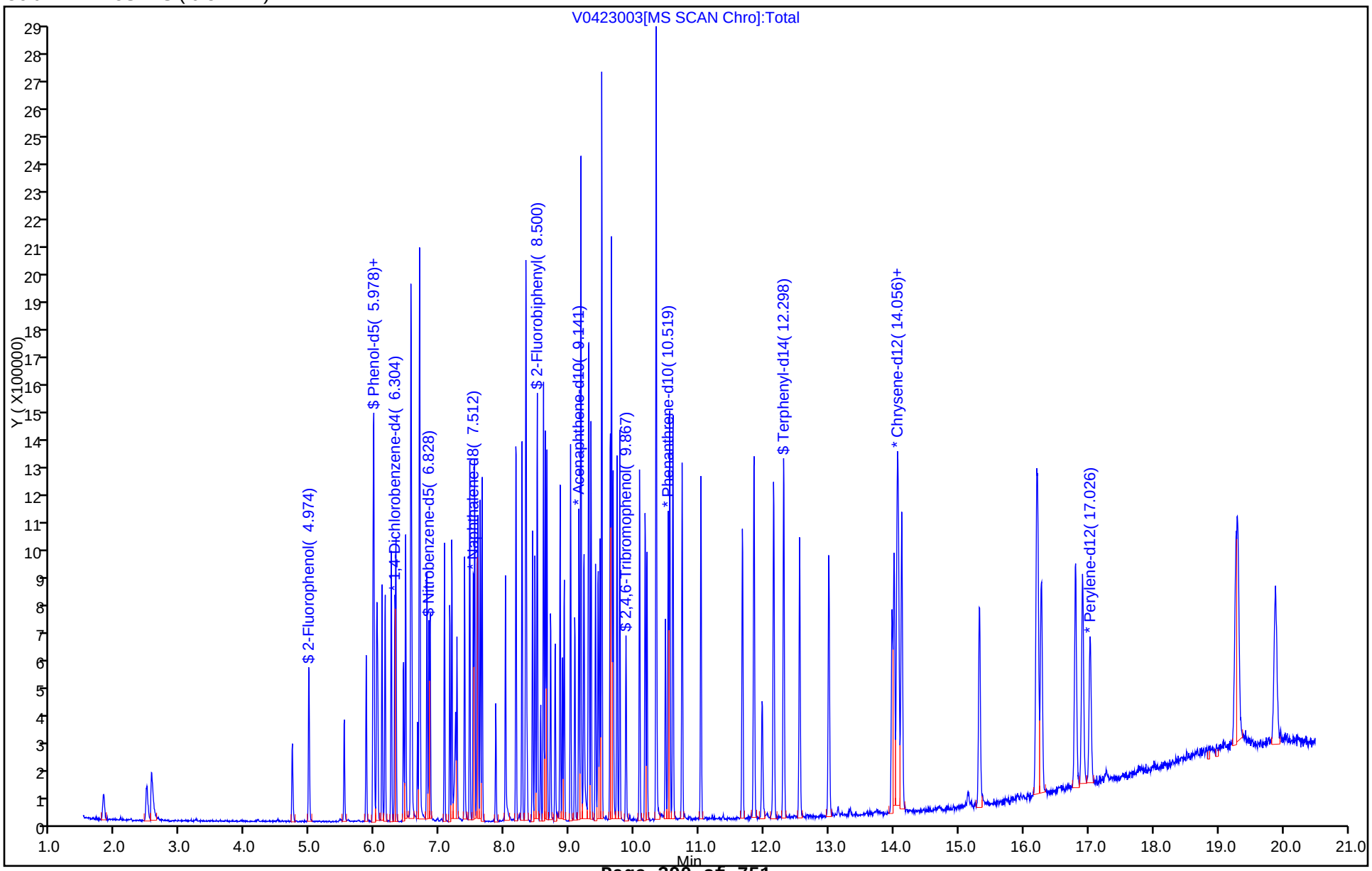
Report Date: 24-Apr-2015 05:56:24 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423003.D

Injection Date:	23-Apr-2015 09:24:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

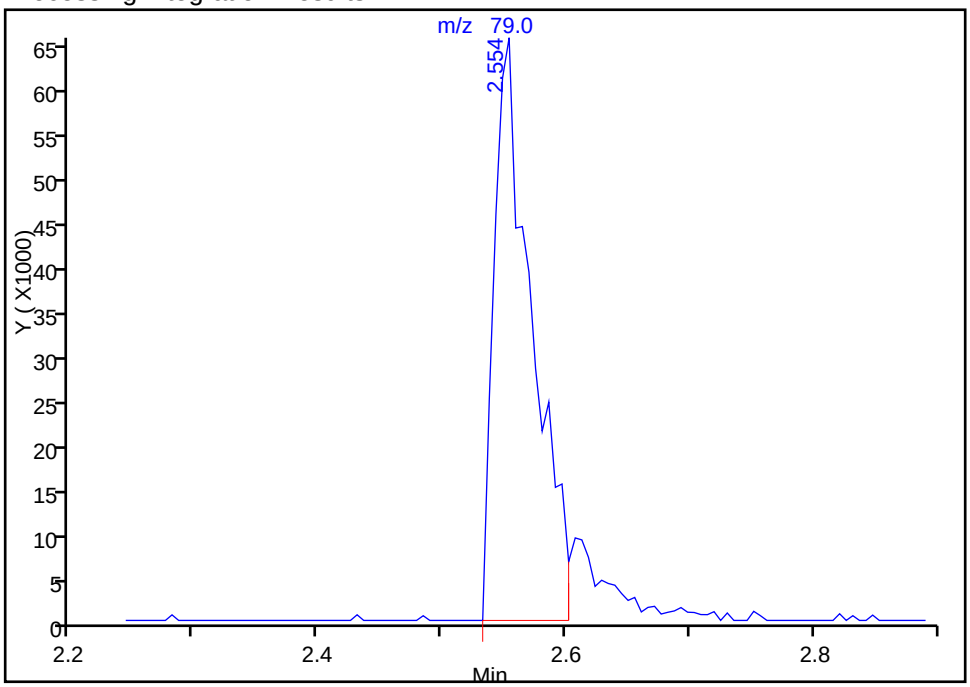
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20150423-6603.b\V0423003.D				
Injection Date:	23-Apr-2015 09:24:30	Instrument ID:	CH731		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

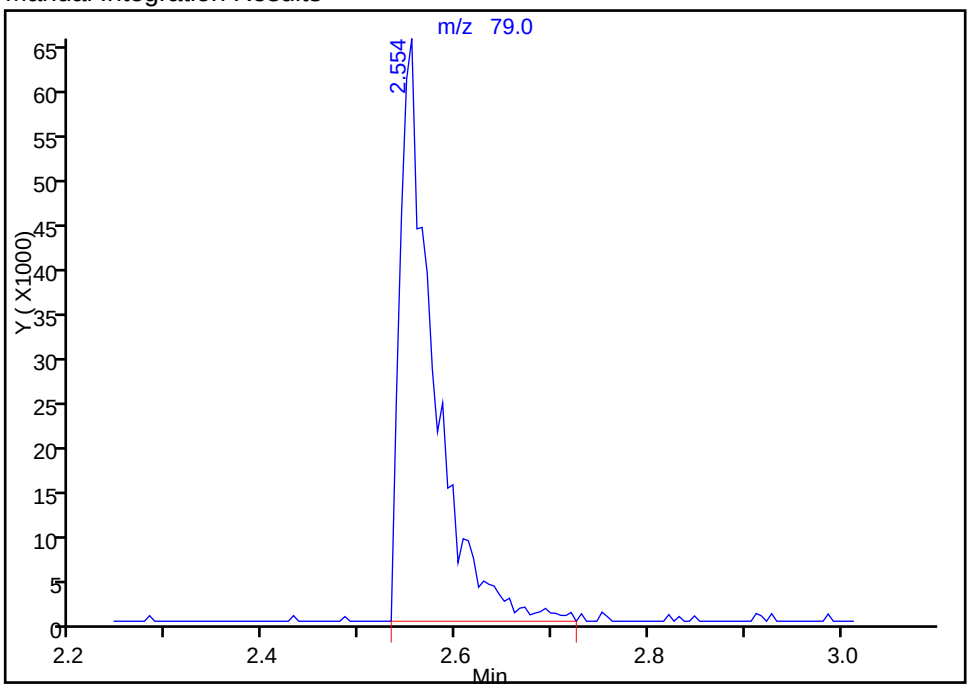
Processing Integration Results

RT: 2.55
Area: 139208
Amount: 9.059489
Amount Units: ng



Manual Integration Results

RT: 2.55
Area: 159015
Amount: 10.348504
Amount Units: ng



Reviewer: piccolinov, 24-Apr-2015 05:06:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

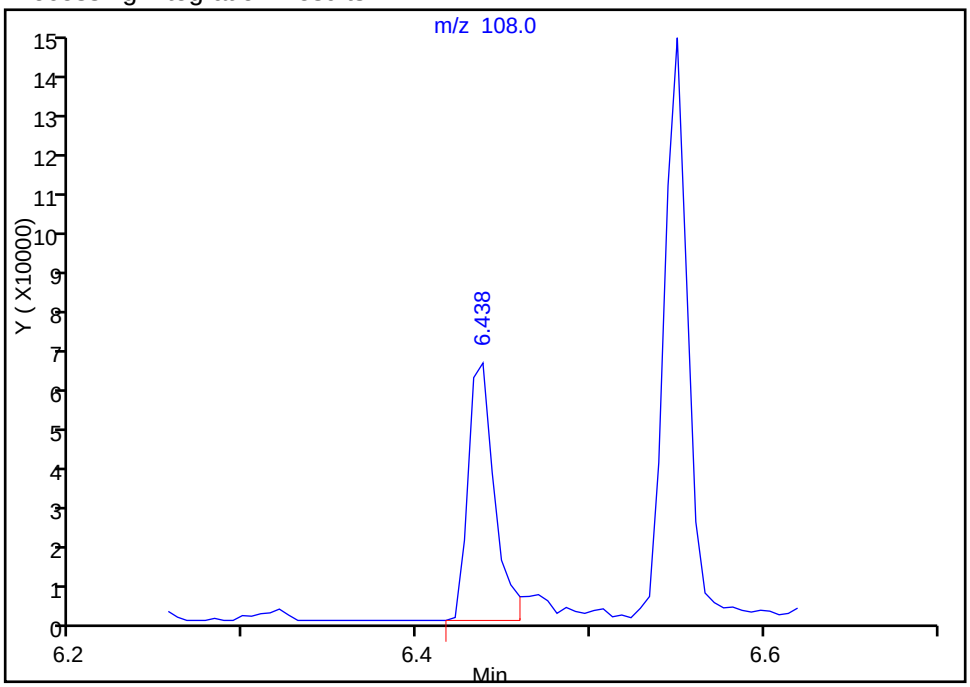
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423003.D
Injection Date: 23-Apr-2015 09:24:30 Instrument ID: CH731
Lims ID: CCVIS
Client ID:
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

36 Benzyl alcohol, CAS: 100-51-6

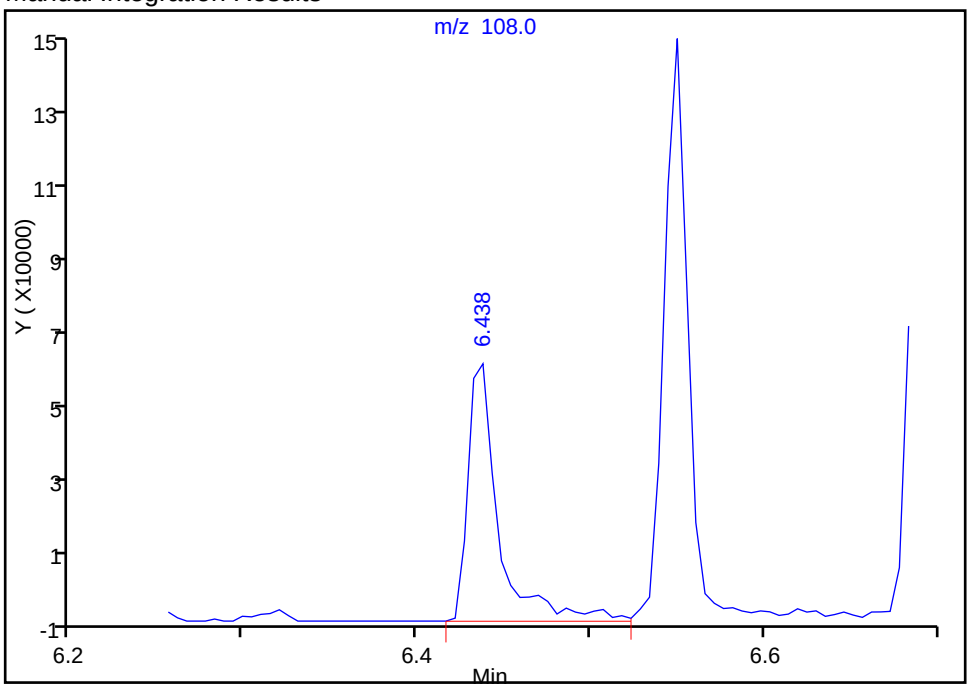
Processing Integration Results

RT: 6.44
Area: 69812
Amount: 7.471634
Amount Units: ng



Manual Integration Results

RT: 6.44
Area: 81455
Amount: 8.717727
Amount Units: ng



Reviewer: piccolinov, 23-Apr-2015 12:11:47
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab Sample ID: CCVIS 180-139524/3 Calibration Date: 04/24/2015 08:22

Instrument ID: CH731 Calib Start Date: 12/16/2014 04:19

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 12/16/2014 07:37

Lab File ID: V0424003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5080	0.5547	0.0100	5.46	5.00	9.2	20.0
N-Nitrosodimethylamine	Ave	0.7118	0.7279	0.0100	5.11	5.00	2.3	20.0
Pyridine	Ave	1.256	1.236	0.0100	4.92	5.00	-1.6	20.0
Methyl methanesulfonate	Ave	0.9475	1.033	0.0100	5.45	5.00	9.0	20.0
Benzaldehyde	Ave	0.8071	0.9671	0.0100	5.99	5.00	19.8	20.0
Aniline	Ave	1.803	1.832	0.0100	5.08	5.00	1.6	20.0
Phenol	Ave	1.670	1.604	0.8000	4.80	5.00	-3.9	20.0
Bis(2-chloroethyl)ether	Ave	1.122	1.052	0.7000	4.69	5.00	-6.2	20.0
2-Chlorophenol	Ave	1.188	1.235	0.8000	5.20	5.00	3.9	20.0
n-Decane	Ave	1.031	0.9639		4.67	5.00	-6.5	20.0
1,3-Dichlorobenzene	Ave	1.538	1.514	0.0100	4.92	5.00	-1.6	20.0
1,4-Dichlorobenzene	Ave	1.593	1.581	0.0100	4.97	5.00	-0.7	20.0
Benzyl alcohol	Ave	0.7635	0.6981	0.0100	4.57	5.00	-8.6	20.0
1,2-Dichlorobenzene	Ave	1.509	1.517	0.0100	5.03	5.00	0.5	20.0
2-Methylphenol	Ave	1.169	1.209	0.7000	5.17	5.00	3.4	20.0
Indene	Ave	2.074	2.092	0.0100	5.04	5.00	0.9	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.115	0.9710	0.0100	4.35	5.00	-12.9	20.0
N-Nitrosopyrrolidine	Ave	0.4870	0.4941	0.0100	5.07	5.00	1.5	20.0
Acetophenone	Ave	1.946	1.945	0.0100	5.00	5.00	-0.0	20.0
N-Nitrosodi-n-propylamine	Ave	1.104	1.102	0.5000	4.99	5.00	-0.2	20.0
Methylphenol, 3 & 4	Ave	1.280	1.230	0.6000	4.80	5.00	-3.9	20.0
Hexachloroethane	Ave	0.6956	0.6859	0.3000	4.93	5.00	-1.4	20.0
Nitrobenzene	Ave	0.5001	0.5311	0.2000	5.31	5.00	6.2	20.0
Isophorone	Ave	0.7343	0.7846	0.4000	5.34	5.00	6.9	20.0
2-Nitrophenol	Ave	0.1884	0.2075	0.1000	5.51	5.00	10.2	20.0
2,4-Dimethylphenol	Ave	0.4270	0.4327	0.2000	5.07	5.00	1.3	20.0
Benzoic acid	Lin2		0.1924	0.0100	6.10	5.00	22.0*	20.0
Bis(2-chloroethoxy)methane	Ave	0.3925	0.3850	0.3000	4.90	5.00	-1.9	20.0
2,4-Dichlorophenol	Ave	0.3356	0.3714	0.2000	5.53	5.00	10.7	20.0
1,2,4-Trichlorobenzene	Ave	0.4498	0.4633	0.0100	5.15	5.00	3.0	20.0
Naphthalene	Ave	1.090	1.051	0.7000	4.82	5.00	-3.6	20.0
4-Chloroaniline	Ave	0.4404	0.4335	0.0100	4.92	5.00	-1.6	20.0
2,6-Dichlorophenol	Ave	0.3449	0.3620	0.0100	5.25	5.00	5.0	20.0
Hexachlorobutadiene	Ave	0.3139	0.3431	0.0100	5.47	5.00	9.3	20.0
Caprolactam	Lin2		0.0861	0.0100	4.47	5.00	-10.5	20.0
4-Chloro-3-methylphenol	Ave	0.3687	0.3762	0.2000	5.10	5.00	2.0	20.0
2-Methylnaphthalene	Ave	0.7717	0.7639	0.4000	4.95	5.00	-1.0	20.0
1-Methylnaphthalene	Ave	0.7202	0.6982	0.0100	4.85	5.00	-3.1	20.0
Hexachlorocyclopentadiene	Ave	0.4764	0.5449	0.0500	5.72	5.00	14.4	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6993	0.8229	0.0100	5.88	5.00	17.7	20.0
2,4,6-Trichlorophenol	Ave	0.3953	0.4669	0.2000	5.91	5.00	18.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab Sample ID: CCVIS 180-139524/3 Calibration Date: 04/24/2015 08:22

Instrument ID: CH731 Calib Start Date: 12/16/2014 04:19

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 12/16/2014 07:37

Lab File ID: V0424003.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	0.4404	0.4814	0.2000	5.47	5.00	9.3	20.0
1,1'-Biphenyl	Ave	1.422	1.443	0.0100	5.07	5.00	1.5	20.0
2-Chloronaphthalene	Ave	1.214	1.332	0.8000	5.49	5.00	9.8	20.0
2-Nitroaniline	Ave	0.3769	0.3939	0.0100	5.22	5.00	4.5	20.0
Dimethyl phthalate	Ave	1.345	1.341	0.0100	4.98	5.00	-0.3	20.0
1,3-Dinitrobenzene	Ave	0.2083	0.2074	0.0100	4.98	5.00	-0.4	20.0
2,6-Dinitrotoluene	Ave	0.2847	0.2907	0.2000	5.10	5.00	2.1	20.0
Acenaphthylene	Ave	1.710	1.758	0.9000	5.14	5.00	2.9	20.0
3-Nitroaniline	Ave	0.2875	0.2752	0.0100	4.79	5.00	-4.3	20.0
2,4-Dinitrophenol	Lin1		0.1896	0.0100	8.98	10.0	-10.2	20.0
Acenaphthene	Ave	1.153	1.155	0.9000	5.01	5.00	0.1	20.0
4-Nitrophenol	Ave	0.2742	0.2763	0.0100	10.1	10.0	0.7	20.0
2,4-Dinitrotoluene	Ave	0.3991	0.3977	0.2000	4.98	5.00	-0.4	20.0
Dibenzofuran	Ave	1.776	1.737	0.8000	4.89	5.00	-2.2	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3831	0.3886	0.0100	5.07	5.00	1.4	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3728	0.4051	0.0100	5.43	5.00	8.6	20.0
2-Naphthylamine	Ave	1.052	0.9915	0.0100	4.71	5.00	-5.7	20.0
Diethyl phthalate	Ave	1.403	1.368	0.0100	4.88	5.00	-2.4	20.0
Hexadecane	Ave	0.4104	0.4017		4.89	5.00	-2.1	20.0
4-Chlorophenyl phenyl ether	Ave	0.8089	0.8231	0.4000	5.09	5.00	1.8	20.0
4-Nitroaniline	Ave	0.3065	0.2896	0.0100	4.72	5.00	-5.5	20.0
Fluorene	Ave	1.320	1.290	0.9000	4.89	5.00	-2.3	20.0
4,6-Dinitro-2-methylphenol	Lin2		0.1520	0.0100	10.5	10.0	4.7	20.0
N-Nitrosodiphenylamine	Ave	0.5184	0.5667	0.0100	5.47	5.00	9.3	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.7859	0.8494	0.0100	5.40	5.00	8.1	20.0
4-Bromophenyl phenyl ether	Ave	0.2219	0.2563	0.1000	5.78	5.00	15.5	20.0
Hexachlorobenzene	Ave	0.2394	0.2695	0.1000	5.63	5.00	12.6	20.0
Atrazine	Ave	0.1771	0.2097	0.0100	5.92	5.00	18.4	20.0
n-Octadecane	Ave	1.552	1.400		4.51	5.00	-9.8	20.0
Pentachlorophenol	Ave	0.1542	0.1554	0.0500	10.1	10.0	0.8	20.0
Phenanthrene	Ave	1.104	1.119	0.7000	5.07	5.00	1.4	20.0
Anthracene	Ave	1.127	1.181	0.7000	5.24	5.00	4.8	20.0
Carbazole	Ave	0.9879	0.9699	0.0100	4.91	5.00	-1.8	20.0
Di-n-butyl phthalate	Ave	1.086	1.119	0.0100	5.15	5.00	3.1	20.0
Fluoranthene	Ave	1.282	1.270	0.6000	4.95	5.00	-1.0	20.0
Benzidine	Lin1		0.3023	0.0100		5.00	-11.2	20.0
Pyrene	Ave	1.195	1.321	0.6000	5.53	5.00	10.6	20.0
Butyl benzyl phthalate	Ave	0.4243	0.4548	0.0100	5.36	5.00	7.2	20.0
3,3'-Dichlorobenzidine	Ave	0.3466	0.3637	0.0100	5.05	5.00	5.0	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.5645	0.5959	0.0100	5.28	5.00	5.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab Sample ID: CCVIS 180-139524/3 Calibration Date: 04/24/2015 08:22

Instrument ID: CH731 Calib Start Date: 12/16/2014 04:19

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 12/16/2014 07:37

Lab File ID: V0424003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.140	1.136	0.8000	4.98	5.00	-0.4	20.0
Chrysene	Ave	1.111	1.104	0.7000	4.97	5.00	-0.6	20.0
Di-n-octyl phthalate	Lin2		1.090	0.0100	5.39	5.00	7.8	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5386	0.5348	0.0100	4.97	5.00	-0.7	20.0
Benzo[b]fluoranthene	Ave	1.177	1.212	0.7000	5.15	5.00	3.0	20.0
Benzo[k]fluoranthene	Ave	1.280	1.228	0.7000	4.80	5.00	-4.0	20.0
Benzo[e]pyrene	Ave	1.133	1.124	0.0100	4.96	5.00	-0.8	20.0
Benzo[a]pyrene	Ave	1.100	1.166	0.7000	5.30	5.00	6.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.231	1.312	0.5000	5.33	5.00	6.6	20.0
Dibenz(a,h)anthracene	Ave	1.050	1.141	0.4000	5.43	5.00	8.7	20.0
Benzo[g,h,i]perylene	Ave	1.077	1.183	0.5000	5.49	5.00	9.8	20.0
2-Fluorophenol (Surr)	Ave	1.154	1.135		4.92	5.00	-1.7	20.0
Phenol-d5 (Surr)	Ave	1.421	1.466		5.16	5.00	3.2	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4784	0.5249		5.49	5.00	9.7	20.0
2-Fluorobiphenyl	Ave	1.466	1.551		5.29	5.00	5.8	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1001	0.1170	0.0100	5.84	5.00	16.9	20.0
Terphenyl-d14 (Surr)	Ave	0.8122	0.9363		5.76	5.00	15.3	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424003.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 24-Apr-2015 08:22:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006616-003
Misc. Info.: CCVIS
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20150424-6616.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 27-Apr-2015 05:32:58 Calib Date: 05-Feb-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20150205-5565.b\V0205010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: piccolinov Date: 24-Apr-2015 10:03:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.303	6.303	0.000	90	128996	8.00	8.00	
* 2 Naphthalene-d8	136	7.505	7.505	0.000	98	430509	8.00	8.00	
* 3 Acenaphthene-d10	164	9.129	9.129	0.000	92	290715	8.00	8.00	
* 4 Phenanthrene-d10	188	10.508	10.508	0.000	97	525672	8.00	8.00	
* 5 Chrysene-d12	240	14.039	14.039	0.000	95	519520	8.00	8.00	
* 6 Perylene-d12	264	16.993	16.993	0.000	97	436233	8.00	8.00	
$ 7 2-Fluorophenol	112	4.984	4.984	0.000	90	183019	10.0	9.83	
$ 8 Phenol-d5	99	5.961	5.961	0.000	87	236440	10.0	10.3	
$ 9 Nitrobenzene-d5	82	6.827	6.827	0.000	91	282462	10.0	11.0	
$ 10 2-Fluorobiphenyl	172	8.488	8.488	0.000	99	563561	10.0	10.6	
$ 11 2,4,6-Tribromophenol	330	9.856	9.856	0.000	87	76894	10.0	11.7	
$ 12 Terphenyl-d14	244	12.276	12.276	0.000	98	608022	10.0	11.5	
13 1,4-Dioxane	88	1.880	1.880	0.000	89	89434	10.0	10.9	
14 N-Nitrosodimethylamine	74	2.553	2.553	0.000	75	117376	10.0	10.2	M
15 Pyridine	79	2.628	2.628	0.000	94	199225	10.0	9.84	
22 Methyl methanesulfonate	80	4.733	4.733	0.000	92	166575	10.0	10.9	
26 Benzaldehyde	77	5.865	5.865	0.000	87	155939	10.0	12.0	
28 Aniline	93	5.977	5.977	0.000	63	295398	10.0	10.2	
27 Phenol	94	5.977	5.977	0.000	69	258708	10.0	9.61	
29 Bis(2-chloroethyl)ether	93	6.042	6.042	0.000	93	169697	10.0	9.38	
31 2-Chlorophenol	128	6.106	6.106	0.000	92	199117	10.0	10.4	
32 n-Decane	43	6.154	6.154	0.000	74	155431	10.0	9.35	
33 1,3-Dichlorobenzene	146	6.245	6.245	0.000	90	244106	10.0	9.84	
34 1,4-Dichlorobenzene	146	6.319	6.319	0.000	88	254992	10.0	9.93	
36 Benzyl alcohol	108	6.432	6.432	0.000	83	112572	10.0	9.14	M
37 1,2-Dichlorobenzene	146	6.469	6.469	0.000	89	244636	10.0	10.1	
38 2-Methylphenol	108	6.544	6.544	0.000	91	194986	10.0	10.3	
39 Indene	116	6.549	6.549	0.000	92	337359	10.0	10.1	
40 2,2'-oxybis[1-chloropropan	45	6.560	6.560	0.000	69	156570	10.0	8.71	
41 N-Nitrosopyrrolidine	100	6.651	6.651	0.000	71	79674	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
43 Acetophenone	105	6.677	6.677	0.000	88	313699	10.0	10.0	
44 N-Nitrosodi-n-propylamine	70	6.677	6.677	0.000	85	177715	10.0	9.98	
45 4-Methylphenol	108	6.688	6.688	0.000	91	198355	10.0	9.61	
47 Hexachloroethane	117	6.795	6.795	0.000	85	110604	10.0	9.86	
48 Nitrobenzene	77	6.843	6.843	0.000	88	285783	10.0	10.6	
50 Isophorone	82	7.062	7.062	0.000	97	422228	10.0	10.7	
51 2-Nitrophenol	139	7.142	7.142	0.000	80	111680	10.0	11.0	
52 2,4-Dimethylphenol	107	7.174	7.174	0.000	94	232872	10.0	10.1	
56 Benzoic acid	122	7.238	7.238	0.000	87	103559	10.0	12.2	
55 Bis(2-chloroethoxy)methane	93	7.254	7.254	0.000	95	207192	10.0	9.81	
57 2,4-Dichlorophenol	162	7.372	7.372	0.000	95	199875	10.0	11.1	
61 Azobenzene	77		7.452				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.452	7.452	0.000	91	249302	10.0	10.3	
60 Naphthalene	128	7.527	7.527	0.000	97	565441	10.0	9.64	
62 4-Chloroaniline	127	7.564	7.564	0.000	90	233263	10.0	9.84	
63 2,6-Dichlorophenol	162	7.580	7.580	0.000	91	194829	10.0	10.5	
64 Hexachlorobutadiene	225	7.639	7.639	0.000	95	184658	10.0	10.9	
67 Caprolactam	113	7.853	7.853	0.000	80	46320	10.0	8.95	
70 4-Chloro-3-methylphenol	107	7.997	7.997	0.000	88	202469	10.0	10.2	
72 2-Methylnaphthalene	142	8.162	8.162	0.000	90	411060	10.0	9.90	
75 1-Methylnaphthalene	142	8.253	8.253	0.000	87	375744	10.0	9.69	
76 Hexachlorocyclopentadiene	237	8.312	8.312	0.000	96	198016	10.0	11.4	
77 1,2,4,5-Tetrachlorobenzene	216	8.317	8.317	0.000	98	299041	10.0	11.8	
78 2,4,6-Trichlorophenol	196	8.419	8.419	0.000	95	169664	10.0	11.8	
79 2,4,5-Trichlorophenol	196	8.451	8.451	0.000	92	174951	10.0	10.9	
80 1,1'-Biphenyl	154	8.584	8.584	0.000	96	524376	10.0	10.1	
81 2-Chloronaphthalene	162	8.611	8.611	0.000	98	484119	10.0	11.0	
82 2-Nitroaniline	65	8.697	8.697	0.000	72	143130	10.0	10.4	
86 Dimethyl phthalate	163	8.841	8.841	0.000	95	487243	10.0	9.97	
87 1,3-Dinitrobenzene	168	8.878	8.878	0.000	82	75365	10.0	9.96	
88 2,6-Dinitrotoluene	165	8.905	8.905	0.000	82	105629	10.0	10.2	
89 Acenaphthylene	152	9.001	9.001	0.000	97	639024	10.0	10.3	
90 3-Nitroaniline	138	9.065	9.065	0.000	86	99987	10.0	9.57	
91 Acenaphthene	153	9.161	9.161	0.000	85	419642	10.0	10.0	
92 2,4-Dinitrophenol	184	9.161	9.161	0.000	71	137829	20.0	18.0	
93 4-Nitrophenol	109	9.209	9.209	0.000	83	200777	20.0	20.1	
94 2,4-Dinitrotoluene	165	9.279	9.279	0.000	84	144519	10.0	9.96	
95 Dibenzofuran	168	9.316	9.316	0.000	94	631202	10.0	9.78	
97 2,3,5,6-Tetrachlorophenol	232	9.386	9.386	0.000	91	141218	10.0	10.1	
99 2,3,4,6-Tetrachlorophenol	232	9.428	9.428	0.000	73	147191	10.0	10.9	
100 2-Naphthylamine	143	9.455	9.455	0.000	93	360318	10.0	9.43	
102 Hexadecane	57	9.482	9.482	0.000	87	216161	10.0	9.79	
101 Diethyl phthalate	149	9.482	9.482	0.000	96	497266	10.0	9.76	
104 4-Chlorophenyl phenyl ethe	204	9.610	9.610	0.000	94	299112	10.0	10.2	
105 4-Nitroaniline	138	9.631	9.631	0.000	73	105219	10.0	9.45	
106 Fluorene	166	9.631	9.631	0.000	93	468686	10.0	9.77	
108 4,6-Dinitro-2-methylphenol	198	9.658	9.658	0.000	84	199715	20.0	20.9	
109 N-Nitrosodiphenylamine	169	9.717	9.717	0.000	63	372347	10.0	10.9	
111 1,2-Diphenylhydrazine	77	9.760	9.760	0.000	98	558143	10.0	10.8	
116 4-Bromophenyl phenyl ether	248	10.064	10.064	0.000	70	168418	10.0	11.6	
118 Hexachlorobenzene	284	10.150	10.150	0.000	93	177103	10.0	11.3	
119 Atrazine	200	10.176	10.176	0.000	93	137791	10.0	11.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
121 n-Octadecane	57	10.315	10.315	0.000	86	225662	10.0	9.02	
122 Pentachlorophenol	266	10.321	10.321	0.000	81	204258	20.0	20.2	
126 Phenanthrene	178	10.529	10.529	0.000	96	735087	10.0	10.1	
128 Anthracene	178	10.577	10.577	0.000	96	775718	10.0	10.5	
130 Carbazole	167	10.721	10.721	0.000	97	637316	10.0	9.82	
132 Di-n-butyl phthalate	149	11.010	11.010	0.000	99	735502	10.0	10.3	
137 Fluoranthene	202	11.822	11.822	0.000	96	834349	10.0	9.90	
138 Benzidine	184	11.945	11.945	0.000	98	196323	10.0	8.88	
139 Pyrene	202	12.121	12.121	0.000	98	858009	10.0	11.1	
144 Butyl benzyl phthalate	149	12.970	12.970	0.000	94	295373	10.0	10.7	
149 3,3'-Dichlorobenzidine	252	13.937	13.937	0.000	73	236192	10.0	10.1	
151 Bis(2-ethylhexyl) phthalat	149	13.969	13.969	0.000	94	386953	10.0	10.6	
152 Benzo[a]anthracene	228	14.023	14.023	0.000	96	737673	10.0	9.96	
153 Chrysene	228	14.087	14.087	0.000	95	716829	10.0	9.94	
156 Di-n-octyl phthalate	149	15.283	15.283	0.000	100	594180	10.0	10.8	
157 7,12-Dimethylbenz(a)anthra	256	16.165	16.165	0.000	89	291639	10.0	9.93	
158 Benzo[b]fluoranthene	252	16.181	16.181	0.000	94	661096	10.0	10.3	
159 Benzo[k]fluoranthene	252	16.234	16.234	0.000	96	669673	10.0	9.60	
176 Benzo[e]pyrene	252	16.763	16.763	0.000	0	612835	10.0	9.92	
160 Benzo[a]pyrene	252	16.875	16.875	0.000	73	635545	10.0	10.6	
163 Indeno[1,2,3-cd]pyrene	276	19.231	19.231	0.000	93	715507	10.0	10.7	
164 Dibenz(a,h)anthracene	278	19.263	19.263	0.000	65	622110	10.0	10.9	
165 Benzo[g,h,i]perylene	276	19.835	19.835	0.000	88	644814	10.0	11.0	
S 206 Total Cresols	108				0		20.0	20.0	
S 208 Methyl Phenols,Total	108				0		20.0	20.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD10i_00098 Amount Added: 1.00 Units: mL

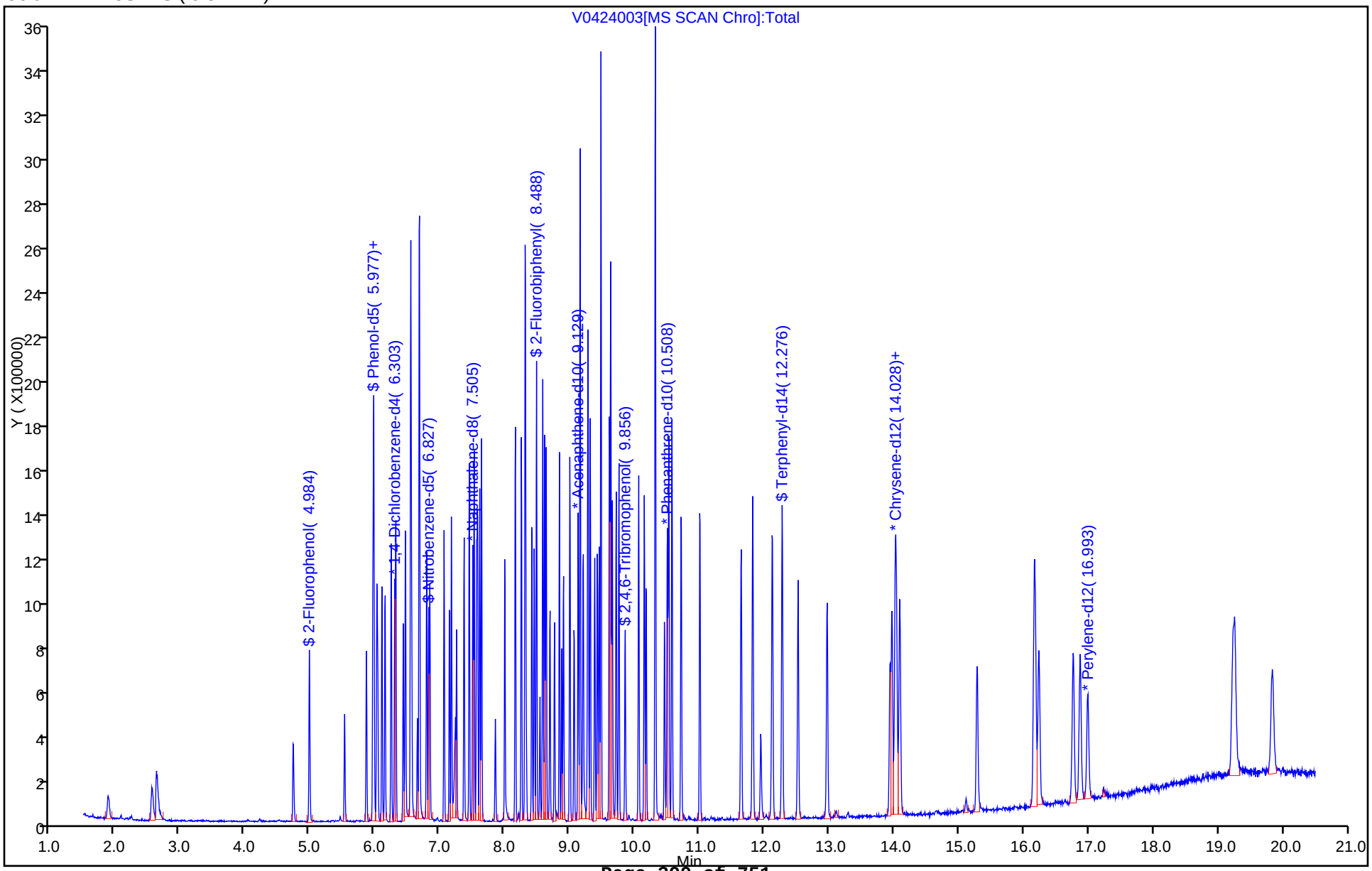
Report Date: 27-Apr-2015 05:32:59 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424003.D

Injection Date:	24-Apr-2015 08:22:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

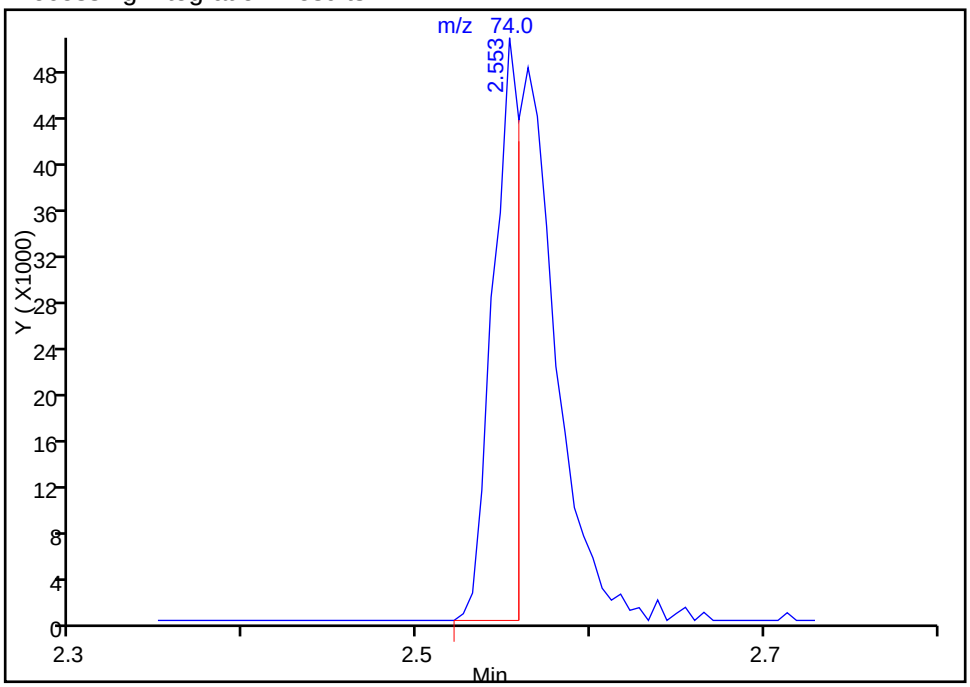
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20150424-6616.b\V0424003.D				
Injection Date:	24-Apr-2015 08:22:30	Instrument ID:	CH731		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

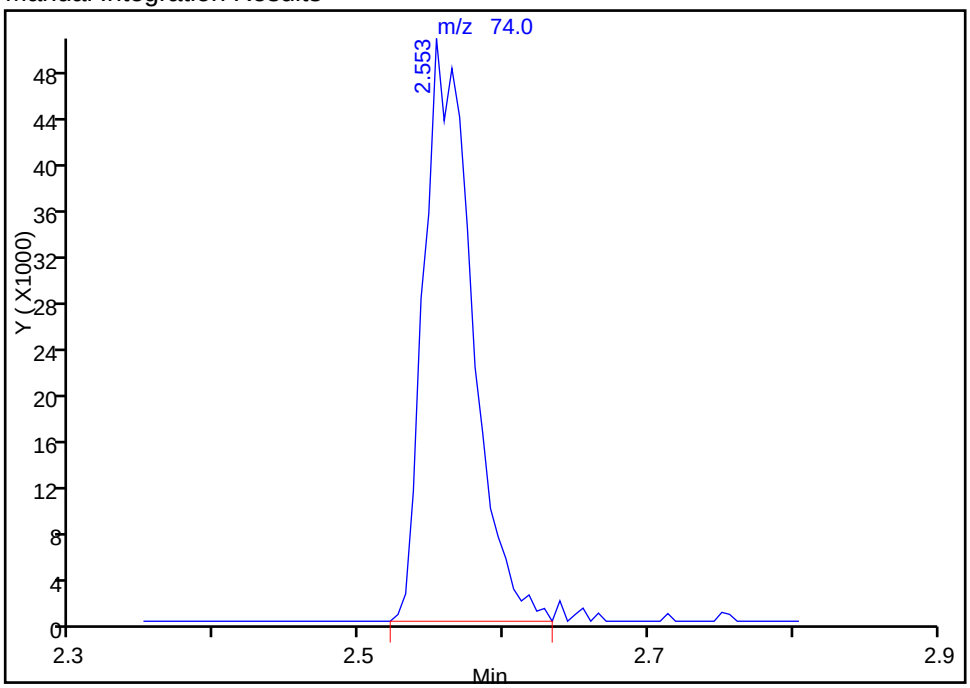
Processing Integration Results

RT: 2.55
Area: 54857
Amount: 4.779541
Amount Units: ng



Manual Integration Results

RT: 2.55
Area: 117376
Amount: 10.226651
Amount Units: ng



Reviewer: piccolinov, 24-Apr-2015 10:03:52
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

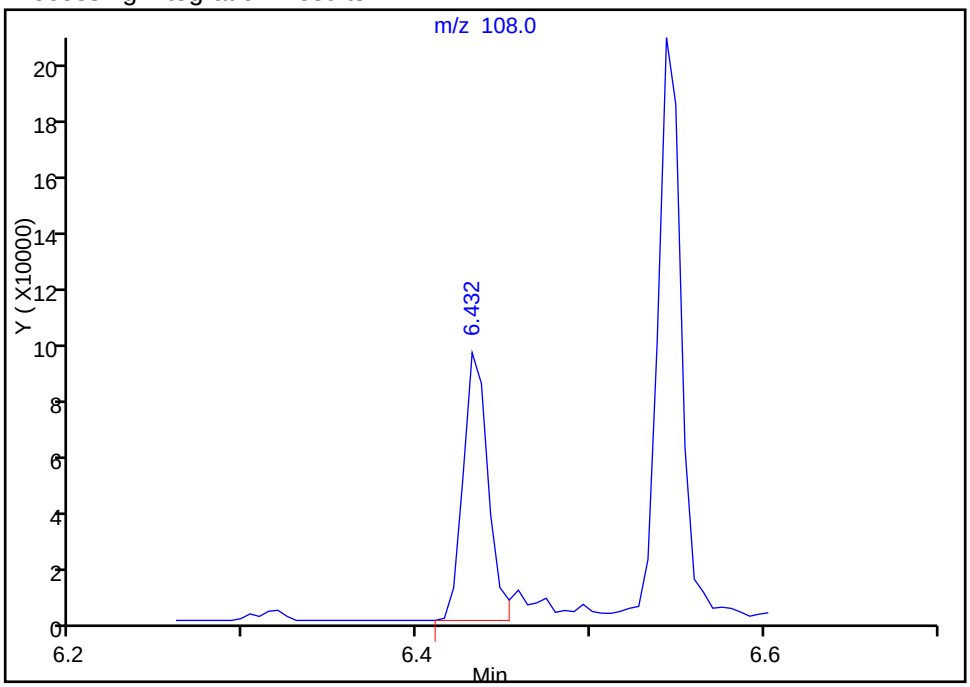
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424003.D
Injection Date: 24-Apr-2015 08:22:30 Instrument ID: CH731
Lims ID: CCVIS
Client ID:
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

36 Benzyl alcohol, CAS: 100-51-6

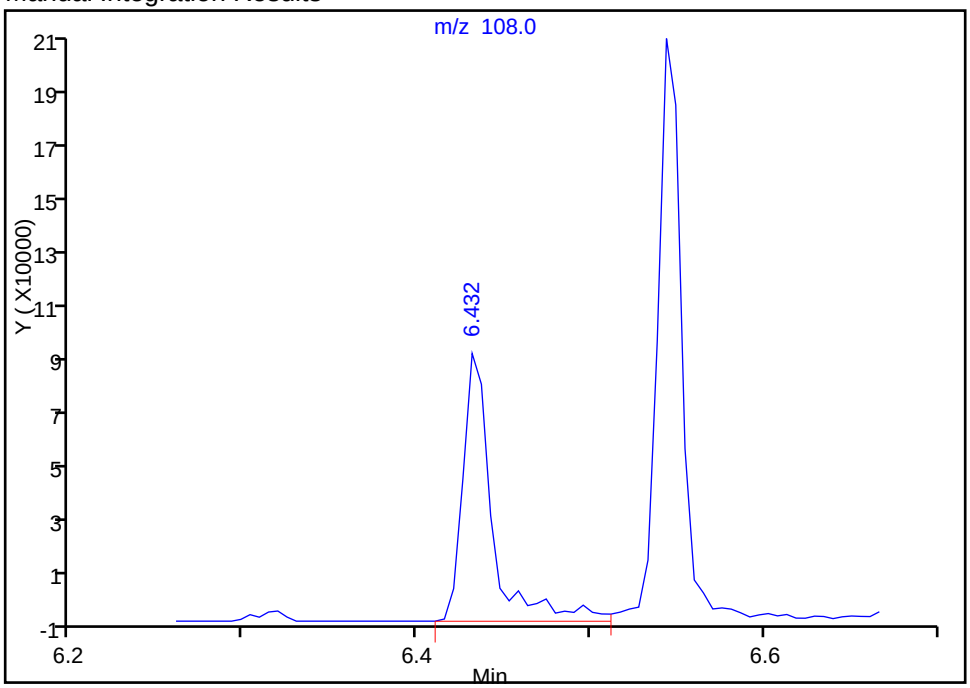
Processing Integration Results

RT: 6.43
Area: 95222
Amount: 7.734605
Amount Units: ng



Manual Integration Results

RT: 6.43
Area: 112572
Amount: 9.143894
Amount Units: ng



Reviewer: piccolinov, 24-Apr-2015 10:03:52
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab Sample ID: CCVIS 180-140008/3 Calibration Date: 04/29/2015 11:29

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: D0429003.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	0.3087	0.0100	4.84	5.00	-3.1	20.0
N-Nitrosodimethylamine	Ave	0.4305	0.4285	0.0100	4.98	5.00	-0.5	20.0
Pyridine	Ave	0.7509	0.6820	0.0100	4.54	5.00	-9.2	20.0
Methyl methanesulfonate	Ave	0.6060	0.6145	0.0100	5.07	5.00	1.4	20.0
Benzaldehyde	Ave	0.6754	0.7579	0.0100	5.61	5.00	12.2	20.0
Aniline	Ave	1.756	1.688	0.0100	4.81	5.00	-3.9	20.0
Phenol	Ave	1.587	1.523	0.8000	4.80	5.00	-4.0	20.0
Bis(2-chloroethyl)ether	Ave	1.120	1.087	0.7000	4.85	5.00	-3.0	20.0
2-Chlorophenol	Ave	1.355	1.357	0.8000	5.01	5.00	0.1	20.0
n-Decane	Ave	1.590	1.660		5.22	5.00	4.4	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	1.618	0.0100	4.99	5.00	-0.1	20.0
Benzyl alcohol	Ave	0.8521	0.8371	0.0100	4.91	5.00	-1.8	20.0
1,2-Dichlorobenzene	Ave	1.574	1.575	0.0100	5.00	5.00	0.0	20.0
2-Methylphenol	Ave	1.204	1.195	0.7000	4.96	5.00	-0.7	20.0
Indene	Ave	2.185	2.219	0.0100	5.08	5.00	1.5	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.359	2.469	0.0100	5.23	5.00	4.7	20.0
N-Nitrosopyrrolidine	Ave	0.5864	0.6099	0.0100	5.20	5.00	4.0	20.0
Acetophenone	Ave	1.815	1.847	0.0100	5.09	5.00	1.7	20.0
N-Nitrosodi-n-propylamine	Ave	0.8551	0.8950	0.5000	5.23	5.00	4.7	20.0
Methylphenol, 3 & 4	Ave	1.236	1.309	0.6000	5.30	5.00	6.0	20.0
Hexachloroethane	Ave	0.7013	0.7467	0.3000	5.32	5.00	6.5	20.0
Nitrobenzene	Ave	0.3334	0.3369	0.2000	5.05	5.00	1.1	20.0
Isophorone	Ave	0.5870	0.5749	0.4000	4.90	5.00	-2.1	20.0
2-Nitrophenol	Ave	0.1845	0.1871	0.1000	5.07	5.00	1.4	20.0
2,4-Dimethylphenol	Ave	0.3367	0.3433	0.2000	5.10	5.00	2.0	20.0
Benzoic acid	Lin1		0.2057	0.0100	5.72	5.00	14.5	20.0
Bis(2-chloroethoxy)methane	Ave	0.3611	0.3608	0.3000	5.00	5.00	-0.0	20.0
2,4-Dichlorophenol	Ave	0.2941	0.3014	0.2000	5.12	5.00	2.5	20.0
1,2,4-Trichlorobenzene	Ave	0.3374	0.3374	0.0100	5.00	5.00	0.0	20.0
Naphthalene	Ave	1.082	1.080	0.7000	4.99	5.00	-0.2	20.0
4-Chloroaniline	Ave	0.4336	0.4497	0.0100	5.19	5.00	3.7	20.0
2,6-Dichlorophenol	Ave	0.2924	0.3045	0.0100	5.21	5.00	4.1	20.0
Hexachlorobutadiene	Ave	0.2019	0.1998	0.0100	4.95	5.00	-1.0	20.0
Caprolactam	Ave	0.0985	0.0961	0.0100	4.88	5.00	-2.5	20.0
4-Chloro-3-methylphenol	Ave	0.3085	0.3183	0.2000	5.16	5.00	3.2	20.0
2-Methylnaphthalene	Ave	0.7654	0.7857	0.4000	5.13	5.00	2.7	20.0
1-Methylnaphthalene	Ave	0.7177	0.7428	0.0100	5.17	5.00	3.5	20.0
Hexachlorocyclopentadiene	Ave	0.3480	0.3486	0.0500	5.01	5.00	0.2	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5214	0.4944	0.0100	4.74	5.00	-5.2	20.0
2,4,6-Trichlorophenol	Ave	0.3558	0.3477	0.2000	4.89	5.00	-2.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab Sample ID: CCVIS 180-140008/3 Calibration Date: 04/29/2015 11:29

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: D0429003.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	0.3612	0.2000	4.79	5.00	-4.3	20.0
1,1'-Biphenyl	Ave	1.505	1.445	0.0100	4.80	5.00	-4.0	20.0
2-Chloronaphthalene	Ave	1.220	1.148	0.8000	4.71	5.00	-5.8	20.0
2-Nitroaniline	Ave	0.3466	0.3605	0.0100	5.20	5.00	4.0	20.0
Dimethyl phthalate	Ave	1.270	1.203	0.0100	4.73	5.00	-5.3	20.0
1,3-Dinitrobenzene	Ave	0.1913	0.1940	0.0100	5.07	5.00	1.4	20.0
2,6-Dinitrotoluene	Ave	0.2790	0.2782	0.2000	4.98	5.00	-0.3	20.0
Acenaphthylene	Ave	1.934	1.943	0.9000	5.02	5.00	0.4	20.0
3-Nitroaniline	Ave	0.3396	0.3474	0.0100	5.11	5.00	2.3	20.0
2,4-Dinitrophenol	Lin1		0.1711	0.0100	9.43	10.0	-5.7	20.0
Acenaphthene	Ave	1.181	1.196	0.9000	5.06	5.00	1.3	20.0
4-Nitrophenol	Ave	0.1879	0.1920	0.0100	10.2	10.0	2.2	20.0
2,4-Dinitrotoluene	Ave	0.3667	0.3753	0.2000	5.12	5.00	2.4	20.0
Dibenzofuran	Ave	1.694	1.684	0.8000	4.97	5.00	-0.6	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3283	0.3148	0.0100	4.79	5.00	-4.1	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3217	0.3178	0.0100	4.94	5.00	-1.2	20.0
2-Naphthylamine	Ave	1.207	1.197	0.0100	4.96	5.00	-0.9	20.0
Diethyl phthalate	Ave	1.298	1.274	0.0100	4.91	5.00	-1.9	20.0
Hexadecane	Ave	0.5903	0.6902		5.85	5.00	16.9	20.0
4-Chlorophenyl phenyl ether	Ave	0.6218	0.6150	0.4000	4.95	5.00	-1.1	20.0
4-Nitroaniline	Ave	0.3352	0.3440	0.0100	5.13	5.00	2.6	20.0
Fluorene	Ave	1.318	1.335	0.9000	5.07	5.00	1.3	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1300	0.1286	0.0100	9.89	10.0	-1.1	20.0
N-Nitrosodiphenylamine	Ave	0.5683	0.5608	0.0100	4.93	5.00	-1.3	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8141	0.8504	0.0100	5.22	5.00	4.5	20.0
4-Bromophenyl phenyl ether	Ave	0.2089	0.2018	0.1000	4.83	5.00	-3.4	20.0
Hexachlorobenzene	Ave	0.2088	0.1972	0.1000	4.72	5.00	-5.6	20.0
Atrazine	Ave	0.1650	0.1695	0.0100	5.14	5.00	2.7	20.0
n-Octadecane	Ave	2.847	3.384		5.94	5.00	18.9	20.0
Pentachlorophenol	Ave	0.1472	0.1328	0.0500	9.02	10.0	-9.8	20.0
Phenanthrene	Ave	1.202	1.173	0.7000	4.88	5.00	-2.4	20.0
Anthracene	Ave	1.229	1.216	0.7000	4.95	5.00	-1.0	20.0
Carbazole	Ave	1.076	1.058	0.0100	4.92	5.00	-1.7	20.0
Di-n-butyl phthalate	Ave	1.346	1.355	0.0100	5.03	5.00	0.7	20.0
Fluoranthene	Ave	1.213	1.169	0.6000	4.82	5.00	-3.6	20.0
Benzidine	Lin1		0.4804	0.0100		5.00	-6.9	20.0
Pyrene	Ave	1.320	1.327	0.6000	5.02	5.00	0.5	20.0
Butyl benzyl phthalate	Ave	0.5863	0.6409	0.0100	5.47	5.00	9.3	20.0
3,3'-Dichlorobenzidine	Ave	0.3859	0.4130	0.0100	5.35	5.00	7.0	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.8121	0.8999	0.0100	5.54	5.00	10.8	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab Sample ID: CCVIS 180-140008/3 Calibration Date: 04/29/2015 11:29

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: D0429003.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	1.156	0.8000	4.99	5.00	-0.1	20.0
Chrysene	Ave	1.091	1.112	0.7000	5.10	5.00	2.0	20.0
Di-n-octyl phthalate	Ave	1.554	1.695	0.0100	5.45	5.00	9.0	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5519	0.5049	0.0100	4.57	5.00	-8.5	20.0
Benzo[b]fluoranthene	Ave	1.297	1.228	0.7000	4.73	5.00	-5.3	20.0
Benzo[k]fluoranthene	Ave	1.271	1.215	0.7000	4.78	5.00	-4.4	20.0
Benzo[e]pyrene	Ave	1.169	1.155	0.0100	4.94	5.00	-1.2	20.0
Benzo[a]pyrene	Ave	1.168	1.184	0.7000	5.07	5.00	1.4	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.229	1.267	0.5000	5.15	5.00	3.1	20.0
Dibenz(a,h)anthracene	Ave	1.022	1.056	0.4000	5.17	5.00	3.4	20.0
Benzo[g,h,i]perylene	Ave	1.048	1.074	0.5000	5.12	5.00	2.5	20.0
2-Fluorophenol (Surr)	Ave	1.037	0.999		4.81	5.00	-3.7	20.0
Phenol-d5 (Surr)	Ave	1.397	1.419		5.08	5.00	1.6	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3358	0.3402		5.07	5.00	1.3	20.0
2-Fluorobiphenyl	Ave	1.314	1.269		4.83	5.00	-3.4	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0879	0.0852	0.0100	4.84	5.00	-3.1	20.0
Terphenyl-d14 (Surr)	Ave	0.8709	0.8572		4.92	5.00	-1.6	20.0

Report Date: 30-Apr-2015 06:33:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429003.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 29-Apr-2015 11:29:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006684-003
Misc. Info.: CCVIS
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\PITCHROM\ChromData\CH732\20150429-6684.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Apr-2015 06:33:43 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: XAWRK003

First Level Reviewer: piccolinov Date: 29-Apr-2015 12:48:41

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	140179	8.00	8.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	100	641983	8.00	8.00	
* 3 Acenaphthene-d10	164	9.145	9.145	0.000	92	426980	8.00	8.00	
* 4 Phenanthrene-d10	188	10.582	10.582	0.000	97	748640	8.00	8.00	
* 5 Chrysene-d12	240	14.300	14.300	0.000	97	683020	8.00	8.00	
* 6 Perylene-d12	264	17.185	17.185	0.000	96	617019	8.00	8.00	
$ 7 2-Fluorophenol	112	4.759	4.759	0.000	92	174961	10.0	9.63	
$ 8 Phenol-d5	99	5.817	5.817	0.000	94	248577	10.0	10.2	
$ 9 Nitrobenzene-d5	82	6.730	6.730	0.000	94	272977	10.0	10.1	
$ 10 2-Fluorobiphenyl	172	8.483	8.483	0.000	100	677313	10.0	9.66	
$ 11 2,4,6-Tribromophenol	330	9.898	9.898	0.000	85	79721	10.0	9.69	
$ 12 Terphenyl-d14	244	12.479	12.479	0.000	98	731857	10.0	9.84	
13 1,4-Dioxane	88	1.575	1.575	0.000	93	54090	10.0	9.69	
14 N-Nitrosodimethylamine	74	2.168	2.168	0.000	86	75075	10.0	9.95	
15 Pyridine	79	2.259	2.259	0.000	91	119496	10.0	9.08	
21 Methyl methanesulfonate	80	4.487	4.487	0.000	92	107682	10.0	10.1	
25 Benzaldehyde	77	5.705	5.705	0.000	89	132806	10.0	11.2	
26 Phenol	94	5.827	5.827	0.000	78	266910	10.0	9.60	
27 Aniline	93	5.827	5.827	0.000	63	295698	10.0	9.61	
29 Bis(2-chloroethyl)ether	93	5.897	5.897	0.000	92	190387	10.0	9.70	
30 2-Chlorophenol	128	5.961	5.961	0.000	96	237761	10.0	10.0	
31 n-Decane	43	6.020	6.020	0.000	93	290867	10.0	10.4	
32 1,3-Dichlorobenzene	146	6.116	6.116	0.000	97	277737	10.0	10.0	
33 1,4-Dichlorobenzene	146	6.191	6.191	0.000	92	283445	10.0	9.99	
34 Benzyl alcohol	108	6.314	6.314	0.000	89	146685	10.0	9.82	
35 1,2-Dichlorobenzene	146	6.346	6.346	0.000	95	275922	10.0	10.0	
36 2-Methylphenol	108	6.436	6.436	0.000	96	209349	10.0	9.93	
37 Indene	116	6.436	6.436	0.000	91	388867	10.0	10.2	
38 2,2'-oxybis[1-chloropropan	45	6.453	6.453	0.000	91	432699	10.0	10.5	
39 N-Nitrosopyrrolidine	100	6.543	6.543	0.000	78	106876	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.575	6.575	0.000	87	323589	10.0	10.2	
41 N-Nitrosodi-n-propylamine	70	6.575	6.575	0.000	80	156832	10.0	10.5	
42 4-Methylphenol	108	6.586	6.586	0.000	91	229441	10.0	10.6	
45 Hexachloroethane	117	6.693	6.693	0.000	96	130843	10.0	10.6	
46 Nitrobenzene	77	6.746	6.746	0.000	94	270350	10.0	10.1	
48 Isophorone	82	6.981	6.981	0.000	98	461318	10.0	9.79	
49 2-Nitrophenol	139	7.067	7.067	0.000	96	150104	10.0	10.1	
50 2,4-Dimethylphenol	107	7.104	7.104	0.000	97	275449	10.0	10.2	
52 Benzoic acid	122	7.168	7.168	0.000	91	165094	10.0	11.4	
53 Bis(2-chloroethoxy)methane	93	7.184	7.184	0.000	95	289523	10.0	10.0	
54 2,4-Dichlorophenol	162	7.307	7.307	0.000	95	241850	10.0	10.2	
56 1,2,4-Trichlorobenzene	180	7.387	7.387	0.000	94	270729	10.0	10.0	
58 Naphthalene	128	7.468	7.468	0.000	97	866913	10.0	9.98	
59 4-Chloroaniline	127	7.510	7.510	0.000	96	360879	10.0	10.4	
60 2,6-Dichlorophenol	162	7.526	7.526	0.000	96	244329	10.0	10.4	
62 Hexachlorobutadiene	225	7.590	7.590	0.000	97	160336	10.0	9.90	
64 Caprolactam	113	7.815	7.815	0.000	73	77111	10.0	9.75	
67 4-Chloro-3-methylphenol	107	7.970	7.970	0.000	98	255419	10.0	10.3	
69 2-Methylnaphthalene	142	8.135	8.135	0.000	92	630541	10.0	10.3	
71 1-Methylnaphthalene	142	8.237	8.237	0.000	93	596061	10.0	10.3	
72 Hexachlorocyclopentadiene	237	8.296	8.296	0.000	97	186068	10.0	10.0	
73 1,2,4,5-Tetrachlorobenzene	216	8.301	8.301	0.000	98	263891	10.0	9.48	
74 2,4,6-Trichlorophenol	196	8.408	8.408	0.000	95	185592	10.0	9.77	
75 2,4,5-Trichlorophenol	196	8.445	8.445	0.000	95	192780	10.0	9.57	
76 1,1'-Biphenyl	154	8.579	8.579	0.000	95	771494	10.0	9.60	
77 2-Chloronaphthalene	162	8.611	8.611	0.000	97	612908	10.0	9.42	
79 2-Nitroaniline	65	8.691	8.691	0.000	82	192415	10.0	10.4	
82 Dimethyl phthalate	163	8.846	8.846	0.000	98	641881	10.0	9.47	
83 1,3-Dinitrobenzene	168	8.883	8.883	0.000	82	103557	10.0	10.1	
84 2,6-Dinitrotoluene	165	8.910	8.910	0.000	93	148468	10.0	9.97	
85 Acenaphthylene	152	9.011	9.011	0.000	98	1036823	10.0	10.0	
86 3-Nitroaniline	138	9.081	9.081	0.000	93	185407	10.0	10.2	
88 Acenaphthene	153	9.177	9.177	0.000	88	638301	10.0	10.1	
87 2,4-Dinitrophenol	184	9.177	9.177	0.000	68	182584	20.0	18.9	
89 4-Nitrophenol	109	9.225	9.225	0.000	98	204963	20.0	20.4	
91 2,4-Dinitrotoluene	165	9.300	9.300	0.000	91	200309	10.0	10.2	
93 Dibenzofuran	168	9.343	9.343	0.000	96	898563	10.0	9.94	
95 2,3,5,6-Tetrachlorophenol	232	9.412	9.412	0.000	93	168005	10.0	9.59	
96 2,3,4,6-Tetrachlorophenol	232	9.455	9.455	0.000	75	169604	10.0	9.88	
97 2-Naphthylamine	143	9.482	9.482	0.000	97	638609	10.0	9.91	
98 Diethyl phthalate	149	9.514	9.514	0.000	98	679744	10.0	9.81	
99 Hexadecane	57	9.519	9.519	0.000	91	553853	10.0	11.7	
100 4-Chlorophenyl phenyl ethe	204	9.647	9.647	0.000	97	328235	10.0	9.89	
101 4-Nitroaniline	138	9.663	9.663	0.000	83	183619	10.0	10.3	
103 Fluorene	166	9.669	9.669	0.000	94	712550	10.0	10.1	
104 4,6-Dinitro-2-methylphenol	198	9.695	9.695	0.000	80	240600	20.0	19.8	
105 N-Nitrosodiphenylamine	169	9.759	9.759	0.000	63	524753	10.0	9.87	
90 1,2-Diphenylhydrazine	77	9.802	9.802	0.000	99	795812	10.0	10.4	
110 4-Bromophenyl phenyl ether	248	10.117	10.117	0.000	71	188802	10.0	9.66	
112 Hexachlorobenzene	284	10.208	10.208	0.000	92	184520	10.0	9.44	
113 Atrazine	200	10.240	10.240	0.000	89	158577	10.0	10.3	
116 Pentachlorophenol	266	10.384	10.384	0.000	90	248495	20.0	18.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.384	10.384	0.000	93	592983	10.0	11.9	
121 Phenanthrene	178	10.603	10.603	0.000	97	1097976	10.0	9.76	
122 Anthracene	178	10.657	10.657	0.000	97	1138314	10.0	9.90	
124 Carbazole	167	10.806	10.806	0.000	96	990038	10.0	9.83	
126 Di-n-butyl phthalate	149	11.122	11.122	0.000	99	1267716	10.0	10.1	
57 Azobenzene	77		11.800				ND	ND	
131 Fluoranthene	202	11.992	11.992	0.000	98	1093511	10.0	9.64	
132 Benzidine	184	12.126	12.126	0.000	99	410154	10.0	9.31	
133 Pyrene	202	12.308	12.308	0.000	97	1132548	10.0	10.0	
138 Butyl benzyl phthalate	149	13.216	13.216	0.000	98	547140	10.0	10.9	
144 3,3'-Dichlorobenzidine	252	14.204	14.204	0.000	75	352595	10.0	10.7	
145 Bis(2-ethylhexyl) phthalat	149	14.252	14.252	0.000	97	768344	10.0	11.1	
146 Benzo[a]anthracene	228	14.284	14.284	0.000	98	987207	10.0	9.99	
147 Chrysene	228	14.354	14.354	0.000	98	949542	10.0	10.2	
150 Di-n-octyl phthalate	149	15.550	15.550	0.000	99	1307220	10.0	10.9	
151 7,12-Dimethylbenz(a)anthra	256	16.394	16.394	0.000	91	389425	10.0	9.15	
152 Benzo[b]fluoranthene	252	16.410	16.410	0.000	98	947006	10.0	9.47	
153 Benzo[k]fluoranthene	252	16.464	16.464	0.000	99	936933	10.0	9.56	
219 Benzo[e]pyrene	252	16.971	16.971	0.000	0	890630	10.0	9.88	
154 Benzo[a]pyrene	252	17.068	17.068	0.000	79	913281	10.0	10.1	
157 Indeno[1,2,3-cd]pyrene	276	19.514	19.514	0.000	96	976826	10.0	10.3	
158 Dibenz(a,h)anthracene	278	19.546	19.546	0.000	89	814748	10.0	10.3	
159 Benzo[g,h,i]perylene	276	20.187	20.187	0.000	95	828660	10.0	10.2	
S 199 Total Cresols	108				0		20.0	20.5	
S 197 Methyl Phenols,Total	108				0		20.0	20.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD10i_00100 Amount Added: 1.00 Units: mL

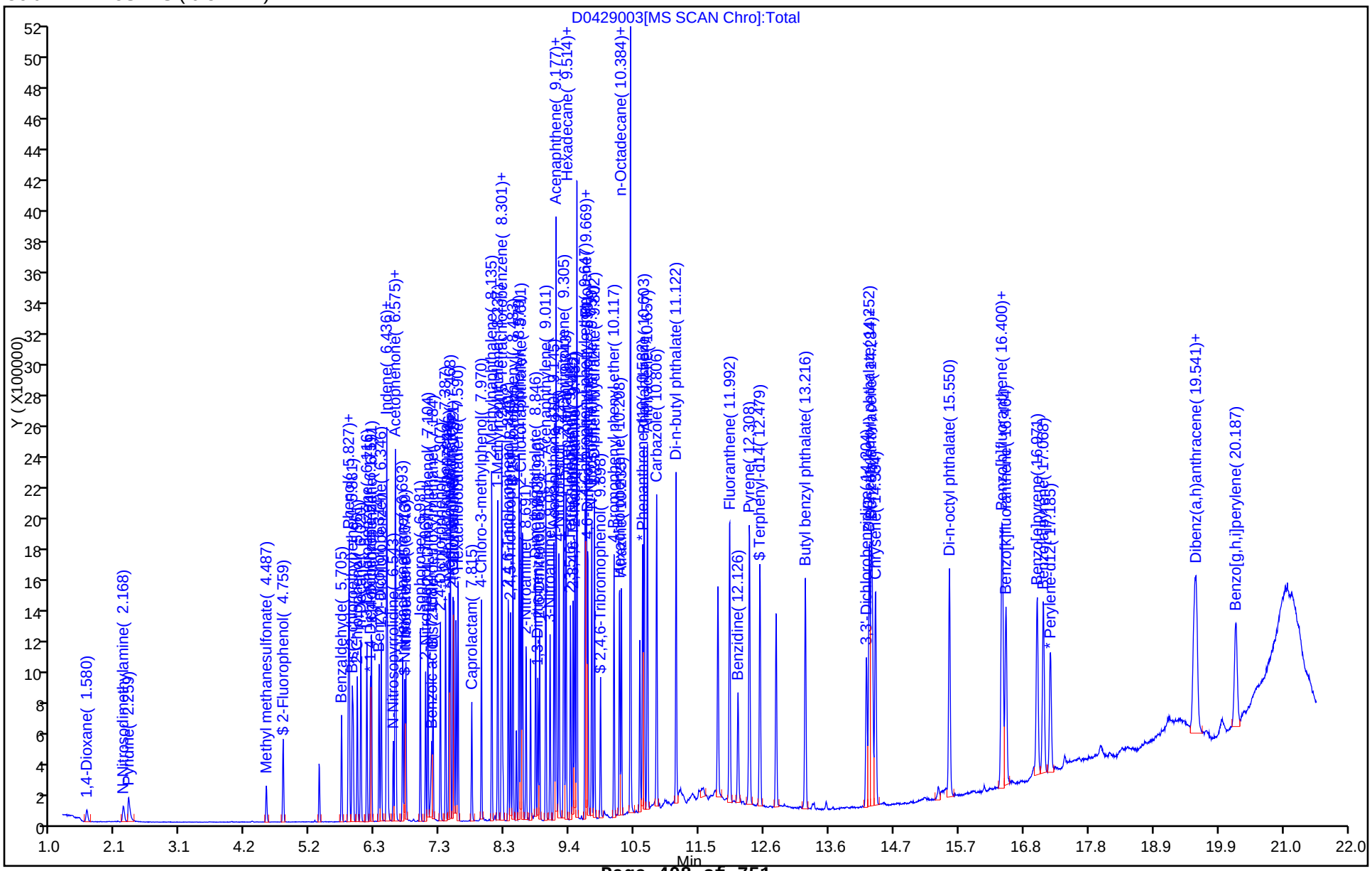
Report Date: 30-Apr-2015 06:33:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429003.D

Injection Date:	29-Apr-2015 11:29:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 16-Dec-2014 04:02:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004887-002
Misc. Info.: DFTPP
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20141216-4887.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 16-Dec-2014 09:20:48 Calib Date: 16-Dec-2014 07:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: piccolinov Date: 16-Dec-2014 05:55:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
198 Pentachlorophenol_T	266	5.454	5.454	0.000	88	279391	NR	NR	
199 DFTPP									
200 Benzidine_T	184	8.045	8.045	0.000	98	1859449	NR	NR	
201 4,4'-DDE	246		8.319					ND	
202 4,4'-DDD	235	9.049	8.992	0.057	1	4581		NR	
203 4,4'-DDT	235	9.589	9.589	0.000	96	914962	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

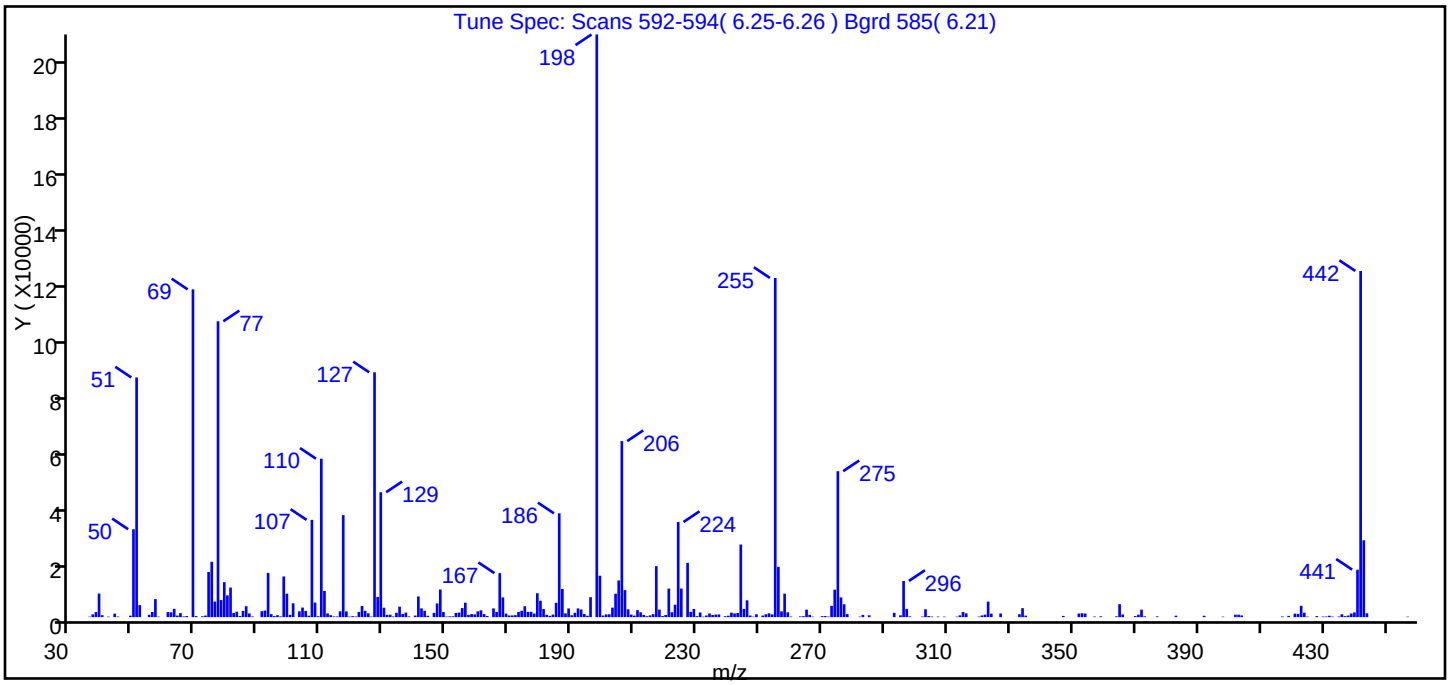
SVDFTPP50i_00021 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141216-4887.b\V1216002.D				
Injection Date:	16-Dec-2014 04:02:30	Instrument ID:	CH731		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	003200	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Tune Method:	DFTPP Method 8270				

199 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	41.1
68	<2% of mass 69	0.0 (0.0)
69	Present	56.3
70	<2% of mass 69	0.2 (0.3)
127	40-60% of mass 198	42.0
197	<1% of mass 198	0.0
199	5-9% of mass 198	7.1
275	10-30% of mass 198	25.0
365	>1% of mass 198	2.2
441	Present but less than mass 443	8.1 (61.8)
442	>40% of mass 198	59.4
443	17-23% of mass 442	13.2 (22.2)

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216002.D\BNA_CH731.rslt\spectra.d
Injection Date: 16-Dec-2014 04:02:30
Spectrum: Tune Spec: Scans 592-594(6.25-6.26) Bgrd 585(6.21)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	173	122.00	1843	198.00	208704	277.00	4621
37.00	986	123.00	4003	199.00	14845	278.00	1100
38.00	1815	124.00	2270	200.00	574	282.00	178
39.00	8439	125.00	1377	201.00	964	283.00	791
40.00	714	126.00	195	202.00	1020	285.00	672
42.00	183	127.00	87688	203.00	3410	293.00	1535
44.00	1252	128.00	7213	204.00	8390	295.00	643
45.00	210	129.00	44744	205.00	13149	296.00	12975
49.00	532	130.00	3374	206.00	63056	297.00	2945
50.00	31488	131.00	819	207.00	9685	298.00	269
51.00	85848	132.00	885	208.00	2808	302.00	219
52.00	4329	133.00	227	209.00	906	303.00	2829
55.00	846	134.00	1558	210.00	545	304.00	393
56.00	1836	135.00	3750	211.00	2506	305.00	218
57.00	6466	136.00	1131	212.00	1732	307.00	200
58.00	182	137.00	1629	213.00	796	309.00	177
61.00	1821	138.00	258	214.00	333	313.00	177
62.00	1723	140.00	572	215.00	629	314.00	646
63.00	2962	141.00	7408	216.00	1067	315.00	1857
64.00	576	142.00	3144	217.00	18272	316.00	1357
65.00	1463	143.00	2269	218.00	2692	320.00	190
66.00	247	144.00	489	219.00	396	321.00	603
67.00	413	146.00	1526	220.00	766	322.00	893
69.00	117408	147.00	4911	221.00	10238	323.00	5568
70.00	368	148.00	9910	222.00	1770	324.00	1244
72.00	302	149.00	1820	223.00	4443	327.00	1317
73.00	558	150.00	189	224.00	34088	333.00	1041
74.00	16180	151.00	281	225.00	10209	334.00	3209
75.00	19824	152.00	306	227.00	19448	335.00	536
76.00	5569	153.00	1501	228.00	1897	347.00	441
77.00	105976	154.00	1631	229.00	2911	352.00	1286
78.00	6116	155.00	3251	230.00	353	353.00	1388
79.00	12528	156.00	5167	231.00	1671	354.00	1297

Report Date: 16-Dec-2014 09:20:48 Chrom Revision: 2.2 06-Nov-2014 14:50:32
Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216002.D\BNA_CH731.rslt\spectra.d
Injection Date: 16-Dec-2014 04:02:30
Spectrum: Tune Spec: Scans 592-594(6.25-6.26) Bgrd 585(6.21)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	7811	157.00	809	232.00	167	357.00	215
81.00	10593	158.00	1109	233.00	597	359.00	307
82.00	1506	159.00	994	234.00	1315	364.00	300
83.00	1949	160.00	2094	235.00	759	365.00	4658
84.00	388	161.00	2441	236.00	929	366.00	948
85.00	2222	162.00	1085	237.00	972	370.00	381
86.00	3912	163.00	415	239.00	341	371.00	872
87.00	1326	165.00	3125	240.00	515	372.00	2677
88.00	233	166.00	1851	241.00	1589	373.00	299
91.00	2146	167.00	15759	242.00	1327	377.00	276
92.00	2357	168.00	7072	243.00	1492	383.00	521
93.00	15845	169.00	1261	244.00	26000	392.00	494
94.00	1069	170.00	600	245.00	2952	398.00	183
95.00	374	171.00	619	246.00	6020	402.00	864
96.00	703	172.00	715	247.00	585	403.00	884
97.00	267	173.00	1862	248.00	171	404.00	612
98.00	14571	174.00	2289	249.00	1027	417.00	252
99.00	8400	175.00	3901	251.00	561	419.00	457
100.00	829	176.00	1887	252.00	1024	421.00	1246
101.00	4966	177.00	1894	253.00	1373	422.00	1165
103.00	2083	178.00	1282	254.00	981	423.00	4057
104.00	3436	179.00	8559	255.00	121496	424.00	1577
105.00	2226	180.00	5862	256.00	18032	425.00	196
106.00	519	181.00	2901	257.00	2084	428.00	382
107.00	34840	182.00	854	258.00	8409	430.00	218
108.00	5221	183.00	475	259.00	1733	431.00	224
109.00	323	184.00	918	260.00	207	432.00	498
110.00	56744	185.00	5155	263.00	259	433.00	196
111.00	9364	186.00	37184	264.00	349	435.00	229
112.00	1340	187.00	10081	265.00	2690	436.00	1028
113.00	711	188.00	1350	266.00	814	437.00	369
114.00	241	189.00	3114	267.00	174	438.00	581
115.00	247	190.00	669	270.00	350	439.00	1293
116.00	2092	191.00	1558	271.00	383	440.00	1700

Report Date: 16-Dec-2014 09:20:48 Chrom Revision: 2.2 06-Nov-2014 14:50:32
Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216002.D\BNA_CH731.rslt\spectra.d
Injection Date: 16-Dec-2014 04:02:30
Spectrum: Tune Spec: Scans 592-594(6.25-6.26) Bgrd 585(6.21)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	36536	192.00	3120	272.00	191	441.00	17000
118.00	2067	193.00	2725	273.00	4043	442.00	123992
119.00	192	194.00	1148	274.00	9840	443.00	27528
120.00	340	195.00	495	275.00	52280	444.00	1375
121.00	219	196.00	7144	276.00	7062	457.00	180

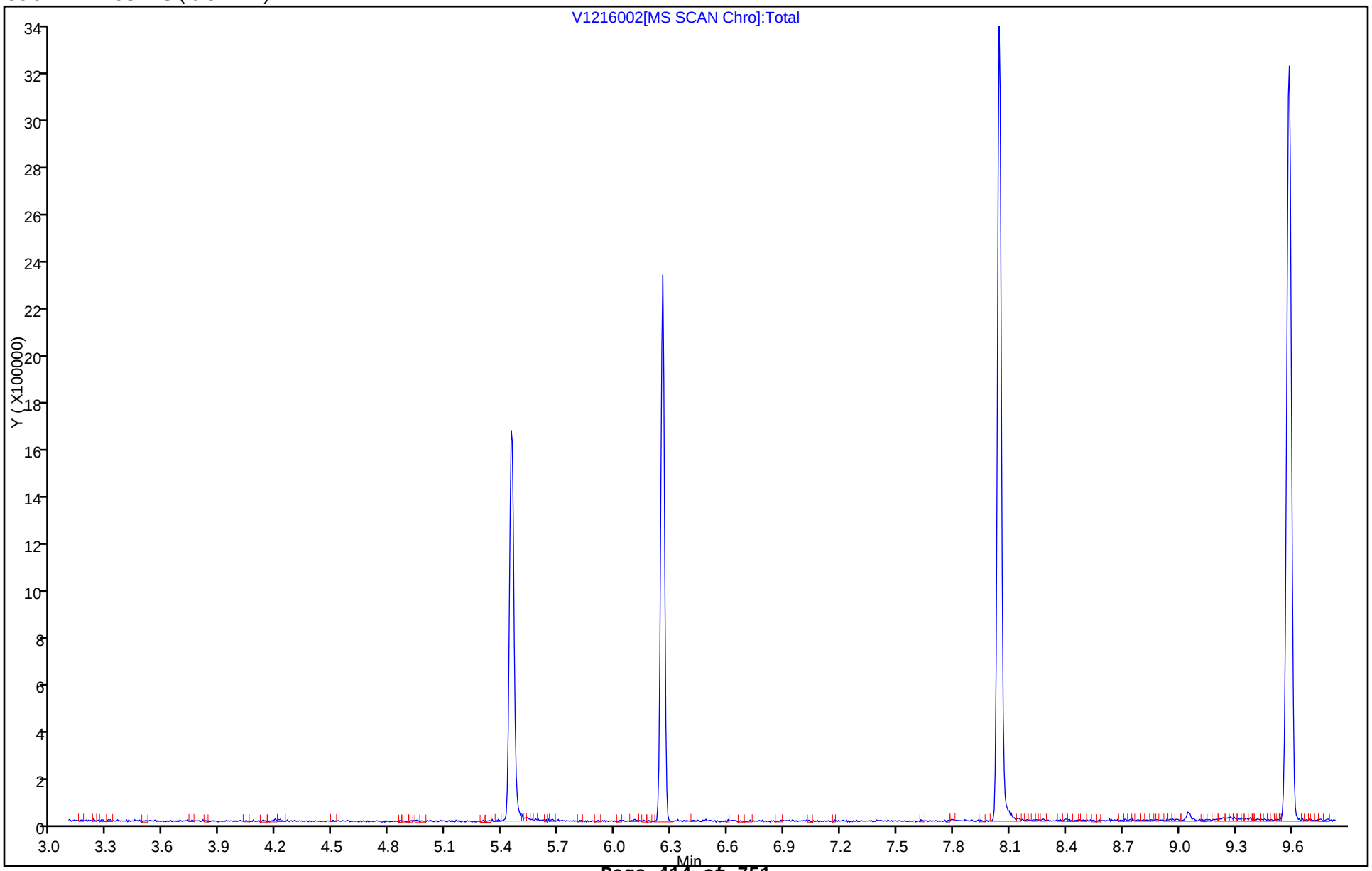
Report Date: 16-Dec-2014 09:20:48 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216002.D

Injection Date:	16-Dec-2014 04:02:30	Instrument ID:	CH731	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_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

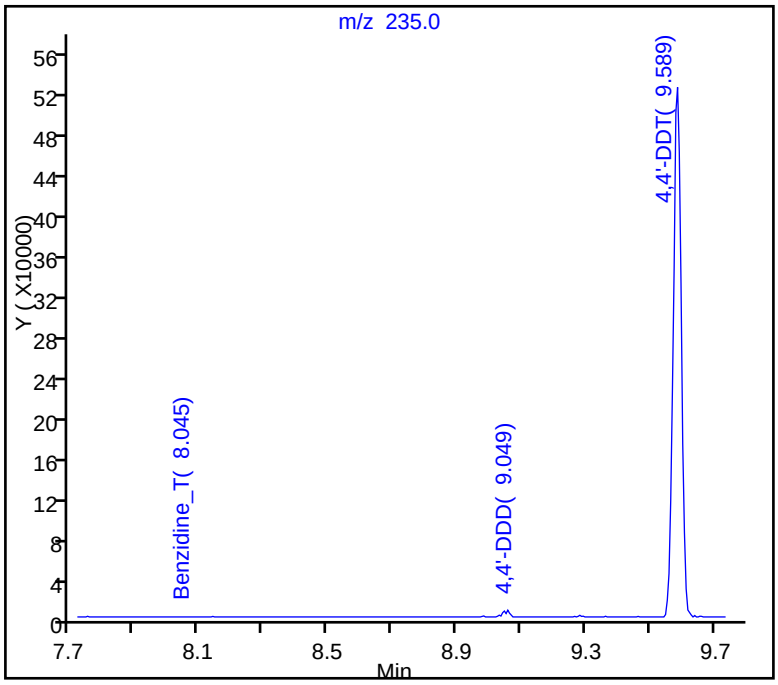


Breakdown Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216002.D
Injection Date: 16-Dec-2014 04:02:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

203 4,4'-DDT, Detector: MS SCAN



SW-846 Method

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

203 4,4'-DDT, Area = 914962
201 4,4'-DDE, Area = 0
202 4,4'-DDD, Area = 4581

%Breakdown: 0.50%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

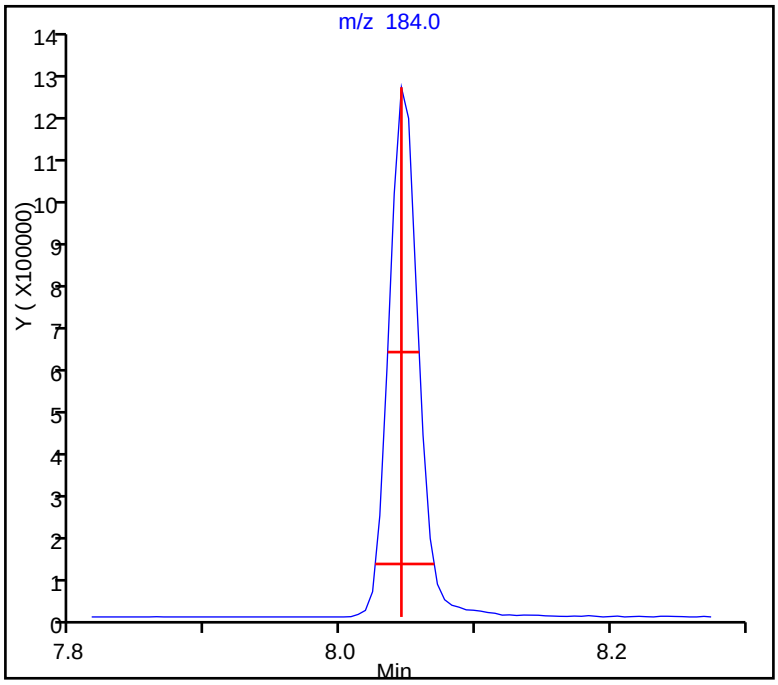
Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216002.D
Injection Date: 16-Dec-2014 04:02:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

200 Benzidine_T, Detector: MS SCAN

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

Back Width = 0.024 (min.)
Front Width = 0.019 (min.)

Tailing Factor = 1.3, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

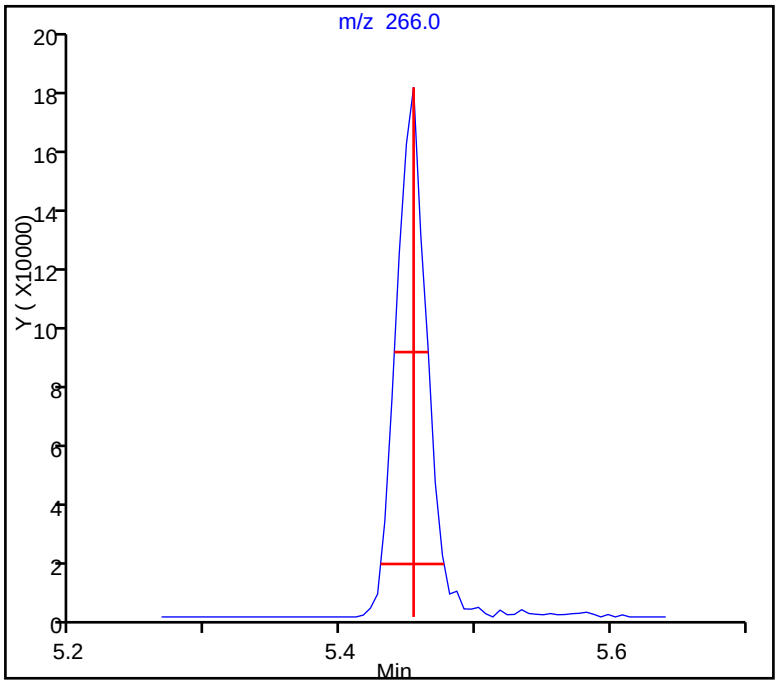
Data File: \\PITCHROM\ChromData\CH731\20141216-4887.b\V1216002.D
Injection Date: 16-Dec-2014 04:02:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

198 Pentachlorophenol_T, Detector: MS SCAN

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

Back Width = 0.023 (min.)
Front Width = 0.025 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 23-Apr-2015 09:06:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006603-002
Misc. Info.: DFTPP
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20150423-6603.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 24-Apr-2015 05:56:22 Calib Date: 05-Feb-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20150205-5565.b\V0205010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: piccolinov Date: 24-Apr-2015 05:05:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
198 Pentachlorophenol_T	266	5.447	5.447	0.000	86	175540	NR	NR	
199 DFTPP									
200 Benzidine_T	184	8.043	8.043	0.000	98	1417645	NR	NR	
201 4,4'-DDE	246		8.323					ND	
202 4,4'-DDD	235	9.047	8.863	0.184	88	8404		NR	
203 4,4'-DDT	235	9.582	9.582	0.000	97	773583	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

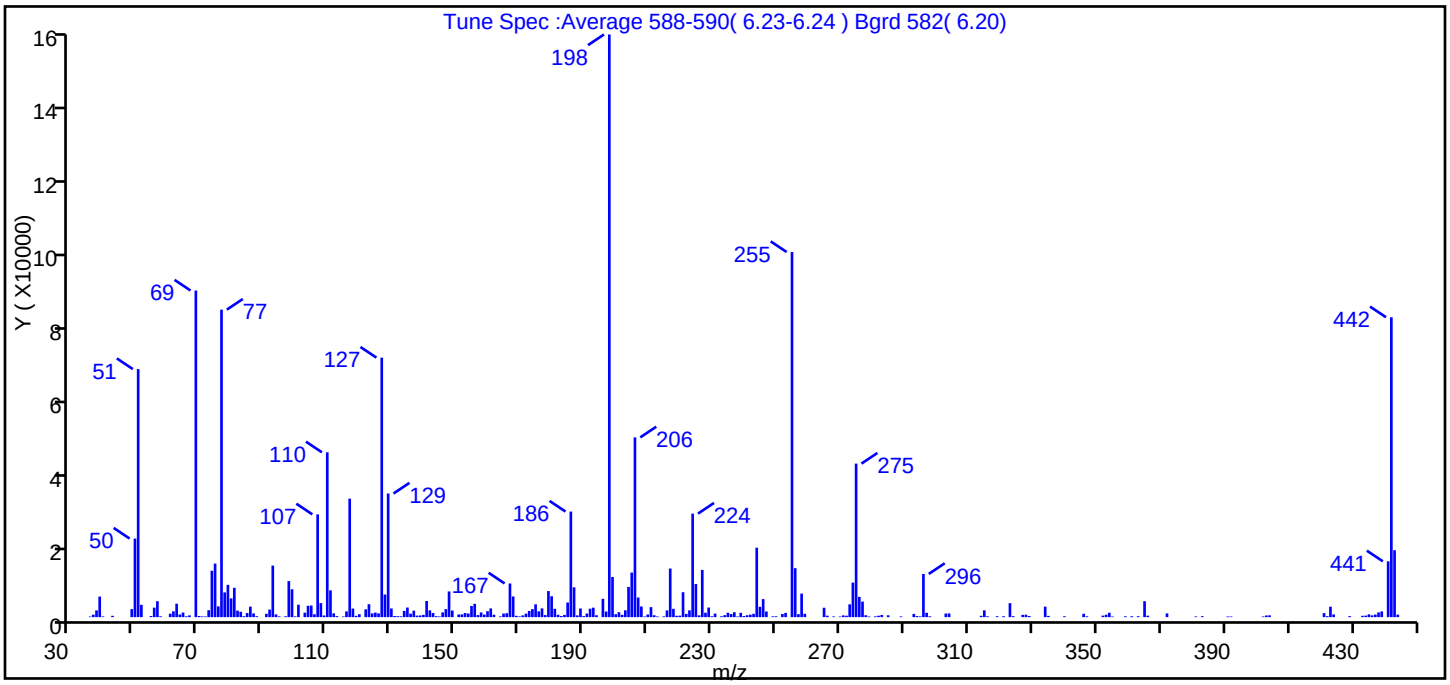
SVDFTPP50i_00022 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423002.D
Injection Date: 23-Apr-2015 09:06:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

199 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	42.6
68	<2% of mass 69	0.0 (0.0)
69	Present	56.1
70	<2% of mass 69	0.2 (0.4)
127	40-60% of mass 198	44.5
197	<1% of mass 198	1.0
199	5-9% of mass 198	6.9
275	10-30% of mass 198	26.3
365	>1% of mass 198	2.7
441	Present but less than mass 443	9.6 (83.4)
442	>40% of mass 198	51.5
443	17-23% of mass 442	11.5 (22.3)

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423002.D\BNA_CH731.rslt\spectra.d
Injection Date: 23-Apr-2015 09:06:30
Spectrum: Tune Spec :Average 588-590(6.23-6.24) Bgrd 582(6.20)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 272

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	171	122.00	2142	192.00	2307	273.00	3503
37.00	679	123.00	3533	193.00	2590	274.00	9450
38.00	1849	124.00	1024	194.00	521	275.00	42024
39.00	5631	125.00	1248	196.00	5023	276.00	5546
40.00	204	126.00	1027	197.00	1544	277.00	4257
43.00	371	127.00	71032	198.00	159488	278.00	522
49.00	2190	128.00	6189	199.00	10981	279.00	188
50.00	21504	129.00	33840	200.00	804	281.00	223
51.00	67896	130.00	2366	201.00	1354	282.00	393
52.00	3371	131.00	310	202.00	630	283.00	581
55.00	306	132.00	259	203.00	1871	285.00	511
56.00	2602	133.00	227	204.00	8280	289.00	202
57.00	4363	134.00	1712	205.00	12201	293.00	884
58.00	223	135.00	2635	206.00	49208	294.00	298
61.00	939	136.00	934	207.00	5372	295.00	193
62.00	1598	137.00	1775	208.00	2918	296.00	11823
63.00	3680	138.00	415	209.00	169	297.00	1192
64.00	725	139.00	467	210.00	726	298.00	235
65.00	1262	140.00	621	211.00	2742	303.00	980
66.00	234	141.00	4415	212.00	518	304.00	1012
67.00	481	142.00	1857	213.00	195	314.00	369
69.00	89400	143.00	1124	215.00	200	315.00	1871
70.00	321	144.00	269	216.00	1848	316.00	224
71.00	195	145.00	186	217.00	13300	319.00	257
72.00	190	146.00	1297	218.00	2285	321.00	249
73.00	1892	147.00	2194	219.00	380	323.00	3826
74.00	12692	148.00	7038	220.00	406	324.00	272
75.00	14663	149.00	1808	221.00	6825	327.00	637
76.00	2949	151.00	717	222.00	889	328.00	673
77.00	84168	152.00	758	223.00	1854	329.00	311
78.00	6782	153.00	1125	224.00	28336	334.00	2866
79.00	8837	154.00	976	225.00	9057	335.00	347
80.00	5130	155.00	3062	226.00	491	340.00	244

Report Date: 24-Apr-2015 05:56:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423002.D\BNA_CH731.rslt\spectra.d
Injection Date: 23-Apr-2015 09:06:30
Spectrum: Tune Spec :Average 588-590(6.23-6.24) Bgrd 582(6.20)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 272

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	8039	156.00	3647	227.00	12930	346.00	919
82.00	1782	157.00	569	228.00	1211	347.00	225
83.00	1462	158.00	1284	229.00	2628	352.00	419
84.00	262	159.00	703	230.00	241	353.00	661
85.00	1121	160.00	1637	231.00	970	354.00	1196
86.00	2882	161.00	2387	233.00	241	355.00	169
87.00	1015	162.00	657	234.00	547	359.00	235
88.00	252	164.00	204	235.00	1199	361.00	250
91.00	923	165.00	977	236.00	850	363.00	264
92.00	2073	166.00	1073	237.00	1347	365.00	4359
93.00	14108	167.00	9219	238.00	175	366.00	403
94.00	749	168.00	5660	239.00	1177	372.00	1023
95.00	217	169.00	364	240.00	303	381.00	195
97.00	242	170.00	195	241.00	523	383.00	267
98.00	9873	171.00	481	242.00	674	391.00	190
99.00	7628	172.00	964	243.00	910	392.00	172
100.00	210	173.00	1695	244.00	19016	402.00	185
101.00	3402	174.00	2199	245.00	2828	403.00	466
103.00	1220	175.00	3505	246.00	4940	404.00	499
104.00	3103	176.00	1592	247.00	1545	421.00	1094
105.00	3175	177.00	2406	249.00	215	422.00	270
106.00	783	178.00	566	250.00	241	423.00	2859
107.00	28136	179.00	7143	252.00	855	424.00	744
108.00	3838	180.00	5714	253.00	1163	429.00	278
109.00	451	181.00	2282	255.00	99936	433.00	370
110.00	45120	182.00	659	256.00	13405	434.00	421
111.00	7333	183.00	311	257.00	821	435.00	767
112.00	1035	184.00	611	258.00	6449	436.00	491
113.00	285	185.00	4006	259.00	916	437.00	713
115.00	179	186.00	28896	265.00	2574	438.00	1306
116.00	1576	187.00	8161	266.00	401	439.00	1574
117.00	32424	188.00	486	268.00	193	441.00	15284
118.00	2352	189.00	2370	270.00	172	442.00	82088
119.00	367	190.00	280	271.00	488	443.00	18320

Report Date: 24-Apr-2015 05:56:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423002.D\BNA_CH731.rslt\spectra.d
Injection Date: 23-Apr-2015 09:06:30
Spectrum: Tune Spec :Average 588-590(6.23-6.24) Bgrd 582(6.20)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 272

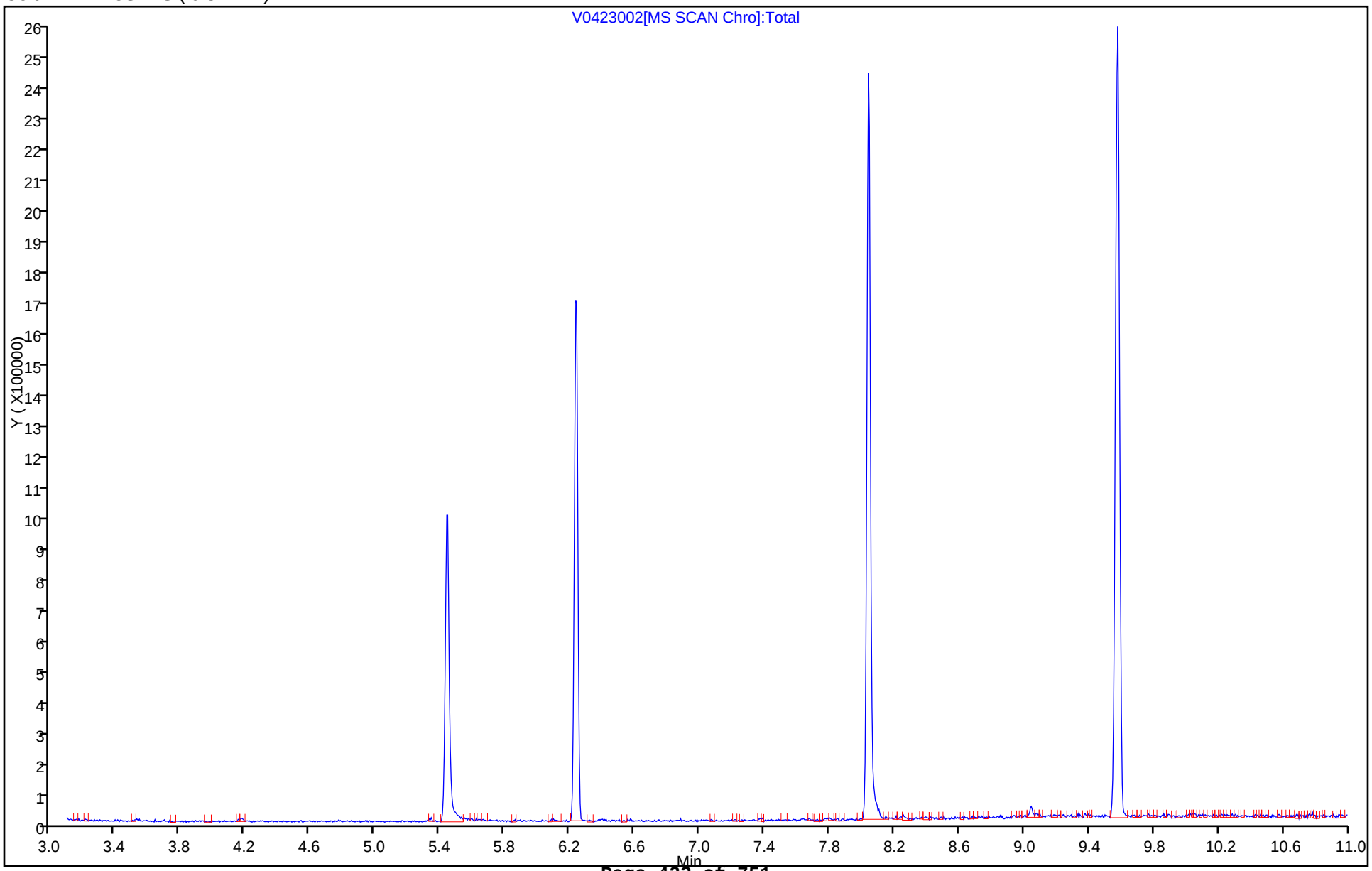
m/z	Y	m/z	Y	m/z	Y	m/z	Y
120.00	814	191.00	988	272.00	395	444.00	692

Report Date: 24-Apr-2015 05:56:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20150423-6603.b\V0423002.D				
Injection Date:	23-Apr-2015 09:06:30	Instrument ID:	CH731	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_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

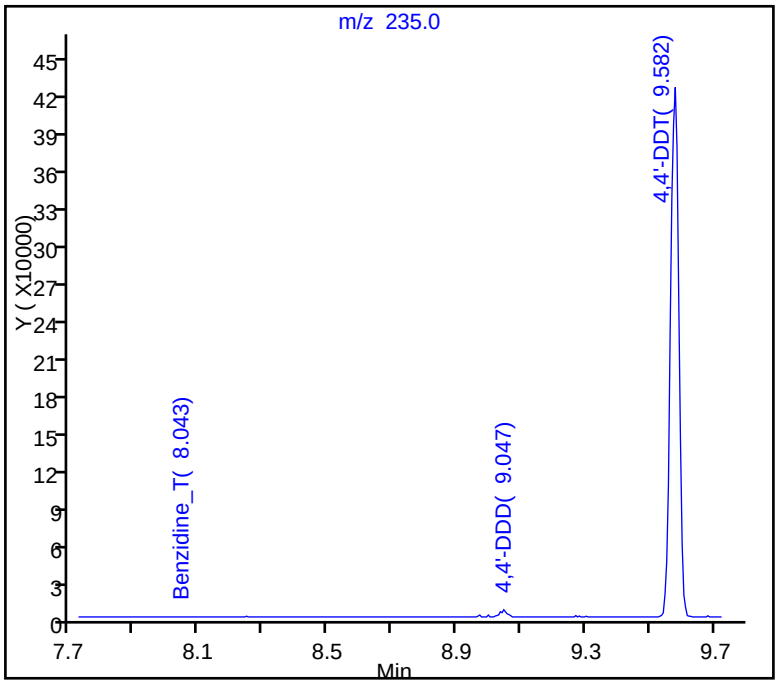


Breakdown Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423002.D
Injection Date: 23-Apr-2015 09:06:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

203 4,4'-DDT, Detector: MS SCAN



SW-846 Method

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

203 4,4'-DDT, Area = 773583
201 4,4'-DDE, Area = 0
202 4,4'-DDD, Area = 8404

%Breakdown: 1.07%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

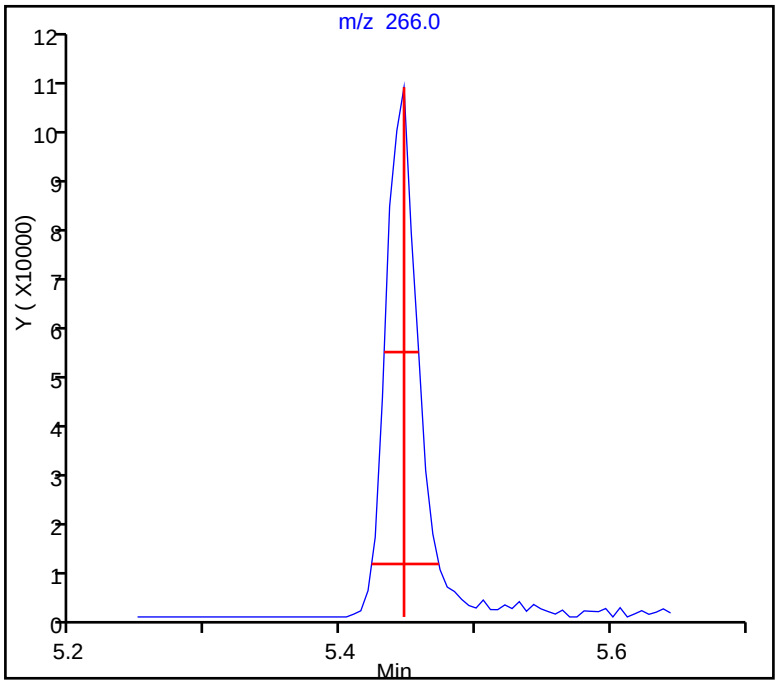
Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423002.D
Injection Date: 23-Apr-2015 09:06:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

198 Pentachlorophenol_T, Detector: MS SCAN

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

Back Width = 0.026 (min.)
Front Width = 0.024 (min.)

Tailing Factor = 1.1, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

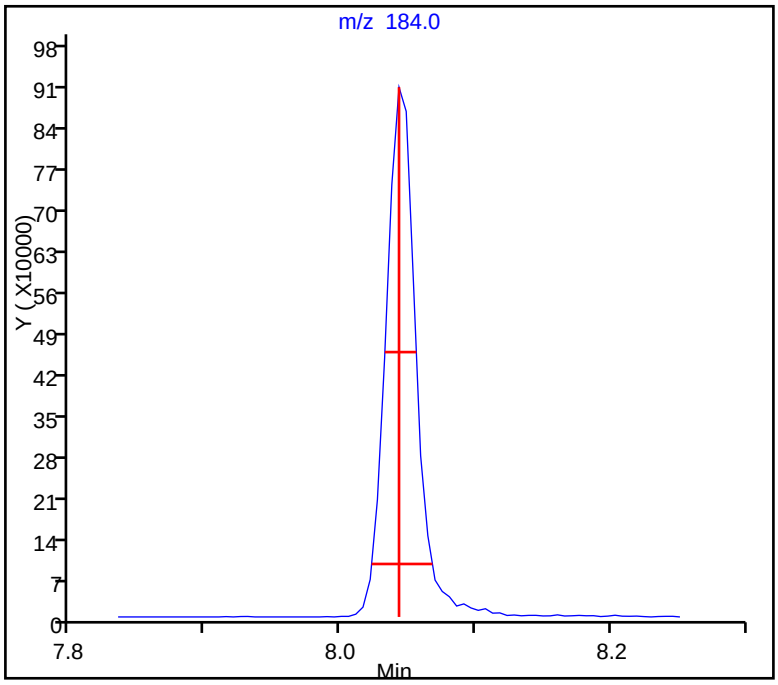
Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423002.D
Injection Date: 23-Apr-2015 09:06:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

200 Benzidine_T, Detector: MS SCAN

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

Back Width = 0.025 (min.)
Front Width = 0.020 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 24-Apr-2015 08:03:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006616-002
Misc. Info.: DFTPP
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20150424-6616.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 27-Apr-2015 05:32:56 Calib Date: 05-Feb-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20150205-5565.b\V0205010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: piccolinov Date: 24-Apr-2015 10:01:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
198 Pentachlorophenol_T	266	5.434	5.434	0.000	87	156064	NR	NR	
199 DFTPP									
200 Benzidine_T	184	8.025	8.025	0.000	98	1180285	NR	NR	
201 4,4'-DDE	246		8.323					ND	
202 4,4'-DDD	235	9.024	8.863	0.161	1	6631		NR	
203 4,4'-DDT	235	9.553	9.553	0.000	97	635605	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

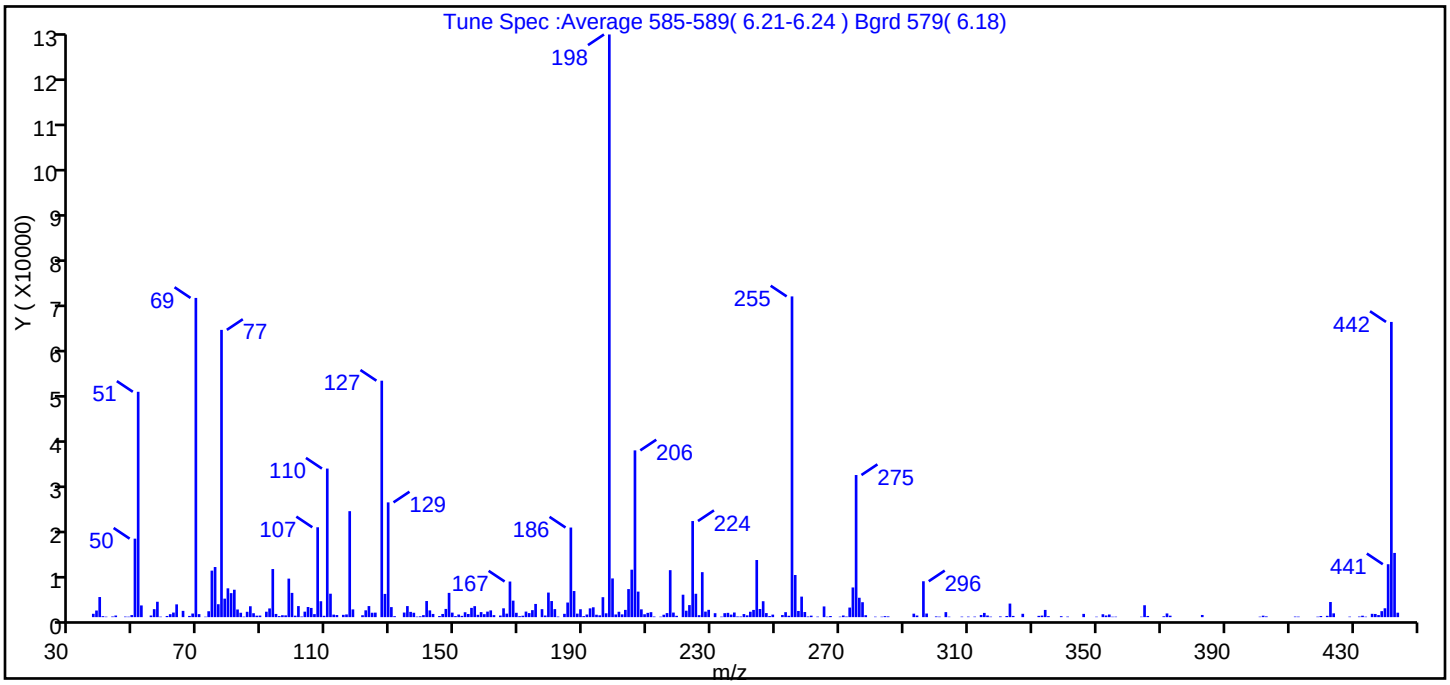
SVDFTPP50i_00022 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424002.D
Injection Date: 24-Apr-2015 08:03:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

199 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	38.7
68	<2% of mass 69	0.6 (1.1)
69	Present	54.8
70	<2% of mass 69	0.5 (0.9)
127	40-60% of mass 198	40.6
197	<1% of mass 198	0.7
199	5-9% of mass 198	6.6
275	10-30% of mass 198	24.4
365	>1% of mass 198	2.0
441	Present but less than mass 443	9.1 (82.4)
442	>40% of mass 198	50.7
443	17-23% of mass 442	11.0 (21.8)

Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424002.D\BNA_CH731.rslt\spectra.d
Injection Date: 24-Apr-2015 08:03:30
Spectrum: Tune Spec :Average 585-589(6.21-6.24) Bgrd 579(6.18)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 279

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	744	118.00	1720	197.00	855	277.00	3315
38.00	1469	121.00	422	198.00	129360	278.00	427
39.00	4465	122.00	1515	199.00	8594	281.00	109
40.00	217	123.00	2457	200.00	595	283.00	102
41.00	107	124.00	977	201.00	1199	284.00	226
43.00	147	125.00	1002	202.00	618	285.00	164
44.00	356	127.00	52496	203.00	1612	293.00	772
47.00	126	128.00	5157	204.00	6229	294.00	359
48.00	102	129.00	25480	205.00	10537	296.00	7969
49.00	453	130.00	2229	206.00	37024	297.00	805
50.00	17424	131.00	214	207.00	5668	300.00	163
51.00	50032	134.00	1020	208.00	1732	301.00	112
52.00	2599	135.00	2456	209.00	644	303.00	1115
55.00	360	136.00	1169	210.00	950	304.00	105
56.00	1773	137.00	971	211.00	1105	308.00	115
57.00	3416	138.00	118	212.00	138	310.00	120
58.00	106	139.00	182	214.00	105	312.00	119
60.00	256	140.00	447	215.00	535	314.00	469
61.00	656	141.00	3577	216.00	902	315.00	941
62.00	1016	142.00	1500	217.00	10430	316.00	361
63.00	2839	143.00	711	218.00	1015	317.00	110
65.00	1394	145.00	252	219.00	298	320.00	159
67.00	270	146.00	707	221.00	4982	322.00	250
68.00	800	147.00	1823	222.00	1429	323.00	3013
69.00	70872	148.00	5387	223.00	2678	324.00	271
70.00	669	149.00	1003	224.00	21336	327.00	743
72.00	103	150.00	231	225.00	5189	332.00	283
73.00	1314	151.00	577	226.00	435	333.00	346
74.00	10327	152.00	287	227.00	9987	334.00	1604
75.00	11125	153.00	1087	228.00	1229	335.00	223
76.00	2871	154.00	700	229.00	1623	339.00	214
77.00	63776	155.00	2055	231.00	877	341.00	126
78.00	4107	156.00	2441	233.00	116	346.00	723

Report Date: 27-Apr-2015 05:32:57 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424002.D\BNA_CH731.rslt\spectra.d
Injection Date: 24-Apr-2015 08:03:30
Spectrum: Tune Spec :Average 585-589(6.21-6.24) Bgrd 579(6.18)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 279

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	6399	157.00	515	234.00	883	350.00	100
80.00	5331	158.00	1122	235.00	951	352.00	646
81.00	6084	159.00	658	236.00	561	353.00	362
82.00	1702	160.00	1228	237.00	1030	354.00	587
83.00	975	161.00	1498	238.00	148	355.00	100
84.00	116	162.00	444	239.00	136	356.00	107
85.00	1188	164.00	355	240.00	687	364.00	103
86.00	2419	165.00	1963	241.00	398	365.00	2642
87.00	871	166.00	777	242.00	1198	366.00	259
88.00	328	167.00	7909	243.00	1607	371.00	193
89.00	352	168.00	3661	244.00	12682	372.00	823
91.00	1208	169.00	966	245.00	1808	373.00	326
92.00	1935	170.00	220	246.00	3535	383.00	482
93.00	10681	171.00	320	247.00	904	401.00	105
94.00	712	172.00	1234	248.00	243	402.00	326
95.00	237	173.00	898	249.00	562	403.00	167
96.00	423	174.00	1556	252.00	463	412.00	130
97.00	392	175.00	2932	253.00	1105	413.00	114
98.00	8554	177.00	1771	254.00	302	419.00	104
99.00	5386	178.00	359	255.00	71208	420.00	253
100.00	324	179.00	5456	256.00	9355	422.00	293
101.00	2458	180.00	3575	257.00	1371	423.00	3359
102.00	135	181.00	1783	258.00	4558	424.00	844
103.00	1217	182.00	131	259.00	1137	429.00	114
104.00	2248	184.00	735	260.00	144	432.00	137
105.00	2046	185.00	3244	261.00	331	433.00	317
106.00	670	186.00	19896	263.00	116	434.00	107
107.00	19952	187.00	5798	265.00	2378	436.00	738
108.00	3534	188.00	781	266.00	102	437.00	706
109.00	299	189.00	1755	267.00	250	438.00	460
110.00	32984	190.00	225	270.00	104	439.00	1330
111.00	5203	191.00	585	271.00	366	440.00	1971
112.00	559	192.00	1953	272.00	129	441.00	11749
113.00	467	193.00	2190	273.00	2126	442.00	65544

Report Date: 27-Apr-2015 05:32:57 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424002.D\BNA_CH731.rslt\spectra.d
Injection Date: 24-Apr-2015 08:03:30
Spectrum: Tune Spec :Average 585-589(6.21-6.24) Bgrd 579(6.18)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 279

m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	512	194.00	537	274.00	6590	443.00	14258
116.00	601	195.00	403	275.00	31552	444.00	986
117.00	23528	196.00	4429	276.00	4304		

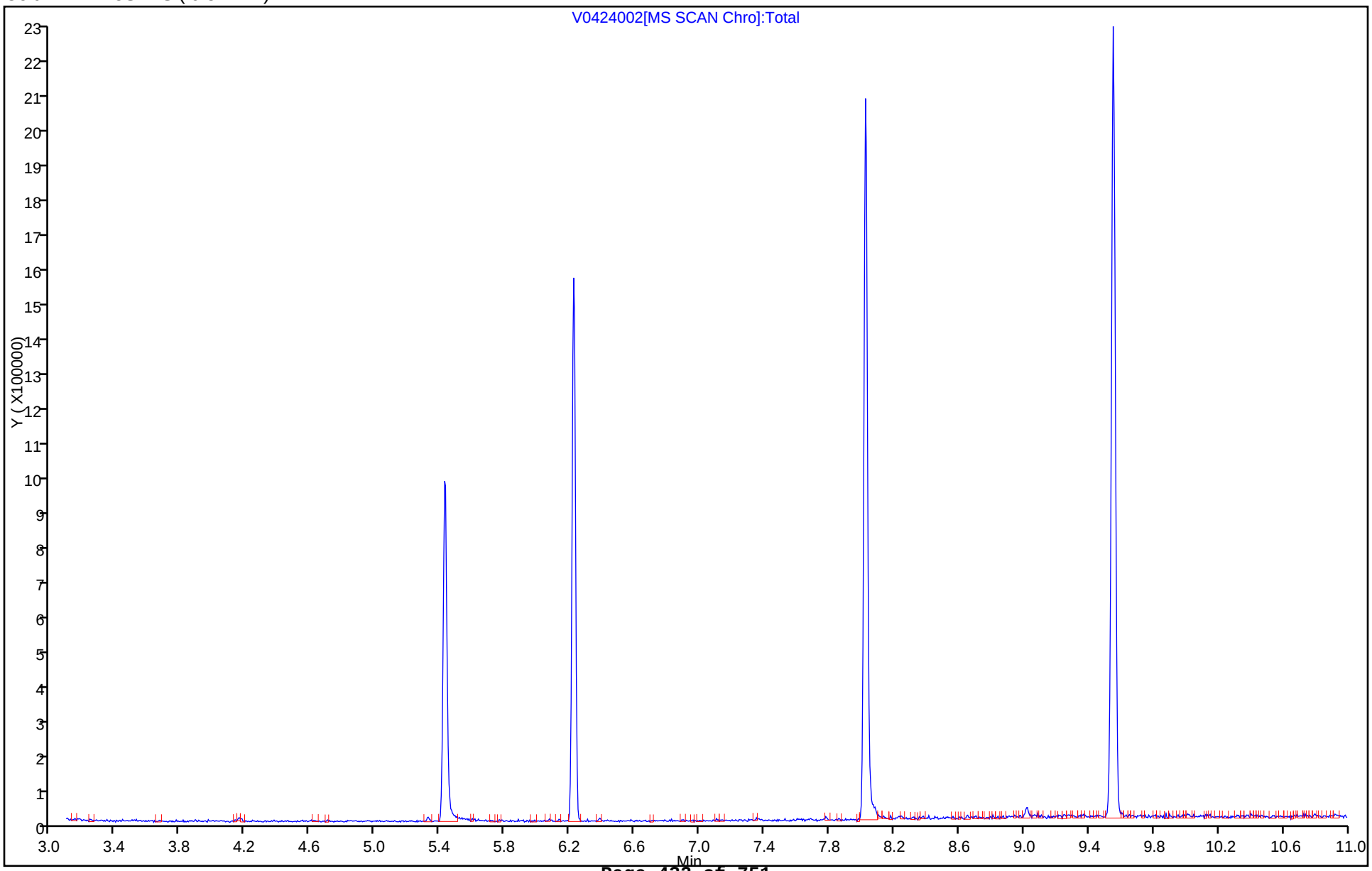
Report Date: 27-Apr-2015 05:32:57 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424002.D

Injection Date:	24-Apr-2015 08:03:30	Instrument ID:	CH731	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_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

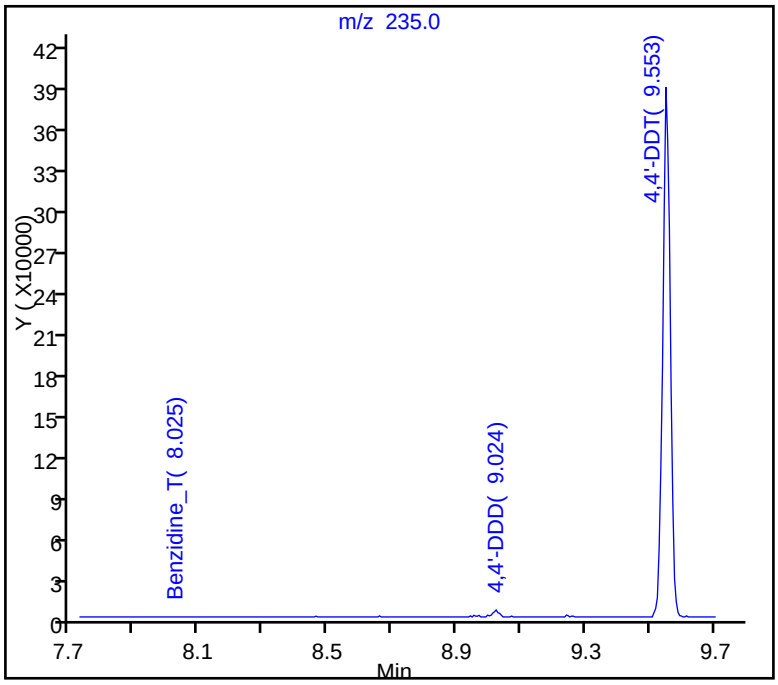


Breakdown Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424002.D
Injection Date: 24-Apr-2015 08:03:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

203 4,4'-DDT, Detector: MS SCAN



SW-846 Method

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

203 4,4'-DDT, Area = 635605
201 4,4'-DDE, Area = 0
202 4,4'-DDD, Area = 6631

%Breakdown: 1.03%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

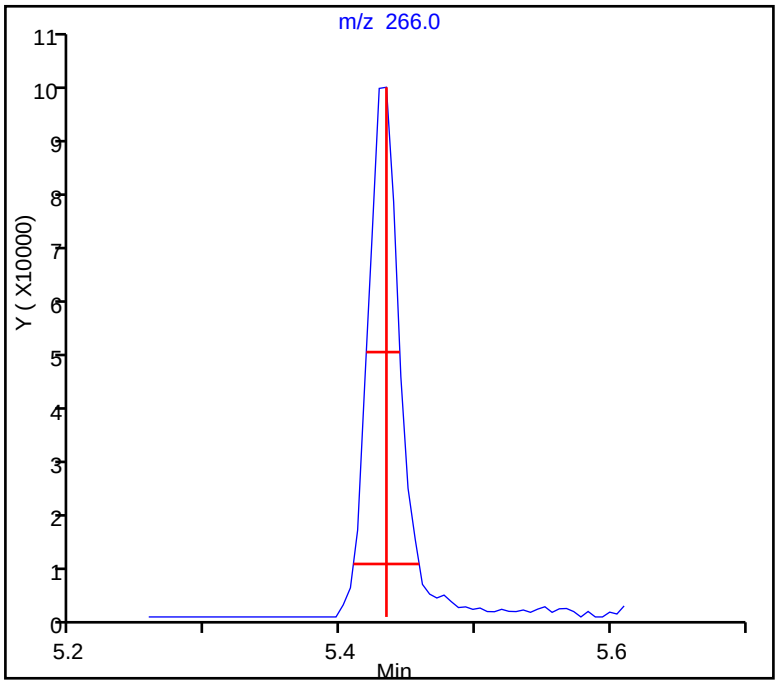
Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424002.D
Injection Date: 24-Apr-2015 08:03:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

198 Pentachlorophenol_T, Detector: MS SCAN

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

Back Width = 0.024 (min.)
Front Width = 0.025 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

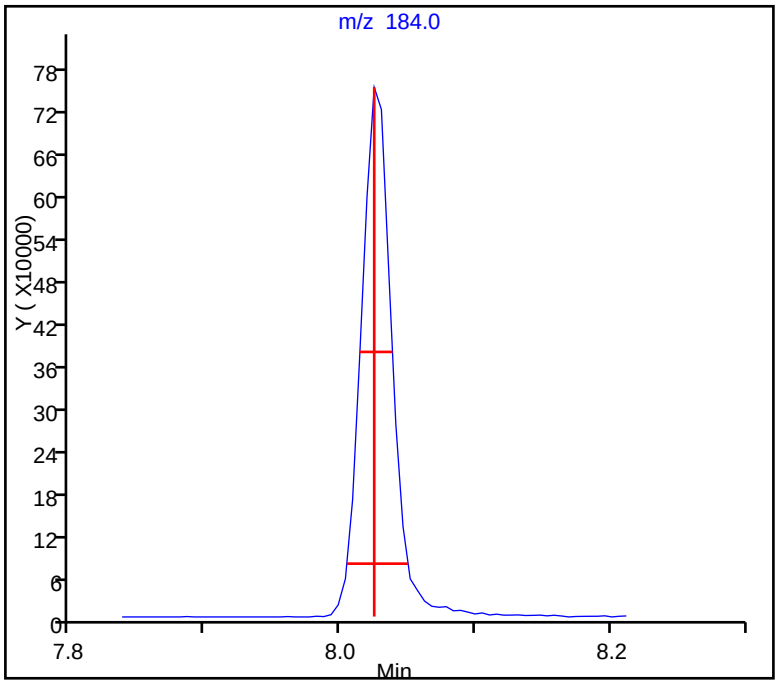
Data File: \\PITCHROM\ChromData\CH731\20150424-6616.b\V0424002.D
Injection Date: 24-Apr-2015 08:03:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

200 Benzidine_T, Detector: MS SCAN

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

Back Width = 0.025 (min.)
Front Width = 0.020 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00
Passed



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-5SilMS (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

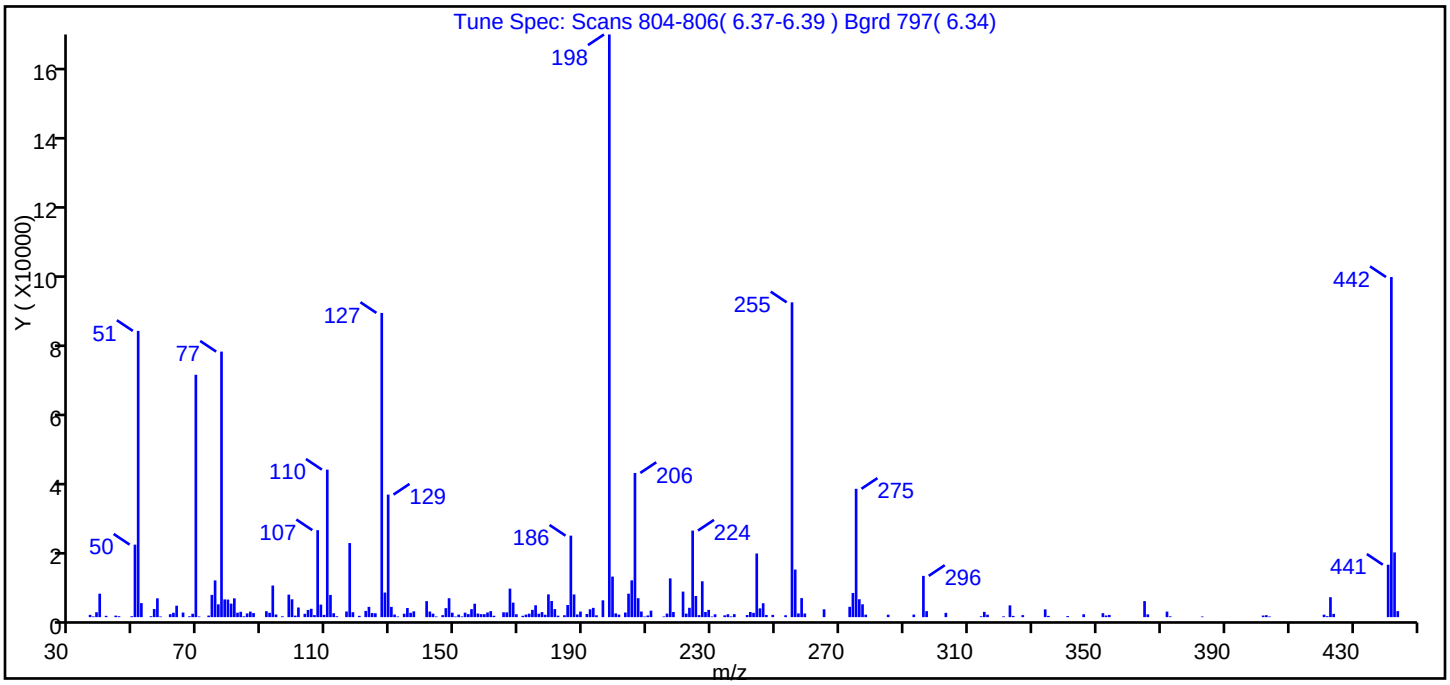
Report Date: 04-Feb-2015 06:46:43 Chrom Revision: 2.2 15-Jan-2015 13:05:58

MS Tune Report

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

Report Date: 04-Feb-2015 06:46:43 Chrom Revision: 2.2 15-Jan-2015 13:05:58
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		

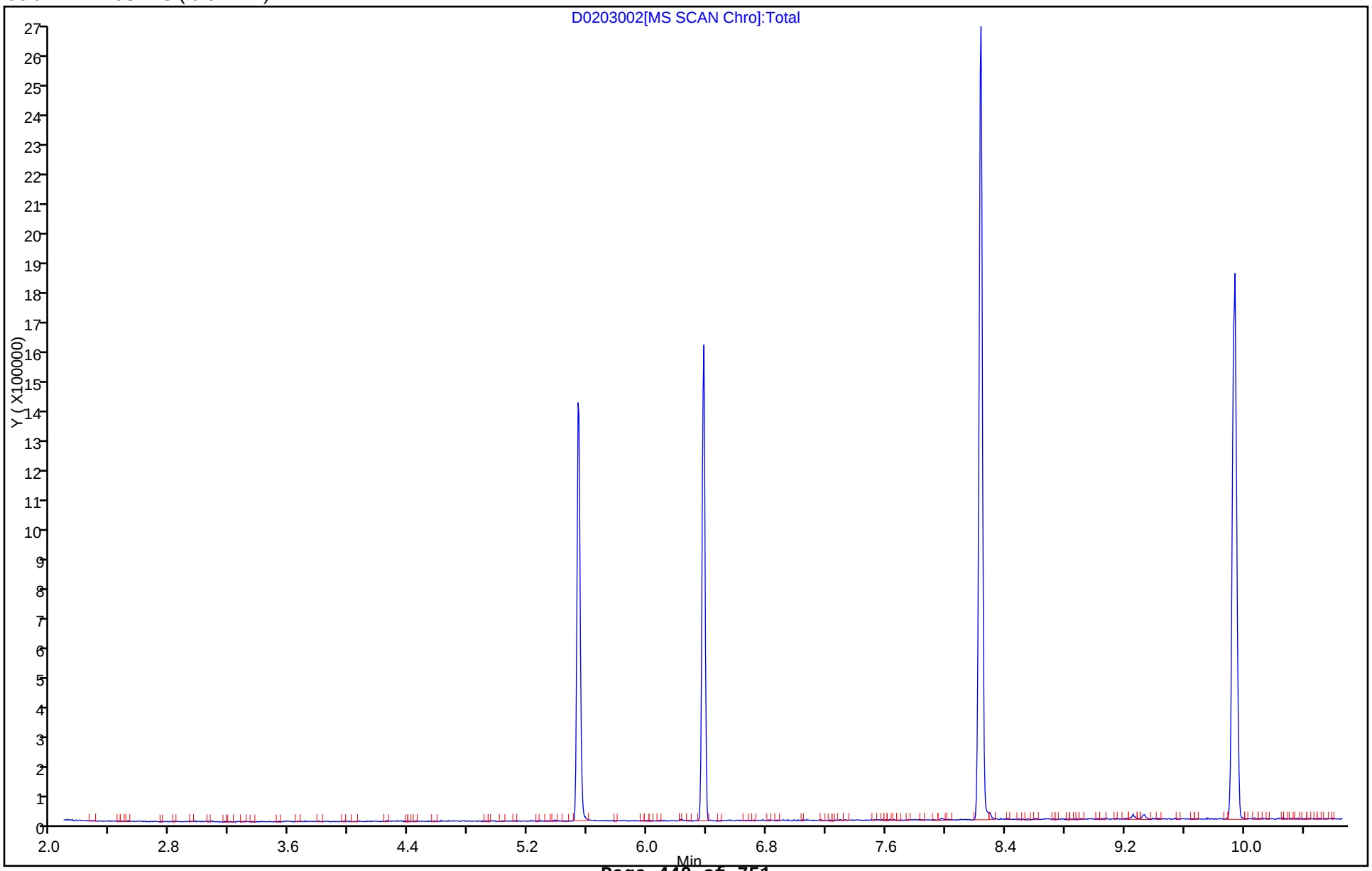
Report Date: 04-Feb-2015 06:46:43 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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-5SilMS (0.32 mm)

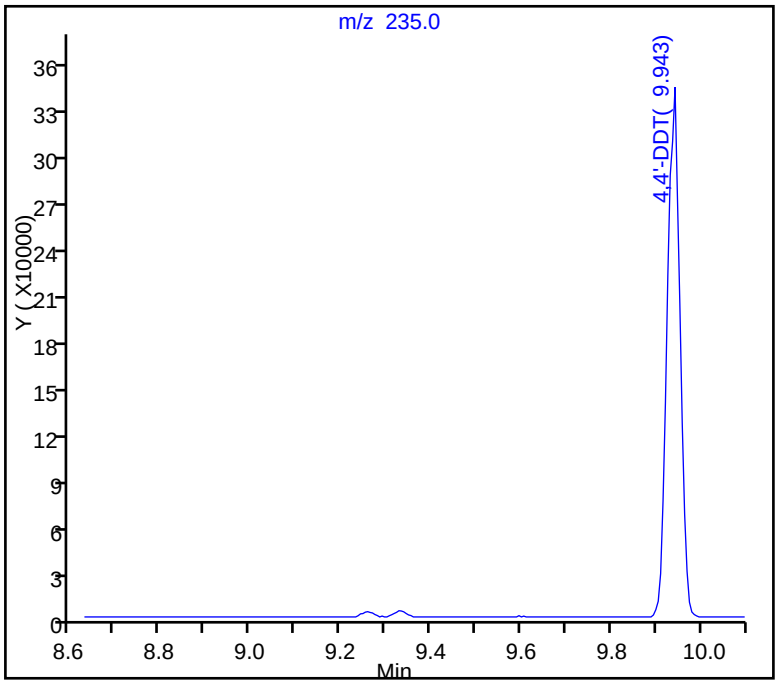


Breakdown Report

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

Report Date: 04-Feb-2015 06:46:43 Chrom Revision: 2.2 15-Jan-2015 13:05:58

Peak Tailing Report

TestAmerica Pittsburgh

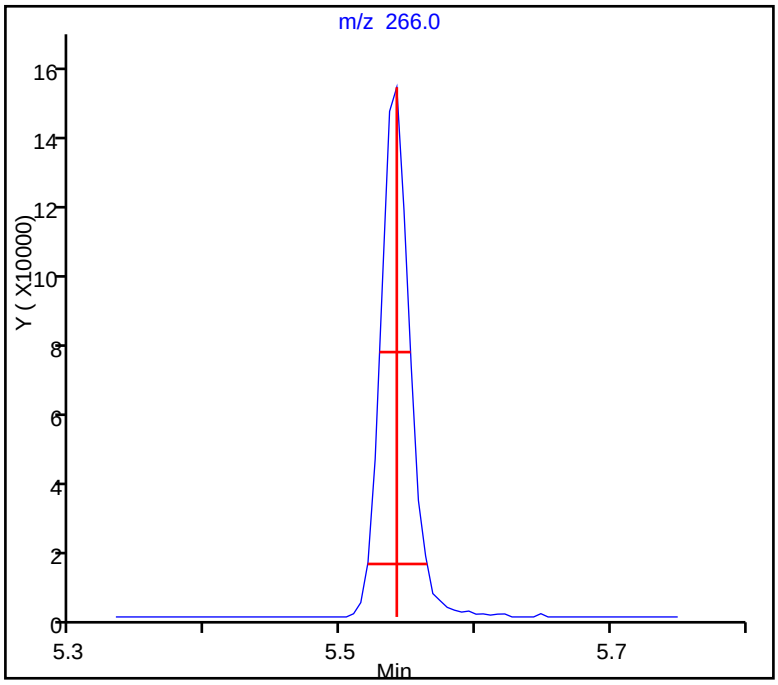
Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203002.D
Injection Date: 03-Feb-2015 05:37:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

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



Peak Tailing Report

TestAmerica Pittsburgh

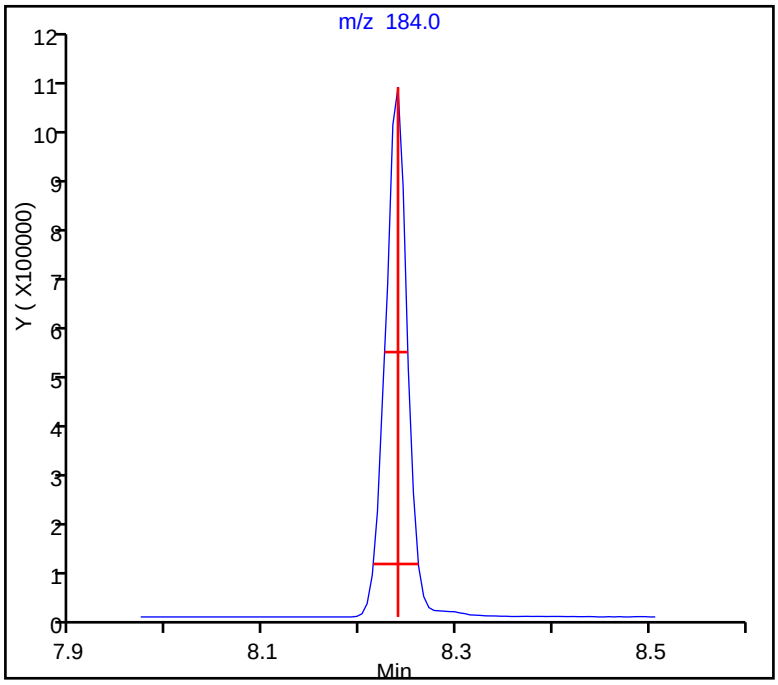
Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203002.D
Injection Date: 03-Feb-2015 05:37:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

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\20150429-6684.b\D0429002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 29-Apr-2015 11:13:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006684-002
Misc. Info.: DFTPP
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20150429-6684.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Apr-2015 06:33:42 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: XAWRK003

First Level Reviewer: piccolinov Date: 29-Apr-2015 11:42:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.515	5.515	0.000	89	267709	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.165	8.165	0.000	99	2265216	NR	NR	
192 4,4'-DDE	246		9.137					ND	
193 4,4'-DDD	235	9.217	9.217	0.000	92	11295		NR	
194 4,4'-DDT	235	9.810	9.810	0.000	97	920962	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

SVDFTPP50i_00022 Amount Added: 1.00 Units: mL

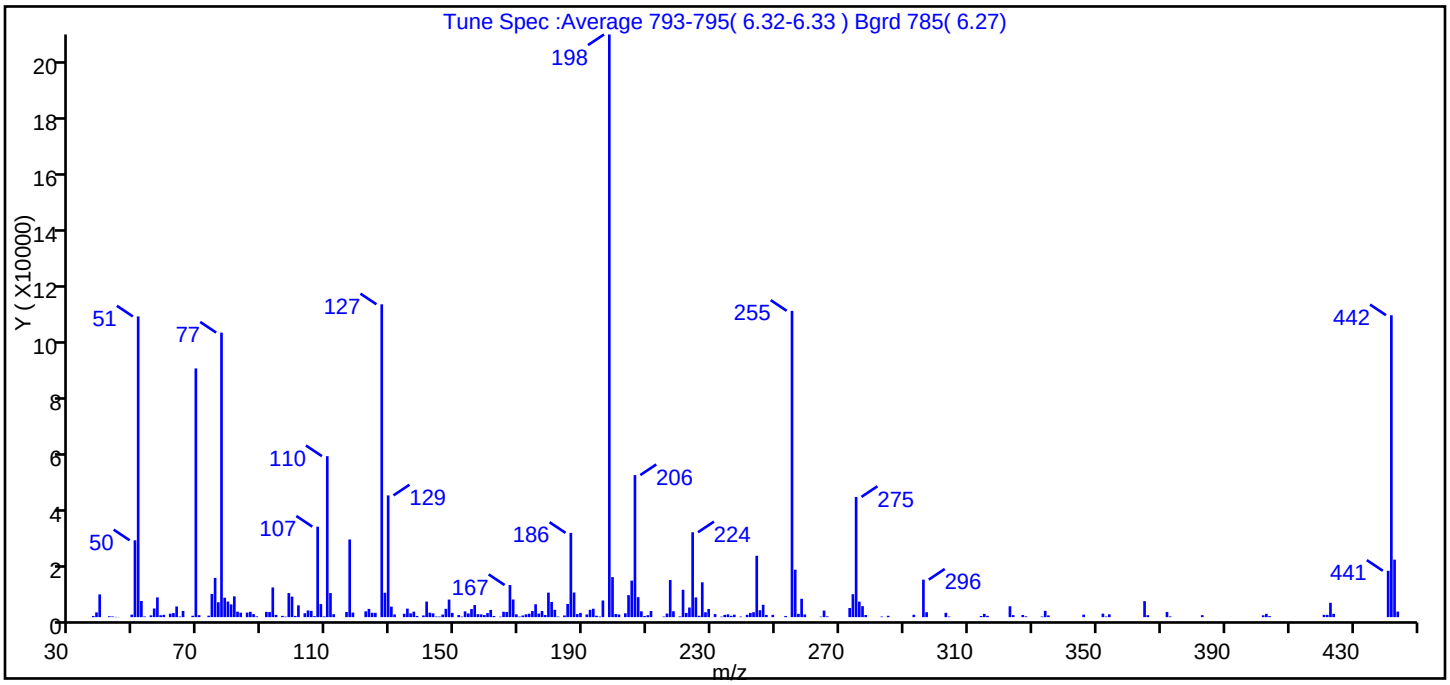
Report Date: 30-Apr-2015 06:33:43 Chrom Revision: 2.2 09-Apr-2015 10:05:40

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429002.D
Injection Date: 29-Apr-2015 11:13:30 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	51.6
68	<2% of mass 69	0.2 (0.6)
69	Present	42.7
70	<2% of mass 69	0.3 (0.8)
127	40-60% of mass 198	53.7
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.9
275	10-30% of mass 198	20.6
365	>1% of mass 198	2.7
441	Present but less than mass 443	8.0 (80.6)
442	>40% of mass 198	51.8
443	17-23% of mass 442	9.9 (19.1)

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429002.D\BNA_CH732.rslt\spectra.d
Injection Date: 29-Apr-2015 11:13:30
Spectrum: Tune Spec :Average 793-795(6.32-6.33) Bgrd 785(6.27)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 225

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	17	109.00	256	178.00	740	247.00	794
37.00	422	110.00	56760	179.00	8639	249.00	805
38.00	1670	111.00	8482	180.00	5365	253.00	418
39.00	8012	112.00	1038	181.00	2606	255.00	108008
42.00	311	116.00	1811	182.00	214	256.00	16728
43.00	228	117.00	27384	184.00	592	257.00	1163
44.00	88	118.00	1609	185.00	4663	258.00	6477
45.00	47	122.00	2046	186.00	29712	259.00	955
49.00	871	123.00	2905	187.00	8683	264.00	176
50.00	27096	124.00	1546	188.00	1080	265.00	2315
51.00	106024	125.00	1515	189.00	1489	266.00	266
52.00	5691	127.00	110304	191.00	968	273.00	3222
53.00	240	128.00	8600	192.00	2572	274.00	8093
55.00	630	129.00	42928	193.00	2961	275.00	42392
56.00	3049	130.00	3711	194.00	497	276.00	5467
57.00	6962	131.00	954	195.00	203	277.00	3882
58.00	670	134.00	1195	196.00	5868	278.00	756
59.00	820	135.00	3010	198.00	205440	283.00	213
61.00	1221	136.00	1345	199.00	14114	285.00	478
62.00	1435	137.00	1932	200.00	1078	293.00	848
63.00	3770	138.00	420	201.00	943	296.00	13223
64.00	212	140.00	598	203.00	1355	297.00	1755
65.00	2175	141.00	5494	204.00	7756	303.00	1534
68.00	489	142.00	1560	205.00	12894	304.00	199
69.00	87696	143.00	1337	206.00	50088	314.00	402
70.00	680	144.00	211	207.00	7049	315.00	1157
73.00	521	145.00	207	208.00	2060	316.00	463
74.00	8189	146.00	904	209.00	403	323.00	3847
75.00	13827	147.00	2924	210.00	692	324.00	715
76.00	5248	148.00	6198	211.00	2165	327.00	773
77.00	100328	149.00	1499	215.00	208	328.00	294
78.00	6844	151.00	739	216.00	1272	333.00	217
79.00	5502	152.00	193	217.00	13100	334.00	2229

Report Date: 30-Apr-2015 06:33:43 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429002.D\BNA_CH732.rslt\spectra.d
Injection Date: 29-Apr-2015 11:13:30
Spectrum: Tune Spec :Average 793-795(6.32-6.33) Bgrd 785(6.27)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 225

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	4494	153.00	2030	218.00	2083	335.00	611
81.00	7330	154.00	1303	220.00	255	346.00	880
82.00	1926	155.00	2869	221.00	9655	352.00	1238
83.00	1565	156.00	4260	222.00	1480	353.00	213
85.00	1606	157.00	1045	223.00	3396	354.00	993
86.00	1882	158.00	990	224.00	29928	365.00	5646
87.00	1058	159.00	731	225.00	6957	366.00	688
88.00	268	160.00	1429	226.00	494	372.00	1805
91.00	1866	161.00	2562	227.00	12290	373.00	255
92.00	1798	162.00	421	228.00	1736	383.00	704
93.00	10471	164.00	177	229.00	2874	402.00	653
94.00	785	165.00	1912	231.00	1075	403.00	1173
96.00	443	166.00	1835	233.00	177	404.00	362
97.00	172	167.00	11319	234.00	810	421.00	823
98.00	8490	168.00	6219	235.00	993	422.00	800
99.00	7241	169.00	990	236.00	485	423.00	5061
100.00	428	170.00	203	237.00	863	424.00	1170
101.00	4171	171.00	582	239.00	202	441.00	16344
103.00	1382	172.00	995	241.00	825	442.00	106456
104.00	2349	173.00	1206	242.00	1477	443.00	20280
105.00	2220	174.00	2152	243.00	1747	444.00	1955
106.00	359	175.00	4535	244.00	21640		
107.00	31904	176.00	1267	245.00	2425		
108.00	4604	177.00	2182	246.00	4359		

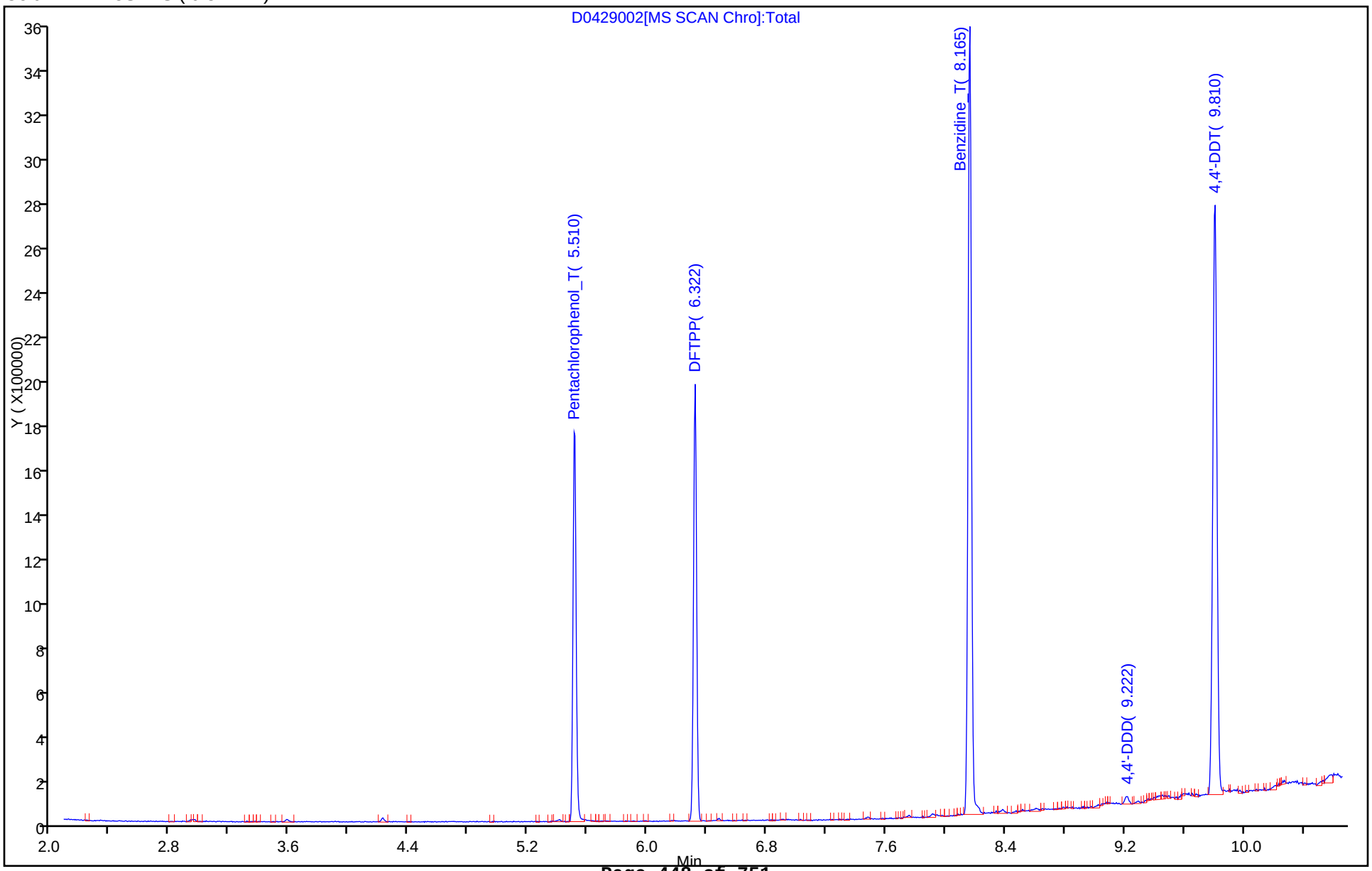
Report Date: 30-Apr-2015 06:33:43 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429002.D

Injection Date:	29-Apr-2015 11:13:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	DFTPP			Worklist Smp#:	2
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

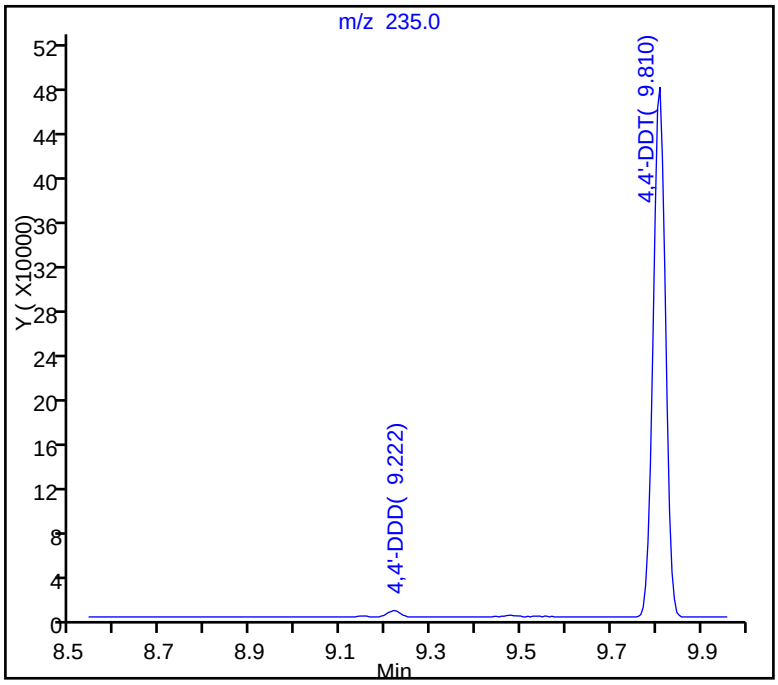


Breakdown Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429002.D
Injection Date: 29-Apr-2015 11:13:30 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 = 920962
192 4,4'-DDE, Area = 0
193 4,4'-DDD, Area = 11295

%Breakdown: 1.21%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

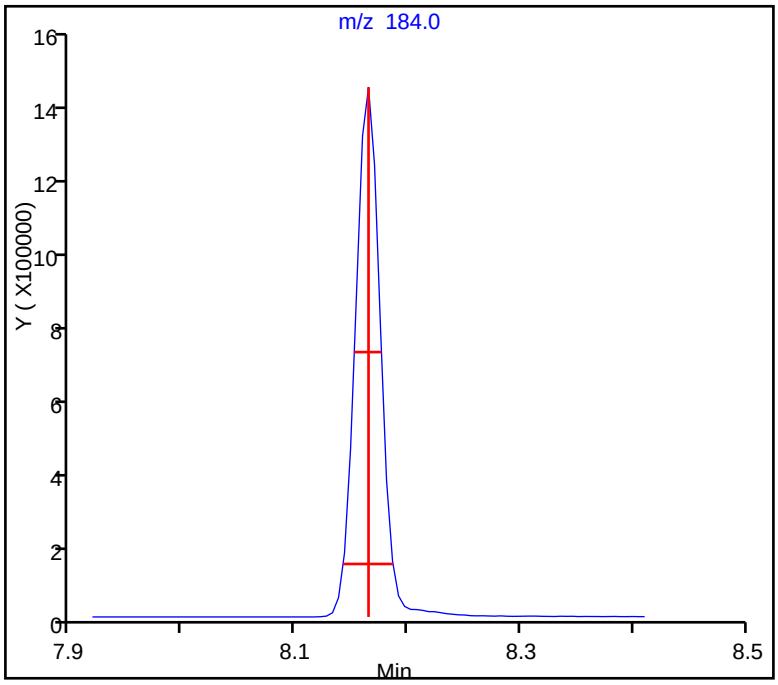
Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429002.D
Injection Date: 29-Apr-2015 11:13:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

191 Benzidine_T, Detector: MS SCAN

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

Back Width = 0.022 (min.)
Front Width = 0.023 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

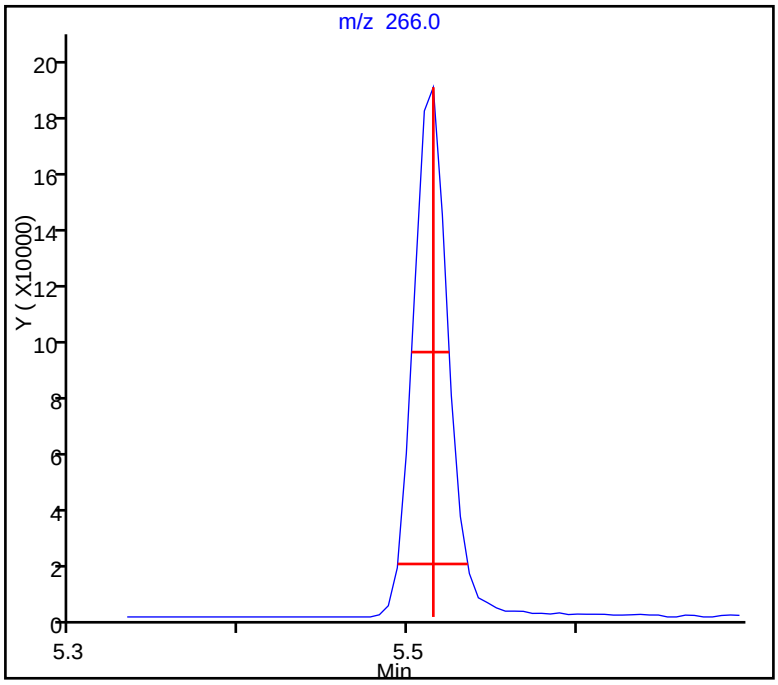
Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429002.D
Injection Date: 29-Apr-2015 11:13:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

189 Pentachlorophenol_T, Detector: MS SCAN

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

Back Width = 0.020 (min.)
Front Width = 0.021 (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.: 180-43220-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-139286/1-A

Matrix: Water | Lab File ID: V0423015.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 04/22/2015 11:36

Sample wt/vol: 250(mL) | Date Analyzed: 04/23/2015 12:24

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 139416 | 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)	74		27-114
321-60-8	2-Fluorobiphenyl	70		28-109
1718-51-0	Terphenyl-d14 (Surr)	71		20-118
367-12-4	2-Fluorophenol (Surr)	72		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	73		30-118
4165-62-2	Phenol-d5 (Surr)	73		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423015.D
Lims ID: MB 180-139286/1-A
Client ID:
Sample Type: MB
Inject. Date: 23-Apr-2015 12:24:30 ALS Bottle#: 14 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006603-015
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20150423-6603.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 24-Apr-2015 05:56:24 Calib Date: 05-Feb-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20150205-5565.b\V0205010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: piccolinov Date: 24-Apr-2015 05:11:17

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	6.299	6.304	-0.005	88	89650	8.00	8.00	
* 2 Naphthalene-d8	136	7.506	7.512	-0.006	98	315097	8.00	8.00	
* 3 Acenaphthene-d10	164	9.135	9.141	-0.006	91	227196	8.00	8.00	
* 4 Phenanthrene-d10	188	10.508	10.519	-0.011	96	421219	8.00	8.00	
* 5 Chrysene-d12	240	14.050	14.072	-0.022	95	466507	8.00	8.00	
* 6 Perylene-d12	264	17.004	17.031	-0.027	97	437418	8.00	8.00	
$ 7 2-Fluorophenol	112	4.974	4.979	-0.005	90	372016	40.0	28.8	
$ 8 Phenol-d5	99	5.957	5.968	-0.011	87	462153	40.0	29.0	
$ 9 Nitrobenzene-d5	82	6.822	6.828	-0.006	92	558705	40.0	29.6	
$ 10 2-Fluorobiphenyl	172	8.494	8.500	-0.006	99	1162644	40.0	27.9	
$ 11 2,4,6-Tribromophenol	330	9.862	9.867	-0.005	88	153080	40.0	29.0	
$ 12 Terphenyl-d14	244	12.287	12.298	-0.011	99	1344739	40.0	28.4	
13 1,4-Dioxane	88		1.811					ND	
14 N-Nitrosodimethylamine	74		2.479					ND	
15 Pyridine	79		2.554					ND	
16 Dimethylformamide	73		3.480					ND	
18 Dibromoacetonitrile	120		3.590					ND	
19 2-Picoline	93		4.030					ND	
20 N-Nitrosomethylethylamine	88		4.233					ND	
21 Acrylamide	71	4.968	4.597	0.372	27	2299			NC
22 Methyl methanesulfonate	80		4.723					ND	
23 Phenylmercaptan	110	4.974	5.000	-0.026	44	2894			NC
24 N-Nitrosodiethylamine	102		5.115					ND	
25 Ethyl methanesulfonate	79		5.517					ND	
26 Benzaldehyde	77		5.861					ND	
28 Aniline	93		5.978					ND	
27 Phenol	94		5.978					ND	
30 Pentachloroethane	167		6.025					ND	
29 Bis(2-chloroethyl)ether	93		6.037					ND	
31 2-Chlorophenol	128		6.107					ND	
32 n-Decane	43		6.155					ND	
33 1,3-Dichlorobenzene	146		6.245					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 1,4-Dichlorobenzene	146		6.320					ND	
35 1,2,3-Trimethylbenzene	105		6.386					ND	
36 Benzyl alcohol	108		6.438					ND	
37 1,2-Dichlorobenzene	146		6.470					ND	
38 2-Methylphenol	108		6.550					ND	
39 Indene	116		6.555					ND	
40 2,2'-oxybis[1-chloropropan	45		6.566					ND	
42 N-Nitrosomorpholine	116		6.632					ND	
41 N-Nitrosopyrrolidine	100		6.651					ND	
46 2-Toluidine	106		6.664					ND	
43 Acetophenone	105		6.684					ND	
44 N-Nitrosodi-n-propylamine	70		6.684					ND	
45 4-Methylphenol	108		6.689					ND	
194 Benzotrichloride TIC	159	9.130	6.750	2.380	0	2763			0
47 Hexachloroethane	117		6.796					ND	
48 Nitrobenzene	77		6.849					ND	
49 N-Nitrosopiperidine	114		6.926					ND	
50 Isophorone	82		7.068					ND	
51 2-Nitrophenol	139		7.148					ND	
52 2,4-Dimethylphenol	107		7.180					ND	
54 o,o',o''-Triethylphosphoro	198		7.182					ND	
56 Benzoic acid	122		7.244					ND	
53 4-Chloro-3-nitro-alpha,alp	179		7.252					ND	
55 Bis(2-chloroethoxy)methane	93		7.260					ND	
58 alpha,alpha-Dimethyl phene	58		7.353					ND	
57 2,4-Dichlorophenol	162		7.378					ND	
61 Azobenzene	77		7.452					ND	
59 1,2,4-Trichlorobenzene	180		7.458					ND	
60 Naphthalene	128		7.533					ND	
62 4-Chloroaniline	127		7.570					ND	
63 2,6-Dichlorophenol	162		7.586					ND	
65 Hexachloropropene	213		7.627					ND	
64 Hexachlorobutadiene	225		7.650					ND	
66 Quinoline	129		7.786					ND	
68 N-Nitrosodi-n-butylamine	84		7.818					ND	
69 p-Phenylene diamine	108	7.506	7.834	-0.328	51	51570			NC
67 Caprolactam	113		7.859					ND	
70 4-Chloro-3-methylphenol	107		8.008					ND	
71 Safrole, Total	162		8.026					ND	
72 2-Methylnaphthalene	142		8.174					ND	
74 Diphenamid	168	8.489	8.200	0.289	40	15271			NC
73 Phthalic anhydride	104	8.494	8.229	0.265	34	3034			NC
75 1-Methylnaphthalene	142		8.265					ND	
76 Hexachlorocyclopentadiene	237		8.318					ND	
77 1,2,4,5-Tetrachlorobenzene	216		8.329					ND	
78 2,4,6-Trichlorophenol	196		8.425					ND	
79 2,4,5-Trichlorophenol	196		8.462					ND	
80 1,1'-Biphenyl	154		8.596					ND	
81 2-Chloronaphthalene	162		8.623					ND	
83 1-Chloronaphthalene	162		8.648					ND	
82 2-Nitroaniline	65		8.703					ND	
84 1,4-Dinitrobenzene	168	8.489	8.769	-0.280	32	15271			NC

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 1,4-Naphthoquinone	158	8.489	8.771	-0.282	45	3067		NC	
86 Dimethyl phthalate	163		8.852					ND	
87 1,3-Dinitrobenzene	168		8.890					ND	
88 2,6-Dinitrotoluene	165		8.917					ND	
89 Acenaphthylene	152		9.013					ND	
90 3-Nitroaniline	138		9.077					ND	
91 Acenaphthene	153		9.173					ND	
92 2,4-Dinitrophenol	184		9.173					ND	
93 4-Nitrophenol	109		9.221					ND	
94 2,4-Dinitrotoluene	165		9.290					ND	
96 Pentachlorobenzene	250		9.299					ND	
95 Dibenzofuran	168		9.328					ND	
98 1-Naphthylamine	143		9.340					ND	
97 2,3,5,6-Tetrachlorophenol	232		9.397					ND	
99 2,3,4,6-Tetrachlorophenol	232		9.440					ND	
100 2-Naphthylamine	143		9.467					ND	
102 Hexadecane	57		9.493					ND	
101 Diethyl phthalate	149	9.488	9.493	-0.005	94	12115		0.3041	
107 N-Nitro-o-toluidine	152	9.862	9.586	0.276	42	2064		NC	
103 4-tert-Octylphenol	135		9.624					ND	
104 4-Chlorophenyl phenyl ethe	204		9.627					ND	
105 4-Nitroaniline	138		9.643					ND	
106 Fluorene	166		9.643					ND	
108 4,6-Dinitro-2-methylphenol	198		9.670					ND	
110 Diphenylamine	169		9.677					ND	
109 N-Nitrosodiphenylamine	169		9.729					ND	
111 1,2-Diphenylhydrazine	77		9.771					ND	
112 1,3,5-Trinitrobenzene	213		9.896					ND	
113 Phenacetin	108		9.939					ND	
114 Phorate	121		9.944					ND	
115 2,3,7,8-TCDD TIC	322		10.000					ND	
116 4-Bromophenyl phenyl ether	248		10.076					ND	
117 Dimethoate	87		10.099					ND	
118 Hexachlorobenzene	284		10.161					ND	
119 Atrazine	200		10.193					ND	
120 4-Aminobiphenyl	169	9.857	10.265	-0.408	56	8784		NC	
123 Pronamide	173	9.862	10.297	-0.435	56	3583		NC	
124 Pentachloronitrobenzene	237		10.302					ND	
121 n-Octadecane	57		10.332					ND	
122 Pentachlorophenol	266		10.338					ND	
125 Disulfoton	88		10.419					ND	
127 Dinoseb	211		10.475					ND	
126 Phenanthrene	178		10.541					ND	
128 Anthracene	178		10.594					ND	
129 Hexachlorophene TIC	198		10.600					ND	
130 Carbazole	167		10.733					ND	
131 Methyl parathion	109		10.793					ND	
132 Di-n-butyl phthalate	149		11.021					ND	
133 Ethyl Parathion	109		11.189					ND	
134 4-Nitroquinoline-1-oxide	190		11.263					ND	
135 Methapyrilene	58		11.317					ND	
136 Isodrin	193		11.661					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
137 Fluoranthene	202		11.844					ND	
138 Benzidine	184		11.967					ND	
139 Pyrene	202		12.143					ND	
140 1,2,3,4 -Tetrachlorobenzen	216		12.215					ND	
141 p-Dimethylamino azobenzene	225	12.282	12.428	-0.146	50	10575			NC
142 Chlorobenzilate	139		12.542					ND	
143 Famphur	218		12.850					ND	
145 3,3'-Dimethylbenzidine	212		12.936					ND	
144 Butyl benzyl phthalate	149		12.993					ND	
146 Kepone	272		13.030					ND	
147 2-Acetylaminofluorene	181		13.363					ND	
148 Thionazin	97		13.789					ND	
150 4,4'-Methylene bis(2-chlor	231		13.881					ND	
149 3,3'-Dichlorobenzidine	252		13.970					ND	
151 Bis(2-ethylhexyl) phthalat	149		14.002					ND	
152 Benzo[a]anthracene	228		14.050					ND	
153 Chrysene	228		14.120					ND	
154 Sulfotepp	97		14.530					ND	
155 6-Methylchrysene	242		14.907					ND	
156 Di-n-octyl phthalate	149		15.322					ND	
157 7,12-Dimethylbenz(a)anthra	256		16.203					ND	
158 Benzo[b]fluoranthene	252		16.219					ND	
159 Benzo[k]fluoranthene	252		16.273					ND	
176 Benzo[e]pyrene	252		16.802					ND	
160 Benzo[a]pyrene	252		16.908					ND	
161 3-Methylcholanthrene	268		17.524					ND	
162 Dibenz[a,h]acridine	279		18.636					ND	
175 Dibenz[a,j]acridine	279		18.982					ND	
163 Indeno[1,2,3-cd]pyrene	276		19.275					ND	
164 Dibenz(a,h)anthracene	278		19.307					ND	
165 Benzo[g,h,i]perylene	276		19.884					ND	
181 Isosafrole	162		0.000					ND	
185 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
188 Carbaryl	144		0.000					ND	
186 n,n'-Dimethylaniline	120		0.000					ND	
183 Octachlorocyclopentene	307		0.000					ND	
167 o-Phenylphenol	1		0.000					ND	
182 Aramite Peak 2	185		0.000					ND	
172 4-Chlorophenol	128		0.000					ND	
178 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
184 3-Chlorobenzoic Acid	139		0.000					ND	
177 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
179 4-Nitrobiphenyl	199		0.000					ND	
190 Octachlorostyrene	308		0.000					ND	
192 4-Chlorobenzoic Acid	139		0.000					ND	
193 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
187 1,2-Dibromo-3-Chloropropan	157		0.000					ND	
168 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
191 2,3-Dichlorophenol	162		0.000					ND	
171 Diallate Peak 2	86		0.000					ND	
173 3-Methylphenol	1		0.000					ND	
174 2-Bromonaphthalene	127		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
170 2-Chlorobenzoic Acid	139		0.000					ND	
180 Aramite Peak 1	185		0.000					ND	
169 Diallate Peak 1	86		0.000					ND	
189 Benzotrichloride	159		0.000					ND	
166 2,5-Dichlorophenol	162		0.000					ND	
197 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
196 Trifluralin	306		0.000					ND	
195 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
198 Pentachlorophenol_T	266		5.447					ND	
200 Benzidine_T	184		8.043					ND	
201 4,4'-DDE	246		8.323					ND	
202 4,4'-DDD	235		8.863					ND	
203 4,4'-DDT	235		9.582					ND	
S 204 Aramite, Total	185		1.000					ND	
S 205 Diallate	86		0.000					ND	
S 206 Total Cresols	108		0.000					ND	
S 207 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
S 208 Methyl Phenols,Total	108		0.000					ND	
T 221 Phenyl ether TIC	170	12.282	11.489	0.782	0	16600		0.5845	
T 209 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

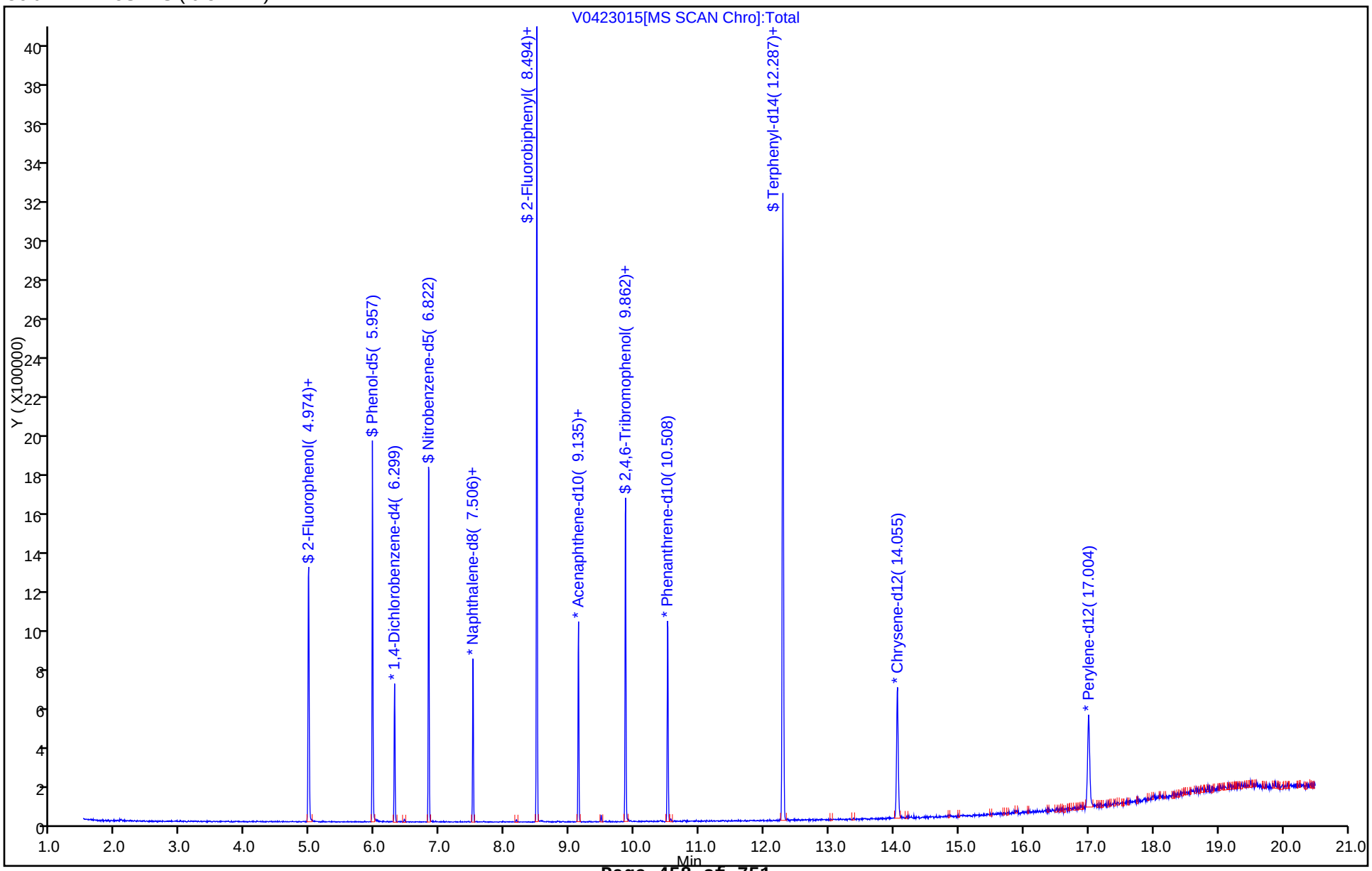
Report Date: 24-Apr-2015 05:56:39 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423015.D

Injection Date:	23-Apr-2015 12:24:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	MB 180-139286/1-A			Worklist Smp#:	15
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43220-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-139434/1-A

Matrix: Water | Lab File ID: D0429006.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 04/23/2015 11:13

Sample wt/vol: 250(mL) | Date Analyzed: 04/29/2015 12:52

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 140008 | 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)	68		27-114
321-60-8	2-Fluorobiphenyl	64		28-109
1718-51-0	Terphenyl-d14 (Surr)	69		20-118
367-12-4	2-Fluorophenol (Surr)	65		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	67		30-118
4165-62-2	Phenol-d5 (Surr)	68		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429006.D
Lims ID: MB 180-139434/1-A
Client ID:
Sample Type: MB
Inject. Date: 29-Apr-2015 12:52:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006684-006
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20150429-6684.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Apr-2015 06:33:43 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: XAWRK003

First Level Reviewer: piccolinov Date: 30-Apr-2015 06:10:56

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	6.169	6.175	-0.006	97	124200	8.00	8.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	100	600581	8.00	8.00	
* 3 Acenaphthene-d10	164	9.150	9.145	0.005	91	404986	8.00	8.00	
* 4 Phenanthrene-d10	188	10.587	10.582	0.005	97	720764	8.00	8.00	
* 5 Chrysene-d12	240	14.316	14.300	0.016	97	638162	8.00	8.00	
* 6 Perylene-d12	264	17.201	17.185	0.016	96	564071	8.00	8.00	
$ 7 2-Fluorophenol	112	4.743	4.759	-0.016	92	421318	40.0	26.2	
$ 8 Phenol-d5	99	5.806	5.817	-0.011	94	591370	40.0	27.3	
$ 9 Nitrobenzene-d5	82	6.725	6.730	-0.005	94	689778	40.0	27.4	
$ 10 2-Fluorobiphenyl	172	8.482	8.483	-0.001	99	1705341	40.0	25.6	
$ 11 2,4,6-Tribromophenol	330	9.904	9.898	0.006	85	211610	40.0	26.7	
$ 12 Terphenyl-d14	244	12.495	12.479	0.015	99	1918924	40.0	27.6	
13 1,4-Dioxane	88		1.575					ND	
14 N-Nitrosodimethylamine	74		2.168					ND	
15 Pyridine	79		2.259					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		4.487					ND	
20 Acrylamide	71	4.738	4.597	0.142	26	1392			NC
22 Phenylmercaptan	110	4.738	5.000	-0.262	44	2051			NC
23 N-Nitrosodiethylamine	102		5.115					ND	
24 Ethyl methanesulfonate	79		5.256					ND	
25 Benzaldehyde	77		5.705					ND	
28 Pentachloroethane	167		5.806					ND	
26 Phenol	94		5.827					ND	
27 Aniline	93		5.827					ND	
29 Bis(2-chloroethyl)ether	93		5.897					ND	
30 2-Chlorophenol	128		5.961					ND	
31 n-Decane	43		6.020					ND	
32 1,3-Dichlorobenzene	146		6.116					ND	
33 1,4-Dichlorobenzene	146		6.191					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 Benzyl alcohol	108		6.314					ND	
35 1,2-Dichlorobenzene	146		6.346					ND	
36 2-Methylphenol	108		6.436					ND	
37 Indene	116		6.436					ND	
38 2,2'-oxybis[1-chloropropan	45		6.453					ND	
39 N-Nitrosopyrrolidine	100		6.543					ND	
40 Acetophenone	105		6.575					ND	
41 N-Nitrosodi-n-propylamine	70		6.575					ND	
42 4-Methylphenol	108		6.586					ND	
43 N-Nitrosomorpholine	116		6.632					ND	
44 2-Toluidine	106		6.664					ND	
45 Hexachloroethane	117		6.693					ND	
46 Nitrobenzene	77		6.746					ND	
47 N-Nitrosopiperidine	114		6.926					ND	
48 Isophorone	82		6.981					ND	
49 2-Nitrophenol	139		7.067					ND	
50 2,4-Dimethylphenol	107		7.104					ND	
52 Benzoic acid	122		7.168					ND	
51 o,o',o''-Triethylphosphoro	198		7.182					ND	
53 Bis(2-chloroethoxy)methane	93		7.184					ND	
54 2,4-Dichlorophenol	162		7.307					ND	
55 alpha,alpha-Dimethyl phene	58	7.451	7.353	0.098	44	1012			NC
56 1,2,4-Trichlorobenzene	180		7.387					ND	
58 Naphthalene	128		7.468					ND	
59 4-Chloroaniline	127		7.510					ND	
61 Hexachloropropene	213		7.526					ND	
60 2,6-Dichlorophenol	162		7.526					ND	
62 Hexachlorobutadiene	225		7.590					ND	
63 Quinoline	129		7.786					ND	
64 Caprolactam	113		7.815					ND	
65 N-Nitrosodi-n-butylamine	84		7.818					ND	
66 p-Phenylene diamine	108	7.446	7.834	-0.388	49	68339			NC
67 4-Chloro-3-methylphenol	107		7.970					ND	
68 Safrole, Total	162		8.026					ND	
69 2-Methylnaphthalene	142		8.135					ND	
71 1-Methylnaphthalene	142		8.237					ND	
72 Hexachlorocyclopentadiene	237		8.296					ND	
73 1,2,4,5-Tetrachlorobenzene	216		8.301					ND	
74 2,4,6-Trichlorophenol	196		8.408					ND	
75 2,4,5-Trichlorophenol	196		8.445					ND	
180 Isosafrole	162		8.514					ND	
76 1,1'-Biphenyl	154		8.579					ND	
77 2-Chloronaphthalene	162		8.611					ND	
78 1-Chloronaphthalene	162		8.616					ND	
79 2-Nitroaniline	65		8.691					ND	
80 1,4-Naphthoquinone	158	8.482	8.750	-0.268	44	3112			NC
81 1,4-Dinitrobenzene	168	8.482	8.769	-0.287	31	21869			NC
82 Dimethyl phthalate	163		8.846					ND	
83 1,3-Dinitrobenzene	168		8.883					ND	
84 2,6-Dinitrotoluene	165		8.910					ND	
85 Acenaphthylene	152		9.011					ND	
86 3-Nitroaniline	138		9.081					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
88 Acenaphthene	153		9.177					ND	
87 2,4-Dinitrophenol	184		9.177					ND	
89 4-Nitrophenol	109		9.225					ND	
92 Pentachlorobenzene	250		9.294					ND	
91 2,4-Dinitrotoluene	165		9.300					ND	
94 1-Naphthylamine	143		9.340					ND	
93 Dibenzofuran	168		9.343					ND	
95 2,3,5,6-Tetrachlorophenol	232		9.412					ND	
96 2,3,4,6-Tetrachlorophenol	232		9.455					ND	
97 2-Naphthylamine	143		9.482					ND	
98 Diethyl phthalate	149	9.519	9.514	0.005	97	31144		0.4741	
99 Hexadecane	57		9.519					ND	
102 N-Nitro-o-toluidine	152	9.904	9.586	0.318	42	3996		NC	
100 4-Chlorophenyl phenyl ethe	204		9.647					ND	
101 4-Nitroaniline	138		9.663					ND	
103 Fluorene	166		9.669					ND	
104 4,6-Dinitro-2-methylphenol	198		9.695					ND	
105 N-Nitrosodiphenylamine	169		9.759					ND	
90 1,2-Diphenylhydrazine	77		9.802					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		10.117					ND	
112 Hexachlorobenzene	284		10.208					ND	
113 Atrazine	200		10.240					ND	
114 4-Aminobiphenyl	169	9.904	10.265	-0.360	60	9736		NC	
117 Pronamide	173	9.904	10.297	-0.393	58	5790		NC	
118 Pentachloronitrobenzene	237		10.302					ND	
116 Pentachlorophenol	266		10.384					ND	
115 n-Octadecane	57		10.384					ND	
119 Disulfoton	88		10.419					ND	
120 Dinoseb	211		10.545					ND	
123 Hexachlorophene TIC	198		10.600					ND	
121 Phenanthrene	178		10.603					ND	
122 Anthracene	178		10.657					ND	
125 Methyl parathion	109		10.793					ND	
124 Carbazole	167		10.806					ND	
126 Di-n-butyl phthalate	149		11.122					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	
57 Azobenzene	77		11.800					ND	
130 Isodrin	193		11.821					ND	
131 Fluoranthene	202		11.992					ND	
132 Benzidine	184		12.126					ND	
134 1,2,3,4 -Tetrachlorobenzen	216	12.489	12.215	0.274	49	3316		NC	
133 Pyrene	202		12.308					ND	
135 p-Dimethylamino azobenzene	225	12.500	12.428	0.072	43	10666		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	12.495	12.936	-0.442	56	137456			NC
140 Kepone	272		13.030					ND	
138 Butyl benzyl phthalate	149		13.216					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		14.204					ND	
145 Bis(2-ethylhexyl) phthalat	149		14.252					ND	
146 Benzo[a]anthracene	228		14.284					ND	
147 Chrysene	228		14.354					ND	
148 Sulfotepp	97		14.530					ND	
149 6-Methylchrysene	242		14.907					ND	
150 Di-n-octyl phthalate	149		15.550					ND	
151 7,12-Dimethylbenz(a)anthra	256		16.394					ND	
152 Benzo[b]fluoranthene	252		16.410					ND	
153 Benzo[k]fluoranthene	252		16.464					ND	
219 Benzo[e]pyrene	252		16.971					ND	
154 Benzo[a]pyrene	252		17.068					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		19.514					ND	
158 Dibenz(a,h)anthracene	278		19.546					ND	
159 Benzo[g,h,i]perylene	276		20.187					ND	
184 Diallate Peak 1	86		0.000					ND	
179 2,5-Dichlorophenol	162		0.000					ND	
172 Carbaryl	144		0.000					ND	
162 3-Chlorobenzoic Acid	139		0.000					ND	
164 Aramite Peak 2	185		0.000					ND	
217 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
185 4-Nitrobiphenyl	199		0.000					ND	
166 4-Chloro-3-nitro-alpha,alp	179		0.000					ND	
188 2-Bromonaphthalene	127		0.000					ND	
160 n,n'-Dimethylaniline	120		0.000					ND	
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	
168 Aramite Peak 1	185		0.000					ND	
174 2-Chlorobenzoic Acid	139		0.000					ND	
161 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
215 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
187 1,2-Dibromo-3-Chloropropan	157		0.000					ND	
165 Benzotrichloride	159		0.000					ND	
177 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
176 Dimethylformamide	73		0.000					ND	
167 Phthalic anhydride	104		0.000					ND	
182 4-Chlorophenol	128		0.000					ND	
178 Trifluralin	306		0.000					ND	
212 2,3,7,8-TCDD TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
173 Octachlorocyclopentene	307		0.000					ND	
169 Octachlorostyrene	308		0.000					ND	
170 4-tert-Octylphenol	135		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		5.515					ND	
191 Benzidine_T	184		8.165					ND	
192 4,4'-DDE	246		9.137					ND	
193 4,4'-DDD	235		9.217					ND	
194 4,4'-DDT	235		9.810					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	10.587	11.527	-0.913	0	3783		0.0747	
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

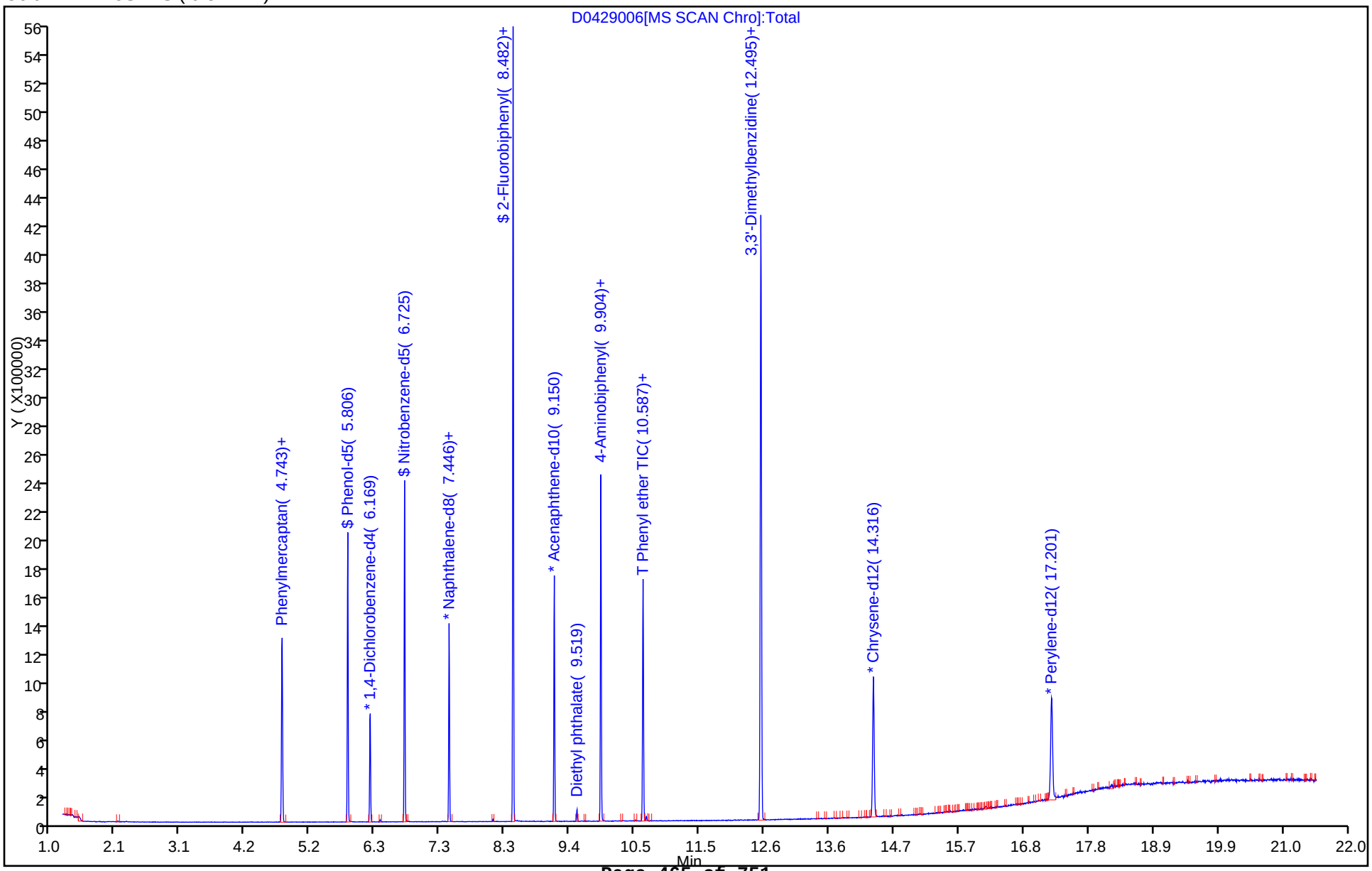
Report Date: 30-Apr-2015 06:33:49 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429006.D

Injection Date:	29-Apr-2015 12:52:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	MB 180-139434/1-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43220-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-139286/2-A

Matrix: Water | Lab File ID: V0423017.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 04/22/2015 11:36

Sample wt/vol: 250(mL) | Date Analyzed: 04/23/2015 13:21

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.: 139416 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	14.2		0.20	0.019
56-55-3	Benzo[a]anthracene	13.7		0.20	0.037
205-99-2	Benzo[b]fluoranthene	13.4		0.20	0.049
207-08-9	Benzo[k]fluoranthene	13.2		0.20	0.030
191-24-2	Benzo[g,h,i]perylene	15.0		0.20	0.029
50-32-8	Benzo[a]pyrene	13.8		0.20	0.028
218-01-9	Chrysene	13.2		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	15.6		0.20	0.027
206-44-0	Fluoranthene	14.6		0.20	0.021
86-73-7	Fluorene	13.9		0.20	0.024
193-39-5	Indeno[1,2,3-cd]pyrene	15.6		0.20	0.043
85-01-8	Phenanthrene	14.3		0.20	0.042
129-00-0	Pyrene	13.1		0.20	0.023
83-32-9	Acenaphthene	13.1		0.20	0.029
208-96-8	Acenaphthylene	13.3		0.20	0.022
91-20-3	Naphthalene	13.3		0.20	0.023
117-81-7	Bis(2-ethylhexyl) phthalate	14.0		2.0	0.44

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	74		27-114
321-60-8	2-Fluorobiphenyl	65		28-109
1718-51-0	Terphenyl-d14 (Surr)	63		20-118
367-12-4	2-Fluorophenol (Surr)	71		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	76		30-118
4165-62-2	Phenol-d5 (Surr)	68		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423017.D
Lims ID: LCS 180-139286/2-A
Client ID:
Sample Type: LCS
Inject. Date: 23-Apr-2015 13:21:30 ALS Bottle#: 16 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006603-017
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20150423-6603.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 24-Apr-2015 05:56:24 Calib Date: 05-Feb-2015 09:39:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20150205-5565.b\V0205010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: piccolinov Date: 24-Apr-2015 05:12:07

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	6.302	6.304	-0.002	90	81914	8.00	8.00	
* 2 Naphthalene-d8	136	7.509	7.512	-0.003	97	269518	8.00	8.00	
* 3 Acenaphthene-d10	164	9.133	9.141	-0.008	88	200359	8.00	8.00	
* 4 Phenanthrene-d10	188	10.511	10.519	-0.008	96	388414	8.00	8.00	
* 5 Chrysene-d12	240	14.053	14.072	-0.019	71	490403	8.00	8.00	
* 6 Perylene-d12	264	16.997	17.031	-0.034	85	455464	8.00	8.00	
$ 7 2-Fluorophenol	112	4.977	4.979	-0.002	88	334906	40.0	28.3	
$ 8 Phenol-d5	99	5.960	5.968	-0.008	85	394194	40.0	27.1	
$ 9 Nitrobenzene-d5	82	6.825	6.828	-0.003	90	479947	40.0	29.8	
$ 10 2-Fluorobiphenyl	172	8.492	8.500	-0.008	83	953999	40.0	26.0	
$ 11 2,4,6-Tribromophenol	330	9.860	9.867	-0.007	85	148623	40.0	30.6	
$ 12 Terphenyl-d14	244	12.285	12.298	-0.013	98	1253435	40.0	25.2	
13 1,4-Dioxane	88	1.814	1.811	0.003	88	164962	40.0	31.7	
14 N-Nitrosodimethylamine	74	2.482	2.479	0.003	78	202081	40.0	27.7	
15 Pyridine	79	2.546	2.554	-0.008	92	357839	40.0	27.8	
26 Benzaldehyde	77	5.858	5.861	-0.003	84	206552	40.0	25.0	
28 Aniline	93	5.976	5.978	-0.002	66	527774	40.0	28.6	
27 Phenol	94	5.971	5.978	-0.007	69	461211	40.0	27.0	
29 Bis(2-chloroethyl)ether	93	6.035	6.037	-0.002	91	290276	40.0	25.3	
31 2-Chlorophenol	128	6.099	6.107	-0.008	90	333653	40.0	27.4	
32 n-Decane	43	6.152	6.155	-0.003	74	267122	40.0	25.3	
33 1,3-Dichlorobenzene	146	6.248	6.245	0.003	90	420565	40.0	26.7	
34 1,4-Dichlorobenzene	146	6.318	6.320	-0.002	87	430909	40.0	26.4	
36 Benzyl alcohol	108	6.430	6.438	-0.008	80	166627	40.0	21.3	
37 1,2-Dichlorobenzene	146	6.467	6.470	-0.003	83	402980	40.0	26.1	
38 2-Methylphenol	108	6.547	6.550	-0.003	72	334820	40.0	28.0	
39 Indene	116	6.547	6.555	-0.008	72	662622	40.0	31.2	
40 2,2'-oxybis[1-chloropropan	45	6.558	6.566	-0.008	66	273850	40.0	24.0	
43 Acetophenone	105	6.681	6.684	-0.003	76	531613	40.0	26.7	
44 N-Nitrosodi-n-propylamine	70	6.676	6.684	-0.008	80	300984	40.0	26.6	
45 4-Methylphenol	108	6.686	6.689	-0.003	69	339159	40.0	25.9	
47 Hexachloroethane	117	6.793	6.796	-0.003	79	190845	40.0	26.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
48 Nitrobenzene	77	6.847	6.849	-0.002	83	486321	40.0	28.9	
50 Isophorone	82	7.066	7.068	-0.002	95	725947	40.0	29.3	
51 2-Nitrophenol	139	7.146	7.148	-0.002	84	195704	40.0	30.8	
52 2,4-Dimethylphenol	107	7.178	7.180	-0.002	76	422132	40.0	29.3	
56 Benzoic acid	122	7.253	7.244	0.009	52	176805	40.0	29.5	
55 Bis(2-chloroethoxy)methane	93	7.258	7.260	-0.002	96	361202	40.0	27.3	
57 2,4-Dichlorophenol	162	7.376	7.378	-0.002	93	334568	40.0	29.6	
61 Azobenzene	77		7.452				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.456	7.458	-0.002	92	430446	40.0	28.4	
60 Naphthalene	128	7.530	7.533	-0.003	98	975200	40.0	26.6	
62 4-Chloroaniline	127	7.568	7.570	-0.002	69	412611	40.0	27.8	
63 2,6-Dichlorophenol	162	7.579	7.586	-0.007	87	333381	40.0	28.7	
64 Hexachlorobutadiene	225	7.643	7.650	-0.007	90	328896	40.0	31.1	
67 Caprolactam	113	7.862	7.859	0.003	70	92230	40.0	26.3	
70 4-Chloro-3-methylphenol	107	8.006	8.008	-0.002	84	337418	40.0	27.2	
72 2-Methylnaphthalene	142	8.166	8.174	-0.008	82	753384	40.0	29.0	
75 1-Methylnaphthalene	142	8.257	8.265	-0.008	78	641625	40.0	26.4	
76 Hexachlorocyclopentadiene	237	8.316	8.318	-0.002	92	355253	40.0	29.8	
77 1,2,4,5-Tetrachlorobenzene	216	8.321	8.329	-0.008	93	505468	40.0	28.9	
78 2,4,6-Trichlorophenol	196	8.423	8.425	-0.002	91	293762	40.0	29.7	
79 2,4,5-Trichlorophenol	196	8.460	8.462	-0.002	91	305208	40.0	27.7	
80 1,1'-Biphenyl	154	8.588	8.596	-0.008	96	937232	40.0	26.3	
81 2-Chloronaphthalene	162	8.620	8.623	-0.003	52	771958	40.0	25.4	
82 2-Nitroaniline	65	8.700	8.703	-0.003	72	274380	40.0	29.1	
86 Dimethyl phthalate	163	8.845	8.852	-0.007	95	900521	40.0	26.7	
87 1,3-Dinitrobenzene	168	8.882	8.890	-0.008	75	142624	40.0	27.3	
88 2,6-Dinitrotoluene	165	8.909	8.917	-0.008	65	198718	40.0	27.9	
89 Acenaphthylene	152	9.005	9.013	-0.008	93	1142131	40.0	26.7	
90 3-Nitroaniline	138	9.074	9.077	-0.003	86	186666	40.0	25.9	
91 Acenaphthene	153	9.165	9.173	-0.008	84	757909	40.0	26.2	
92 2,4-Dinitrophenol	184	9.165	9.173	-0.008	67	284354	80.0	47.3	
93 4-Nitrophenol	109	9.213	9.221	-0.008	85	424712	80.0	61.8	
94 2,4-Dinitrotoluene	165	9.283	9.290	-0.007	76	276218	40.0	27.6	
95 Dibenzofuran	168	9.320	9.328	-0.008	74	1164315	40.0	26.2	
99 2,3,4,6-Tetrachlorophenol	232	9.432	9.440	-0.008	71	261330	40.0	28.0	
102 Hexadecane	57	9.486	9.493	-0.007	69	398690	40.0	28.8	
101 Diethyl phthalate	149	9.486	9.493	-0.007	94	991158	40.0	28.2	
104 4-Chlorophenyl phenyl ethe	204	9.619	9.627	-0.008	91	564358	40.0	27.9	
105 4-Nitroaniline	138	9.635	9.643	-0.008	63	206272	40.0	26.9	
106 Fluorene	166	9.635	9.643	-0.008	72	920917	40.0	27.9	
108 4,6-Dinitro-2-methylphenol	198	9.662	9.670	-0.008	66	411473	80.0	54.8	
109 N-Nitrosodiphenylamine	169	9.721	9.729	-0.008	62	1469671	80.0	58.4	
111 1,2-Diphenylhydrazine	77	9.763	9.771	-0.008	99	1020975	40.0	26.8	
116 4-Bromophenyl phenyl ether	248	10.068	10.076	-0.008	66	319956	40.0	29.7	
118 Hexachlorobenzene	284	10.159	10.161	-0.002	87	340630	40.0	29.3	
119 Atrazine	200	10.185	10.193	-0.008	67	321212	40.0	37.4	
121 n-Octadecane	57	10.324	10.332	-0.008	84	453346	40.0	28.5	
122 Pentachlorophenol	266	10.324	10.338	-0.014	76	405946	80.0	54.2	
126 Phenanthrene	178	10.533	10.541	-0.008	96	1531460	40.0	28.6	
128 Anthracene	178	10.586	10.594	-0.008	96	1549067	40.0	28.3	
130 Carbazole	167	10.725	10.733	-0.008	83	1331647	40.0	27.8	
132 Di-n-butyl phthalate	149	11.014	11.021	-0.007	99	1534404	40.0	29.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
137 Fluoranthene	202	11.831	11.844	-0.013	95	1818478	40.0	29.2	
138 Benzidine	184	11.954	11.967	-0.013	95	240462	40.0	10.6	
139 Pyrene	202	12.130	12.143	-0.013	98	1918066	40.0	26.2	
144 Butyl benzyl phthalate	149	12.979	12.993	-0.014	94	721378	40.0	27.7	
149 3,3'-Dichlorobenzidine	252	13.957	13.970	-0.013	70	599785	40.0	25.6	
151 Bis(2-ethylhexyl) phthalat	149	13.984	14.002	-0.018	94	970764	40.0	28.1	
152 Benzo[a]anthracene	228	14.032	14.050	-0.018	91	1914181	40.0	27.4	
153 Chrysene	228	14.107	14.120	-0.013	91	1802556	40.0	26.5	
156 Di-n-octyl phthalate	149	15.293	15.322	-0.029	99	1644388	40.0	27.0	
158 Benzo[b]fluoranthene	252	16.195	16.219	-0.024	85	1790726	40.0	26.7	
159 Benzo[k]fluoranthene	252	16.249	16.273	-0.024	83	1922681	40.0	26.4	
160 Benzo[a]pyrene	252	16.879	16.908	-0.029	69	1729744	40.0	27.6	
163 Indeno[1,2,3-cd]pyrene	276	19.246	19.275	-0.029	84	2185618	40.0	31.2	
164 Dibenz(a,h)anthracene	278	19.278	19.307	-0.029	73	1870036	40.0	31.3	
165 Benzo[g,h,i]perylene	276	19.855	19.884	-0.029	90	1836380	40.0	30.0	
S 206 Total Cresols	108				0		80.0	53.8	
S 208 Methyl Phenols,Total	108				0		80.0	53.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00007 Amount Added: 1.00 Units: uL Run Reagent

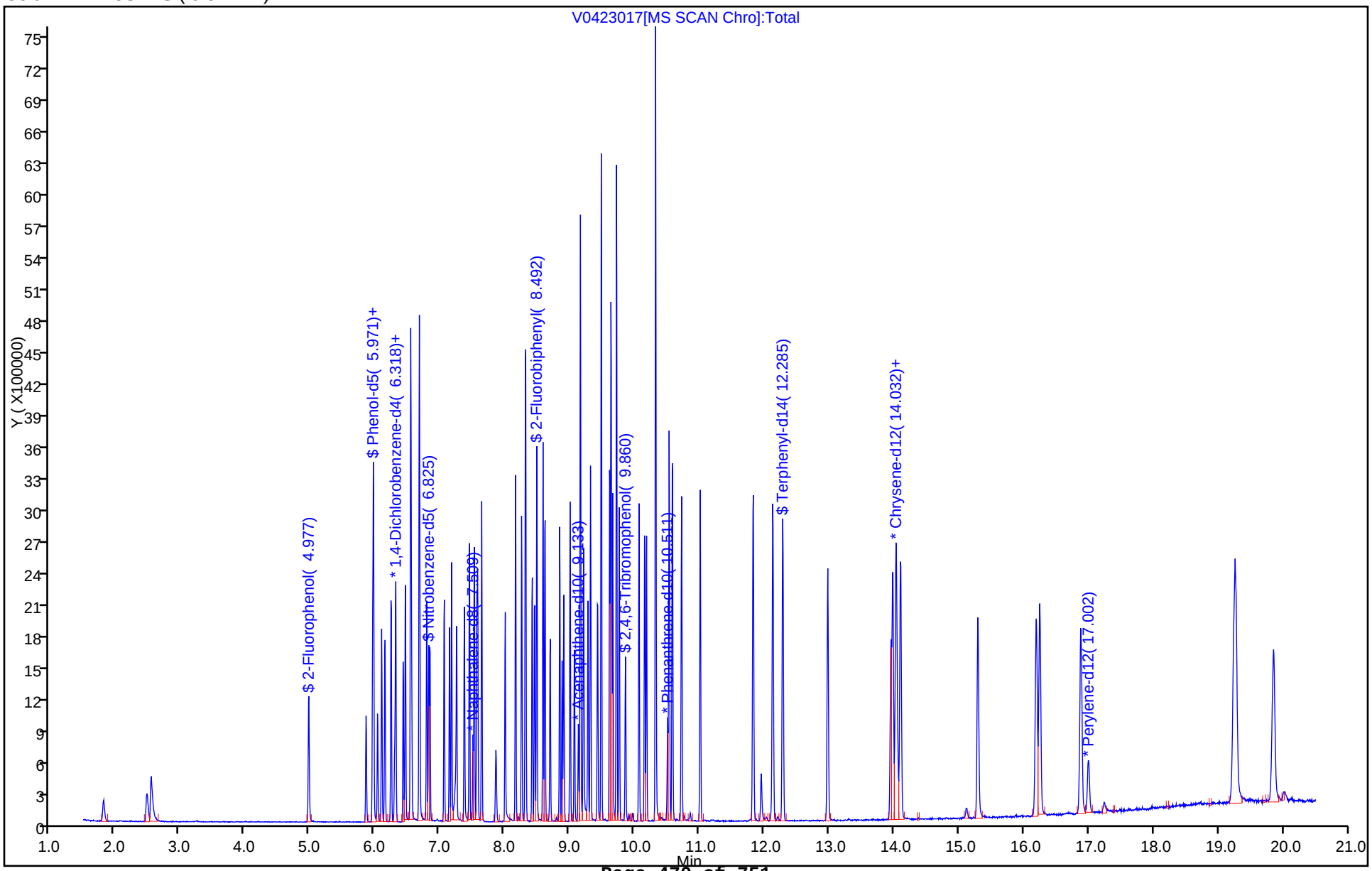
Report Date: 24-Apr-2015 05:56:42 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423017.D

Injection Date:	23-Apr-2015 13:21:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	LCS 180-139286/2-A			Worklist Smp#:	17
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43220-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-139434/2-A

Matrix: Water | Lab File ID: D0429012.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 04/23/2015 11:13

Sample wt/vol: 250(mL) | Date Analyzed: 04/29/2015 15:41

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.: 140008 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	12.7		0.20	0.019
56-55-3	Benzo[a]anthracene	12.8		0.20	0.037
205-99-2	Benzo[b]fluoranthene	12.0		0.20	0.049
207-08-9	Benzo[k]fluoranthene	12.9		0.20	0.030
191-24-2	Benzo[g,h,i]perylene	12.7		0.20	0.029
50-32-8	Benzo[a]pyrene	13.0		0.20	0.028
218-01-9	Chrysene	12.7		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	12.9		0.20	0.027
206-44-0	Fluoranthene	12.5		0.20	0.021
86-73-7	Fluorene	12.7		0.20	0.024
193-39-5	Indeno[1,2,3-cd]pyrene	12.9		0.20	0.043
85-01-8	Phenanthrene	13.0		0.20	0.042
129-00-0	Pyrene	12.8		0.20	0.023
83-32-9	Acenaphthene	11.6		0.20	0.029
208-96-8	Acenaphthylene	12.1		0.20	0.022
91-20-3	Naphthalene	11.8		0.20	0.023
117-81-7	Bis(2-ethylhexyl) phthalate	13.6		2.0	0.44

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	60		27-114
321-60-8	2-Fluorobiphenyl	56		28-109
1718-51-0	Terphenyl-d14 (Surr)	55		20-118
367-12-4	2-Fluorophenol (Surr)	59		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	61		30-118
4165-62-2	Phenol-d5 (Surr)	60		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429012.D
Lims ID: LCS 180-139434/2-A
Client ID:
Sample Type: LCS
Inject. Date: 29-Apr-2015 15:41:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006684-012
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20150429-6684.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Apr-2015 06:33:43 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: XAWRK003

First Level Reviewer: piccolinov Date: 30-Apr-2015 06:15:29

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	6.164	6.175	-0.011	97	122022	8.00	8.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	100	595878	8.00	8.00	
* 3 Acenaphthene-d10	164	9.150	9.145	0.005	91	416749	8.00	8.00	
* 4 Phenanthrene-d10	188	10.587	10.582	0.005	97	721033	8.00	8.00	
* 5 Chrysene-d12	240	14.321	14.300	0.021	97	671533	8.00	8.00	
* 6 Perylene-d12	264	17.212	17.185	0.027	96	563660	8.00	8.00	
$ 7 2-Fluorophenol	112	4.732	4.759	-0.027	92	373276	40.0	23.6	
$ 8 Phenol-d5	99	5.801	5.817	-0.016	94	511728	40.0	24.0	
$ 9 Nitrobenzene-d5	82	6.725	6.730	-0.005	94	598112	40.0	23.9	
$ 10 2-Fluorobiphenyl	172	8.482	8.483	-0.001	99	1526989	40.0	22.3	
$ 11 2,4,6-Tribromophenol	330	9.909	9.898	0.011	90	193616	40.0	24.4	
$ 12 Terphenyl-d14	244	12.500	12.479	0.021	99	1605703	40.0	22.0	
13 1,4-Dioxane	88	1.537	1.575	-0.038	94	115751	40.0	23.8	
14 N-Nitrosodimethylamine	74	2.125	2.168	-0.043	83	161924	40.0	24.7	
15 Pyridine	79	2.195	2.259	-0.064	91	293973	40.0	25.7	
25 Benzaldehyde	77	5.694	5.705	-0.011	89	36170	40.0	3.51	
26 Phenol	94	5.817	5.827	-0.010	78	571387	40.0	23.6	
27 Aniline	93	5.817	5.827	-0.010	85	638545	40.0	23.8	
29 Bis(2-chloroethyl)ether	93	5.886	5.897	-0.011	92	411538	40.0	24.1	
30 2-Chlorophenol	128	5.950	5.961	-0.011	96	518114	40.0	25.1	
31 n-Decane	43	6.009	6.020	-0.011	92	575111	40.0	23.7	
32 1,3-Dichlorobenzene	146	6.105	6.116	-0.011	96	587641	40.0	24.4	
33 1,4-Dichlorobenzene	146	6.180	6.191	-0.011	92	599530	40.0	24.3	
34 Benzyl alcohol	108	6.308	6.314	-0.006	89	327661	40.0	25.2	
35 1,2-Dichlorobenzene	146	6.340	6.346	-0.006	95	589530	40.0	24.6	
36 2-Methylphenol	108	6.426	6.436	-0.010	96	450390	40.0	24.5	
37 Indene	116	6.431	6.436	-0.005	90	862478	40.0	25.9	
38 2,2'-oxybis[1-chloropropan	45	6.447	6.453	-0.005	89	851020	40.0	23.6	
40 Acetophenone	105	6.570	6.575	-0.005	90	671597	40.0	24.3	
41 N-Nitrosodi-n-propylamine	70	6.570	6.575	-0.005	94	333898	40.0	25.6	
42 4-Methylphenol	108	6.581	6.586	-0.005	90	488465	40.0	25.9	
45 Hexachloroethane	117	6.693	6.693	0.000	96	279165	40.0	26.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
46 Nitrobenzene	77	6.746	6.746	0.000	95	611333	40.0	24.6	
48 Isophorone	82	6.981	6.981	0.000	97	1070041	40.0	24.5	
49 2-Nitrophenol	139	7.067	7.067	0.000	97	340721	40.0	24.8	
50 2,4-Dimethylphenol	107	7.104	7.104	0.000	97	633855	40.0	25.3	
52 Benzoic acid	122	7.184	7.168	0.016	91	362239	40.0	25.2	
53 Bis(2-chloroethoxy)methane	93	7.184	7.184	0.000	95	628860	40.0	23.4	
54 2,4-Dichlorophenol	162	7.307	7.307	0.000	96	544360	40.0	24.9	
56 1,2,4-Trichlorobenzene	180	7.393	7.387	0.006	94	589395	40.0	23.5	
58 Naphthalene	128	7.467	7.468	-0.001	98	1895576	40.0	23.5	
59 4-Chloroaniline	127	7.510	7.510	0.000	96	788414	40.0	24.4	
60 2,6-Dichlorophenol	162	7.526	7.526	0.000	95	528244	40.0	24.3	
62 Hexachlorobutadiene	225	7.590	7.590	0.000	96	352597	40.0	23.4	
64 Caprolactam	113	7.825	7.815	0.010	73	192717	40.0	26.3	
67 4-Chloro-3-methylphenol	107	7.975	7.970	0.005	97	595240	40.0	25.9	
69 2-Methylnaphthalene	142	8.140	8.135	0.005	92	1456540	40.0	25.5	
71 1-Methylnaphthalene	142	8.237	8.237	0.000	93	1291593	40.0	24.2	
72 Hexachlorocyclopentadiene	237	8.301	8.296	0.005	97	707403	40.0	39.0	
73 1,2,4,5-Tetrachlorobenzene	216	8.306	8.301	0.005	97	558997	40.0	20.6	
74 2,4,6-Trichlorophenol	196	8.408	8.408	0.000	94	435063	40.0	23.5	
75 2,4,5-Trichlorophenol	196	8.445	8.445	0.000	93	459851	40.0	23.4	
76 1,1'-Biphenyl	154	8.584	8.579	0.005	95	1801459	40.0	23.0	
77 2-Chloronaphthalene	162	8.616	8.611	0.005	97	1359156	40.0	21.4	
79 2-Nitroaniline	65	8.696	8.691	0.005	84	461286	40.0	25.6	
82 Dimethyl phthalate	163	8.856	8.846	0.010	98	1572392	40.0	23.8	
83 1,3-Dinitrobenzene	168	8.888	8.883	0.005	84	262950	40.0	26.4	
84 2,6-Dinitrotoluene	165	8.920	8.910	0.010	93	367845	40.0	25.3	
85 Acenaphthylene	152	9.017	9.011	0.006	98	2433911	40.0	24.2	
86 3-Nitroaniline	138	9.086	9.081	0.005	93	430510	40.0	24.3	
88 Acenaphthene	153	9.182	9.177	0.005	87	1422632	40.0	23.1	
87 2,4-Dinitrophenol	184	9.188	9.177	0.011	68	424838	80.0	43.9	
89 4-Nitrophenol	109	9.236	9.225	0.011	97	549086	80.0	56.1	
91 2,4-Dinitrotoluene	165	9.305	9.300	0.005	91	508625	40.0	26.6	
93 Dibenzofuran	168	9.348	9.343	0.005	96	2192756	40.0	24.9	
96 2,3,4,6-Tetrachlorophenol	232	9.460	9.455	0.005	76	421028	40.0	25.1	
98 Diethyl phthalate	149	9.524	9.514	0.010	98	1649127	40.0	24.4	
99 Hexadecane	57	9.524	9.519	0.005	91	1197468	40.0	27.2	
100 4-Chlorophenyl phenyl ethe	204	9.658	9.647	0.011	95	798976	40.0	24.7	
101 4-Nitroaniline	138	9.674	9.663	0.011	80	429493	40.0	24.6	
103 Fluorene	166	9.674	9.669	0.005	94	1737055	40.0	25.3	
104 4,6-Dinitro-2-methylphenol	198	9.700	9.695	0.005	79	607682	80.0	51.9	
105 N-Nitrosodiphenylamine	169	9.765	9.759	0.006	63	2476272	80.0	48.3	
90 1,2-Diphenylhydrazine	77	9.807	9.802	0.005	99	1849843	40.0	25.2	
110 4-Bromophenyl phenyl ether	248	10.128	10.117	0.011	70	465604	40.0	24.7	
112 Hexachlorobenzene	284	10.213	10.208	0.005	92	456852	40.0	24.3	
113 Atrazine	200	10.245	10.240	0.005	89	438253	40.0	29.5	
116 Pentachlorophenol	266	10.390	10.384	0.006	88	552861	80.0	41.7	
115 n-Octadecane	57	10.395	10.384	0.011	93	1284559	40.0	29.6	
121 Phenanthrene	178	10.614	10.603	0.011	97	2807366	40.0	25.9	
122 Anthracene	178	10.667	10.657	0.010	97	2803919	40.0	25.3	
124 Carbazole	167	10.817	10.806	0.011	96	2487339	40.0	25.6	
126 Di-n-butyl phthalate	149	11.132	11.122	0.010	99	3138981	40.0	25.9	
57 Azobenzene	77		11.800				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	12.003	11.992	0.011	98	2730472	40.0	25.0	
132 Benzidine	184	12.142	12.126	0.016	99	380640	40.0	8.86	
133 Pyrene	202	12.323	12.308	0.015	97	2830896	40.0	25.5	
138 Butyl benzyl phthalate	149	13.237	13.216	0.021	98	1308483	40.0	26.6	
144 3,3'-Dichlorobenzidine	252	14.231	14.204	0.027	75	771778	40.0	23.8	
145 Bis(2-ethylhexyl) phthalat	149	14.273	14.252	0.021	97	1857910	40.0	27.3	
146 Benzo[a]anthracene	228	14.305	14.284	0.021	99	2482824	40.0	25.6	
147 Chrysene	228	14.375	14.354	0.021	98	2333584	40.0	25.5	
150 Di-n-octyl phthalate	149	15.577	15.550	0.027	99	3155737	40.0	28.8	
152 Benzo[b]fluoranthene	252	16.442	16.410	0.032	98	2190544	40.0	24.0	
153 Benzo[k]fluoranthene	252	16.490	16.464	0.026	99	2306632	40.0	25.8	
154 Benzo[a]pyrene	252	17.099	17.068	0.031	79	2144470	40.0	26.1	
157 Indeno[1,2,3-cd]pyrene	276	19.557	19.514	0.043	96	2226863	40.0	25.7	
158 Dibenz(a,h)anthracene	278	19.589	19.546	0.043	91	1854612	40.0	25.8	
159 Benzo[g,h,i]perylene	276	20.235	20.187	0.048	97	1880960	40.0	25.5	
S 199 Total Cresols	108				0		80.0	50.4	
S 197 Methyl Phenols,Total	108				0		80.0	50.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00007 Amount Added: 1.00 Units: uL Run Reagent

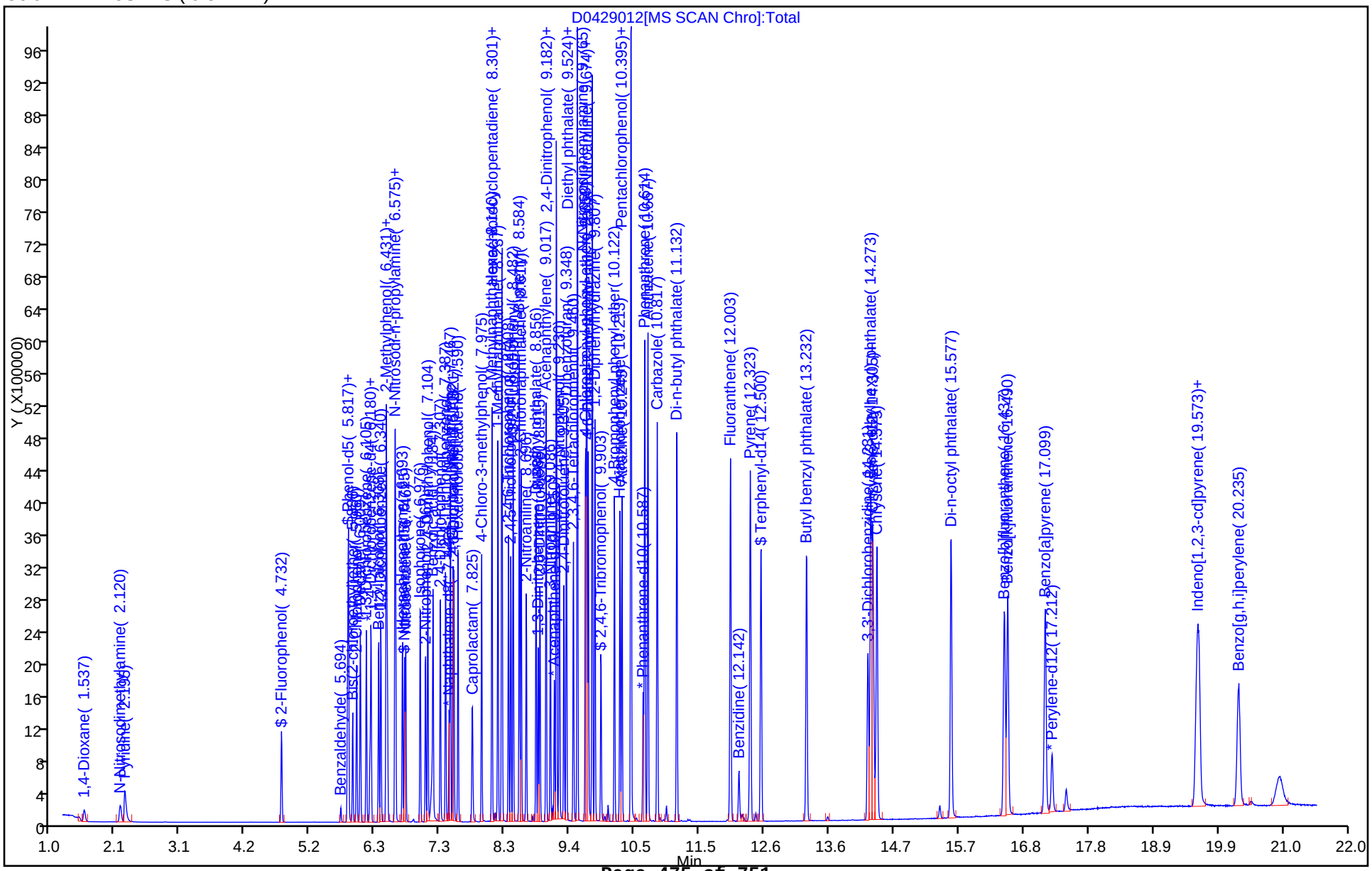
Report Date: 30-Apr-2015 06:33:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429012.D

Injection Date:	29-Apr-2015 15:41:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	LCS 180-139434/2-A			Worklist Smp#:	12
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43220-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-139286/3-A

Matrix: Water | Lab File ID: V0423018.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 04/22/2015 11:36

Sample wt/vol: 250(mL) | Date Analyzed: 04/23/2015 13:50

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.: 139416 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	14.7		0.20	0.019
56-55-3	Benzo[a]anthracene	14.1		0.20	0.037
205-99-2	Benzo[b]fluoranthene	14.5		0.20	0.049
207-08-9	Benzo[k]fluoranthene	13.8		0.20	0.030
191-24-2	Benzo[g,h,i]perylene	15.6		0.20	0.029
50-32-8	Benzo[a]pyrene	14.8		0.20	0.028
218-01-9	Chrysene	13.6		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	16.5		0.20	0.027
206-44-0	Fluoranthene	15.2		0.20	0.021
86-73-7	Fluorene	15.1		0.20	0.024
193-39-5	Indeno[1,2,3-cd]pyrene	16.1		0.20	0.043
85-01-8	Phenanthrene	14.4		0.20	0.042
129-00-0	Pyrene	13.4		0.20	0.023
83-32-9	Acenaphthene	14.6		0.20	0.029
208-96-8	Acenaphthylene	14.5		0.20	0.022
91-20-3	Naphthalene	13.2		0.20	0.023
117-81-7	Bis(2-ethylhexyl) phthalate	14.7		2.0	0.44

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	71		27-114
321-60-8	2-Fluorobiphenyl	71		28-109
1718-51-0	Terphenyl-d14 (Surr)	63		20-118
367-12-4	2-Fluorophenol (Surr)	72		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	78		30-118
4165-62-2	Phenol-d5 (Surr)	70		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423018.D
Lims ID: LCSD 180-139286/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 23-Apr-2015 13:50:30 ALS Bottle#: 17 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006603-018
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20150423-6603.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 24-Apr-2015 05:56:24 Calib Date: 05-Feb-2015 09:39:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20150205-5565.b\V0205010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: piccolinov Date: 24-Apr-2015 05:12:39

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	6.299	6.304	-0.005	88	79685	8.00	8.00	
* 2 Naphthalene-d8	136	7.506	7.512	-0.006	97	280125	8.00	8.00	
* 3 Acenaphthene-d10	164	9.135	9.141	-0.006	84	188953	8.00	8.00	
* 4 Phenanthrene-d10	188	10.508	10.519	-0.011	95	384799	8.00	8.00	
* 5 Chrysene-d12	240	14.050	14.072	-0.022	74	488603	8.00	8.00	
* 6 Perylene-d12	264	16.994	17.031	-0.037	86	431013	8.00	8.00	
$ 7 2-Fluorophenol	112	4.974	4.979	-0.005	89	330968	40.0	28.8	
$ 8 Phenol-d5	99	5.957	5.968	-0.011	85	394013	40.0	27.8	
$ 9 Nitrobenzene-d5	82	6.828	6.828	0.000	88	477484	40.0	28.5	
$ 10 2-Fluorobiphenyl	172	8.494	8.500	-0.006	89	982534	40.0	28.4	
$ 11 2,4,6-Tribromophenol	330	9.862	9.867	-0.005	93	149313	40.0	31.0	
$ 12 Terphenyl-d14	244	12.282	12.298	-0.016	98	1258251	40.0	25.4	
13 1,4-Dioxane	88	1.806	1.811	-0.005	86	170774	40.0	33.7	
14 N-Nitrosodimethylamine	74	2.484	2.479	0.005	75	195025	40.0	27.5	
15 Pyridine	79	2.543	2.554	-0.011	91	361627	40.0	28.9	
26 Benzaldehyde	77	5.861	5.861	0.000	88	210647	40.0	26.2	
28 Aniline	93	5.973	5.978	-0.005	59	524450	40.0	29.2	
27 Phenol	94	5.973	5.978	-0.005	65	448277	40.0	27.0	
29 Bis(2-chloroethyl)ether	93	6.037	6.037	0.000	94	294414	40.0	26.3	
31 2-Chlorophenol	128	6.101	6.107	-0.006	92	345524	40.0	29.2	
32 n-Decane	43	6.149	6.155	-0.006	74	270219	40.0	26.3	
33 1,3-Dichlorobenzene	146	6.245	6.245	0.000	87	424250	40.0	27.7	
34 1,4-Dichlorobenzene	146	6.315	6.320	-0.005	86	436823	40.0	27.5	
36 Benzyl alcohol	108	6.432	6.438	-0.006	81	163294	40.0	21.5	
37 1,2-Dichlorobenzene	146	6.464	6.470	-0.006	83	414735	40.0	27.6	
38 2-Methylphenol	108	6.544	6.550	-0.006	82	336736	40.0	28.9	
39 Indene	116	6.550	6.555	-0.005	79	649546	40.0	31.4	
40 2,2'-oxybis[1-chloropropan	45	6.560	6.566	-0.006	65	271821	40.0	24.5	
43 Acetophenone	105	6.678	6.684	-0.006	75	539649	40.0	27.8	
44 N-Nitrosodi-n-propylamine	70	6.678	6.684	-0.006	72	314797	40.0	28.6	
45 4-Methylphenol	108	6.689	6.689	0.000	76	337513	40.0	26.5	
47 Hexachloroethane	117	6.795	6.796	-0.001	81	203372	40.0	29.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
48 Nitrobenzene	77	6.844	6.849	-0.005	84	500756	40.0	28.6	
50 Isophorone	82	7.063	7.068	-0.005	94	720678	40.0	28.0	
51 2-Nitrophenol	139	7.148	7.148	0.000	83	199537	40.0	30.3	
52 2,4-Dimethylphenol	107	7.175	7.180	-0.005	81	449728	40.0	30.1	
56 Benzoic acid	122	7.250	7.244	0.006	69	179321	40.0	28.9	
55 Bis(2-chloroethoxy)methane	93	7.255	7.260	-0.005	94	357276	40.0	26.0	
57 2,4-Dichlorophenol	162	7.372	7.378	-0.006	94	339462	40.0	28.9	
61 Azobenzene	77		7.452				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.453	7.458	-0.005	90	430105	40.0	27.3	
60 Naphthalene	128	7.527	7.533	-0.006	98	1006825	40.0	26.4	
62 4-Chloroaniline	127	7.565	7.570	-0.005	66	408882	40.0	26.5	
63 2,6-Dichlorophenol	162	7.581	7.586	-0.005	90	342447	40.0	28.4	
64 Hexachlorobutadiene	225	7.645	7.650	-0.005	87	328266	40.0	29.9	
67 Caprolactam	113	7.864	7.859	0.005	73	93231	40.0	25.7	
70 4-Chloro-3-methylphenol	107	8.003	8.008	-0.005	84	346890	40.0	26.9	
72 2-Methylnaphthalene	142	8.163	8.174	-0.011	83	750663	40.0	27.8	
75 1-Methylnaphthalene	142	8.259	8.265	-0.006	78	644673	40.0	25.6	
76 Hexachlorocyclopentadiene	237	8.313	8.318	-0.005	92	355320	40.0	31.6	
77 1,2,4,5-Tetrachlorobenzene	216	8.323	8.329	-0.006	96	507714	40.0	30.7	
78 2,4,6-Trichlorophenol	196	8.419	8.425	-0.006	93	299805	40.0	32.1	
79 2,4,5-Trichlorophenol	196	8.457	8.462	-0.005	89	297928	40.0	28.6	
80 1,1'-Biphenyl	154	8.590	8.596	-0.006	95	951007	40.0	28.3	
81 2-Chloronaphthalene	162	8.617	8.623	-0.006	72	791344	40.0	27.6	
82 2-Nitroaniline	65	8.697	8.703	-0.006	69	273351	40.0	30.7	
86 Dimethyl phthalate	163	8.847	8.852	-0.005	95	945440	40.0	29.8	
87 1,3-Dinitrobenzene	168	8.884	8.890	-0.006	77	149207	40.0	30.3	
88 2,6-Dinitrotoluene	165	8.906	8.917	-0.011	67	209022	40.0	31.1	
89 Acenaphthylene	152	9.007	9.013	-0.006	92	1170536	40.0	29.0	
90 3-Nitroaniline	138	9.071	9.077	-0.006	86	188441	40.0	27.8	
91 Acenaphthene	153	9.162	9.173	-0.011	86	796228	40.0	29.2	
92 2,4-Dinitrophenol	184	9.162	9.173	-0.011	60	272629	80.0	48.1	
93 4-Nitrophenol	109	9.210	9.221	-0.011	85	415383	80.0	64.1	
94 2,4-Dinitrotoluene	165	9.280	9.290	-0.010	85	286343	40.0	30.4	
95 Dibenzofuran	168	9.322	9.328	-0.006	82	1195021	40.0	28.5	
99 2,3,4,6-Tetrachlorophenol	232	9.429	9.440	-0.011	71	262080	40.0	29.8	
102 Hexadecane	57	9.488	9.493	-0.005	68	407356	40.0	28.3	
101 Diethyl phthalate	149	9.488	9.493	-0.005	95	1024795	40.0	30.9	
104 4-Chlorophenyl phenyl ethe	204	9.616	9.627	-0.011	92	566571	40.0	29.7	
105 4-Nitroaniline	138	9.637	9.643	-0.006	61	207576	40.0	28.7	
106 Fluorene	166	9.637	9.643	-0.006	70	941890	40.0	30.2	
108 4,6-Dinitro-2-methylphenol	198	9.664	9.670	-0.006	56	437034	80.0	58.6	
109 N-Nitrosodiphenylamine	169	9.723	9.729	-0.006	61	1474403	80.0	59.1	
111 1,2-Diphenylhydrazine	77	9.760	9.771	-0.011	98	1056493	40.0	27.9	
116 4-Bromophenyl phenyl ether	248	10.070	10.076	-0.006	64	315874	40.0	29.6	
118 Hexachlorobenzene	284	10.156	10.161	-0.005	87	348429	40.0	30.3	
119 Atrazine	200	10.182	10.193	-0.011	71	328854	40.0	38.6	
121 n-Octadecane	57	10.321	10.332	-0.011	83	447657	40.0	29.0	
122 Pentachlorophenol	266	10.327	10.338	-0.011	83	407193	80.0	54.9	
126 Phenanthrene	178	10.530	10.541	-0.011	97	1532699	40.0	28.9	
128 Anthracene	178	10.583	10.594	-0.011	96	1594143	40.0	29.4	
130 Carbazole	167	10.722	10.733	-0.011	83	1364295	40.0	28.7	
132 Di-n-butyl phthalate	149	11.010	11.021	-0.011	99	1584046	40.0	30.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
137 Fluoranthene	202	11.828	11.844	-0.016	96	1880407	40.0	30.5	
138 Benzidine	184	11.951	11.967	-0.016	94	263937	40.0	11.4	
139 Pyrene	202	12.132	12.143	-0.011	98	1948742	40.0	26.7	
144 Butyl benzyl phthalate	149	12.976	12.993	-0.017	94	714704	40.0	27.6	
149 3,3'-Dichlorobenzidine	252	13.949	13.970	-0.021	65	603501	40.0	25.9	
151 Bis(2-ethylhexyl) phthalat	149	13.981	14.002	-0.021	92	1016372	40.0	29.5	
152 Benzo[a]anthracene	228	14.029	14.050	-0.021	91	1958079	40.0	28.1	
153 Chrysene	228	14.098	14.120	-0.022	92	1850124	40.0	27.3	
156 Di-n-octyl phthalate	149	15.289	15.322	-0.033	99	1688503	40.0	29.2	
158 Benzo[b]fluoranthene	252	16.187	16.219	-0.032	91	1833349	40.0	28.9	
159 Benzo[k]fluoranthene	252	16.246	16.273	-0.027	86	1907285	40.0	27.7	
160 Benzo[a]pyrene	252	16.876	16.908	-0.032	68	1751754	40.0	29.6	
163 Indeno[1,2,3-cd]pyrene	276	19.237	19.275	-0.038	95	2136071	40.0	32.2	
164 Dibenz(a,h)anthracene	278	19.269	19.307	-0.038	64	1866341	40.0	33.0	
165 Benzo[g,h,i]perylene	276	19.852	19.884	-0.032	89	1813983	40.0	31.3	
S 206 Total Cresols	108				0		80.0	55.4	
S 208 Methyl Phenols,Total	108				0		80.0	55.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00007 Amount Added: 1.00 Units: uL Run Reagent

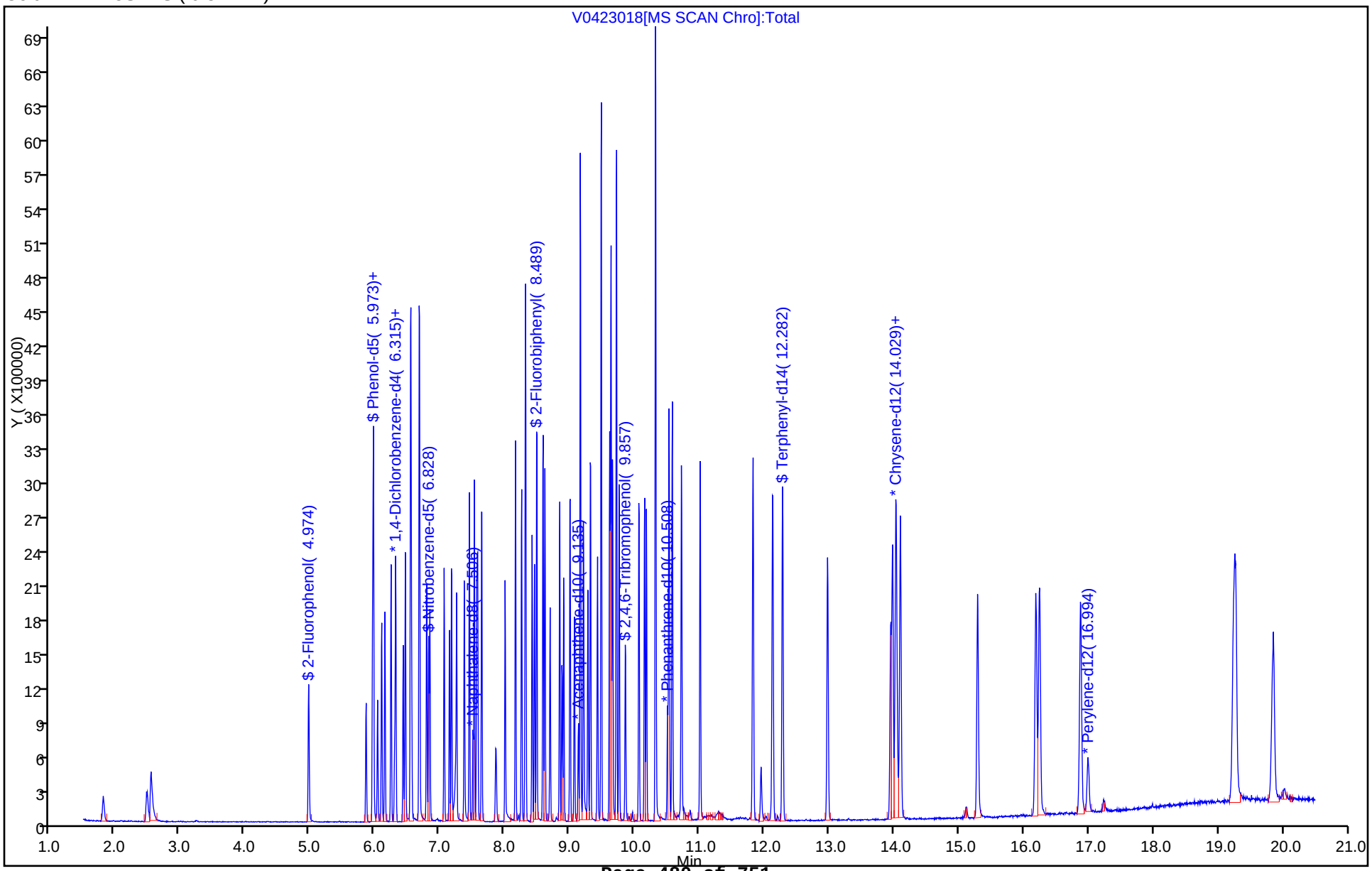
Report Date: 24-Apr-2015 05:56:43 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20150423-6603.b\V0423018.D

Injection Date:	23-Apr-2015 13:50:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	LCSD 180-139286/3-A			Worklist Smp#:	18
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43220-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-139434/3-A

Matrix: Water | Lab File ID: D0429013.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 04/23/2015 11:13

Sample wt/vol: 250(mL) | Date Analyzed: 04/29/2015 16:09

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 140008 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	12.8		0.20	0.019
56-55-3	Benzo[a]anthracene	13.2		0.20	0.037
205-99-2	Benzo[b]fluoranthene	12.4		0.20	0.049
207-08-9	Benzo[k]fluoranthene	13.0		0.20	0.030
191-24-2	Benzo[g,h,i]perylene	13.7		0.20	0.029
50-32-8	Benzo[a]pyrene	13.3		0.20	0.028
218-01-9	Chrysene	13.0		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	13.6		0.20	0.027
206-44-0	Fluoranthene	12.9		0.20	0.021
86-73-7	Fluorene	13.1		0.20	0.024
193-39-5	Indeno[1,2,3-cd]pyrene	13.5		0.20	0.043
85-01-8	Phenanthrene	13.1		0.20	0.042
129-00-0	Pyrene	13.0		0.20	0.023
83-32-9	Acenaphthene	12.2		0.20	0.029
208-96-8	Acenaphthylene	12.6		0.20	0.022
91-20-3	Naphthalene	12.1		0.20	0.023
117-81-7	Bis(2-ethylhexyl) phthalate	13.9		2.0	0.44

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	62		27-114
321-60-8	2-Fluorobiphenyl	59		28-109
1718-51-0	Terphenyl-d14 (Surr)	57		20-118
367-12-4	2-Fluorophenol (Surr)	58		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	62		30-118
4165-62-2	Phenol-d5 (Surr)	59		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429013.D
Lims ID: LCSD 180-139434/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 29-Apr-2015 16:09:30 ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006684-013
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20150429-6684.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Apr-2015 06:33:43 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: XAWRK003

First Level Reviewer: piccolinov Date: 30-Apr-2015 06:16:14

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	6.169	6.175	-0.006	97	114534	8.00	8.00	
* 2 Naphthalene-d8	136	7.451	7.446	0.005	100	528637	8.00	8.00	
* 3 Acenaphthene-d10	164	9.156	9.145	0.011	91	342193	8.00	8.00	
* 4 Phenanthrene-d10	188	10.598	10.582	0.016	97	589650	8.00	8.00	
* 5 Chrysene-d12	240	14.338	14.300	0.038	97	555727	8.00	8.00	
* 6 Perylene-d12	264	17.228	17.185	0.043	96	495582	8.00	8.00	
$ 7 2-Fluorophenol	112	4.738	4.759	-0.021	92	346206	40.0	23.3	
$ 8 Phenol-d5	99	5.806	5.817	-0.011	94	472413	40.0	23.6	
$ 9 Nitrobenzene-d5	82	6.730	6.730	0.000	94	546194	40.0	24.6	
$ 10 2-Fluorobiphenyl	172	8.493	8.483	0.010	99	1333889	40.0	23.7	
$ 11 2,4,6-Tribromophenol	330	9.914	9.898	0.016	88	159914	40.0	24.7	
$ 12 Terphenyl-d14	244	12.505	12.479	0.026	99	1384722	40.0	22.9	
13 1,4-Dioxane	88	1.543	1.575	-0.032	94	109631	40.0	24.0	
14 N-Nitrosodimethylamine	74	2.131	2.168	-0.038	82	148492	40.0	24.1	
15 Pyridine	79	2.205	2.259	-0.054	90	280405	40.0	26.1	
25 Benzaldehyde	77	5.699	5.705	-0.006	88	31837	40.0	3.29	
26 Phenol	94	5.822	5.827	-0.005	78	526465	40.0	23.2	
27 Aniline	93	5.822	5.827	-0.005	63	579525	40.0	23.1	
29 Bis(2-chloroethyl)ether	93	5.891	5.897	-0.006	92	378822	40.0	23.6	
30 2-Chlorophenol	128	5.956	5.961	-0.005	96	476218	40.0	24.5	
31 n-Decane	43	6.014	6.020	-0.006	92	550829	40.0	24.2	
32 1,3-Dichlorobenzene	146	6.110	6.116	-0.006	97	547216	40.0	24.2	
33 1,4-Dichlorobenzene	146	6.185	6.191	-0.006	92	565998	40.0	24.4	
34 Benzyl alcohol	108	6.313	6.314	-0.001	89	292484	40.0	24.0	
35 1,2-Dichlorobenzene	146	6.346	6.346	0.000	95	549626	40.0	24.4	
36 2-Methylphenol	108	6.431	6.436	-0.005	96	419700	40.0	24.4	
37 Indene	116	6.436	6.436	0.000	90	792793	40.0	25.3	
38 2,2'-oxybis[1-chloropropan	45	6.452	6.453	0.000	90	791477	40.0	23.4	
40 Acetophenone	105	6.575	6.575	0.000	85	607135	40.0	23.4	
41 N-Nitrosodi-n-propylamine	70	6.575	6.575	0.000	93	299570	40.0	24.5	
42 4-Methylphenol	108	6.586	6.586	0.000	90	439272	40.0	24.8	
45 Hexachloroethane	117	6.698	6.693	0.005	96	260918	40.0	26.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
46 Nitrobenzene	77	6.752	6.746	0.006	94	541114	40.0	24.6	
48 Isophorone	82	6.987	6.981	0.006	97	950436	40.0	24.5	
49 2-Nitrophenol	139	7.072	7.067	0.005	97	310615	40.0	25.5	
50 2,4-Dimethylphenol	107	7.109	7.104	0.005	97	578897	40.0	26.0	
52 Benzoic acid	122	7.184	7.168	0.016	94	314468	40.0	24.7	
53 Bis(2-chloroethoxy)methane	93	7.190	7.184	0.006	95	582019	40.0	24.4	
54 2,4-Dichlorophenol	162	7.312	7.307	0.005	96	496305	40.0	25.5	
56 1,2,4-Trichlorobenzene	180	7.398	7.387	0.011	94	547784	40.0	24.6	
58 Naphthalene	128	7.473	7.468	0.005	97	1736713	40.0	24.3	
59 4-Chloroaniline	127	7.515	7.510	0.005	96	706858	40.0	24.7	
60 2,6-Dichlorophenol	162	7.532	7.526	0.006	95	488842	40.0	25.3	
62 Hexachlorobutadiene	225	7.601	7.590	0.011	96	332905	40.0	25.0	
64 Caprolactam	113	7.825	7.815	0.010	73	160848	40.0	24.7	
67 4-Chloro-3-methylphenol	107	7.980	7.970	0.010	97	518295	40.0	25.4	
69 2-Methylnaphthalene	142	8.146	8.135	0.011	92	1293930	40.0	25.6	
71 1-Methylnaphthalene	142	8.242	8.237	0.005	93	1139649	40.0	24.0	
72 Hexachlorocyclopentadiene	237	8.306	8.296	0.010	97	613051	40.0	41.2	
73 1,2,4,5-Tetrachlorobenzene	216	8.311	8.301	0.010	97	501697	40.0	22.5	
74 2,4,6-Trichlorophenol	196	8.413	8.408	0.005	95	382240	40.0	25.1	
75 2,4,5-Trichlorophenol	196	8.450	8.445	0.005	94	398998	40.0	24.7	
76 1,1'-Biphenyl	154	8.589	8.579	0.010	95	1575203	40.0	24.5	
77 2-Chloronaphthalene	162	8.621	8.611	0.010	97	1201566	40.0	23.0	
79 2-Nitroaniline	65	8.701	8.691	0.010	83	397030	40.0	26.8	
82 Dimethyl phthalate	163	8.862	8.846	0.016	98	1331876	40.0	24.5	
83 1,3-Dinitrobenzene	168	8.894	8.883	0.011	83	216034	40.0	26.4	
84 2,6-Dinitrotoluene	165	8.926	8.910	0.016	93	305274	40.0	25.6	
85 Acenaphthylene	152	9.022	9.011	0.011	98	2079333	40.0	25.1	
86 3-Nitroaniline	138	9.091	9.081	0.010	94	361901	40.0	24.9	
88 Acenaphthene	153	9.188	9.177	0.011	87	1237198	40.0	24.5	
87 2,4-Dinitrophenol	184	9.193	9.177	0.016	68	358693	80.0	45.1	
89 4-Nitrophenol	109	9.241	9.225	0.016	97	452983	80.0	56.4	
91 2,4-Dinitrotoluene	165	9.310	9.300	0.010	91	413988	40.0	26.4	
93 Dibenzofuran	168	9.353	9.343	0.010	96	1831022	40.0	25.3	
96 2,3,4,6-Tetrachlorophenol	232	9.465	9.455	0.010	76	342909	40.0	24.9	
98 Diethyl phthalate	149	9.530	9.514	0.016	97	1369707	40.0	24.7	
99 Hexadecane	57	9.535	9.519	0.016	91	1053367	40.0	27.0	
100 4-Chlorophenyl phenyl ethe	204	9.663	9.647	0.016	96	665716	40.0	25.0	
101 4-Nitroaniline	138	9.679	9.663	0.016	79	365084	40.0	25.5	
103 Fluorene	166	9.679	9.669	0.010	95	1472675	40.0	26.1	
104 4,6-Dinitro-2-methylphenol	198	9.706	9.695	0.011	79	501075	80.0	52.3	
105 N-Nitrosodiphenylamine	169	9.770	9.759	0.011	63	2067912	80.0	49.4	
90 1,2-Diphenylhydrazine	77	9.813	9.802	0.011	99	1531922	40.0	25.5	
110 4-Bromophenyl phenyl ether	248	10.133	10.117	0.016	71	383984	40.0	24.9	
112 Hexachlorobenzene	284	10.219	10.208	0.011	92	386049	40.0	25.1	
113 Atrazine	200	10.251	10.240	0.011	90	368135	40.0	30.3	
116 Pentachlorophenol	266	10.395	10.384	0.011	89	468798	80.0	43.2	
115 n-Octadecane	57	10.400	10.384	0.016	92	1142026	40.0	28.0	
121 Phenanthrene	178	10.619	10.603	0.016	97	2314869	40.0	26.1	
122 Anthracene	178	10.673	10.657	0.016	97	2325890	40.0	25.7	
124 Carbazole	167	10.822	10.806	0.016	96	2076060	40.0	26.2	
126 Di-n-butyl phthalate	149	11.143	11.122	0.021	99	2580611	40.0	26.0	
57 Azobenzene	77		11.800				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	12.014	11.992	0.022	98	2302555	40.0	25.8	
132 Benzidine	184	12.147	12.126	0.021	99	339731	40.0	9.46	
133 Pyrene	202	12.334	12.308	0.026	97	2383540	40.0	26.0	
138 Butyl benzyl phthalate	149	13.248	13.216	0.032	98	1116341	40.0	27.4	
144 3,3'-Dichlorobenzidine	252	14.241	14.204	0.037	75	655724	40.0	24.5	
145 Bis(2-ethylhexyl) phthalat	149	14.284	14.252	0.032	97	1570948	40.0	27.8	
146 Benzo[a]anthracene	228	14.316	14.284	0.032	99	2128019	40.0	26.5	
147 Chrysene	228	14.386	14.354	0.032	98	1965387	40.0	25.9	
150 Di-n-octyl phthalate	149	15.588	15.550	0.038	99	2706368	40.0	28.1	
152 Benzo[b]fluoranthene	252	16.453	16.410	0.043	98	1984445	40.0	24.7	
153 Benzo[k]fluoranthene	252	16.506	16.464	0.042	99	2051897	40.0	26.1	
154 Benzo[a]pyrene	252	17.115	17.068	0.047	79	1931792	40.0	26.7	
157 Indeno[1,2,3-cd]pyrene	276	19.578	19.514	0.064	97	2060212	40.0	27.1	
158 Dibenz(a,h)anthracene	278	19.610	19.546	0.064	90	1726736	40.0	27.3	
159 Benzo[g,h,i]perylene	276	20.257	20.187	0.070	96	1774434	40.0	27.3	
S 199 Total Cresols	108				0		80.0	49.2	
S 197 Methyl Phenols,Total	108				0		80.0	49.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00007 Amount Added: 1.00 Units: uL Run Reagent

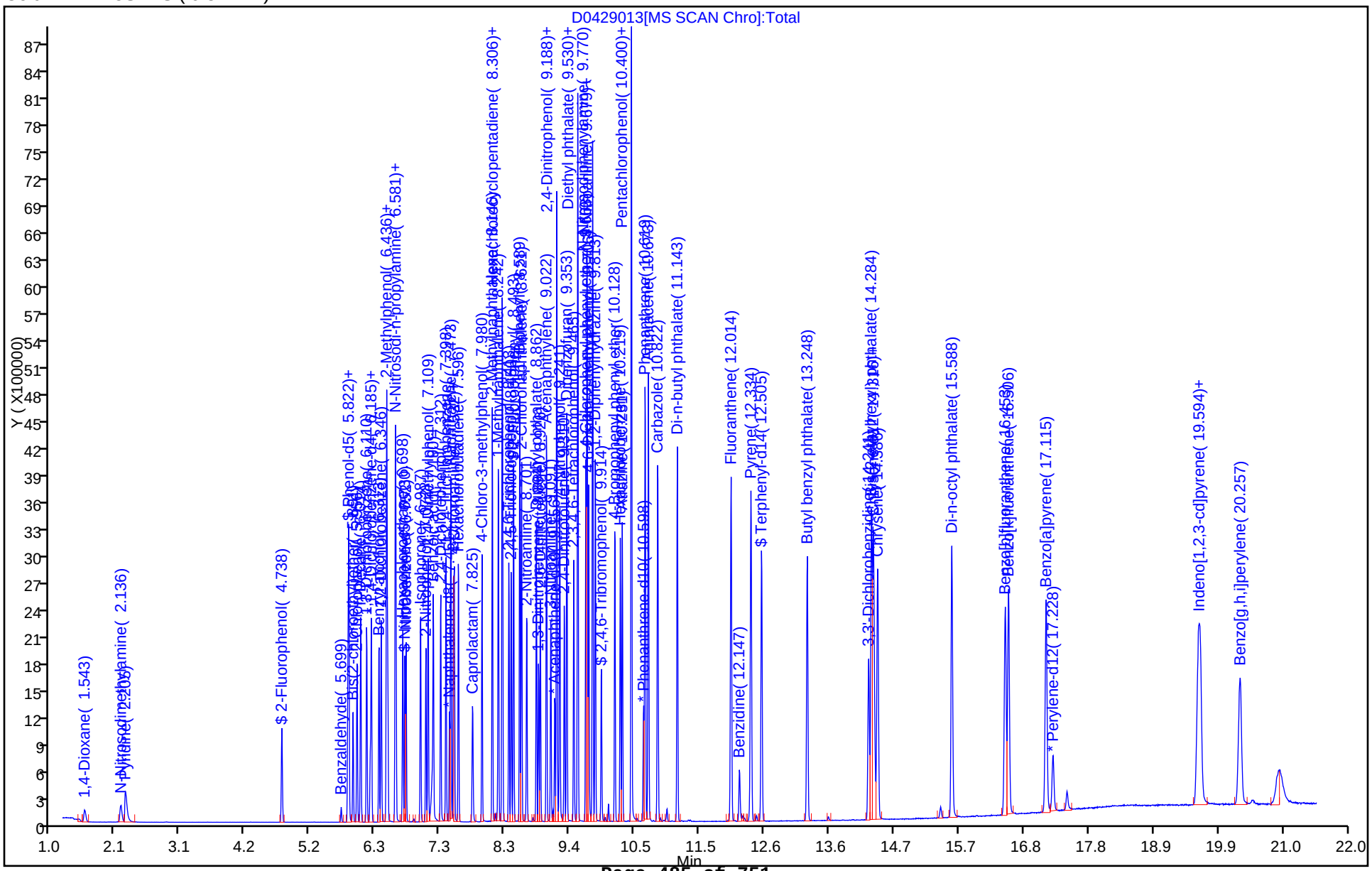
Report Date: 30-Apr-2015 06:33:56 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150429-6684.b\D0429013.D

Injection Date:	29-Apr-2015 16:09:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	LCSD 180-139434/3-A			Worklist Smp#:	13
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: CH731 Start Date: 12/16/2014 04:02

Analysis Batch Number: 128394 End Date: 12/16/2014 09:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-128394/2		12/16/2014 04:02	1	V1216002.D	Rxi-5SilMS 0.32(mm)
IC 180-128394/3		12/16/2014 04:19	1	V1216003.D	Rxi-5SilMS 0.32(mm)
IC 180-128394/4		12/16/2014 04:48	1	V1216004.D	Rxi-5SilMS 0.32(mm)
IC 180-128394/5		12/16/2014 05:16	1	V1216005.D	Rxi-5SilMS 0.32(mm)
ICIS 180-128394/6		12/16/2014 05:44	1	V1216006.D	Rxi-5SilMS 0.32(mm)
IC 180-128394/7		12/16/2014 06:12	1	V1216007.D	Rxi-5SilMS 0.32(mm)
IC 180-128394/8		12/16/2014 06:41	1	V1216008.D	Rxi-5SilMS 0.32(mm)
IC 180-128394/9		12/16/2014 07:09	1	V1216009.D	Rxi-5SilMS 0.32(mm)
IC 180-128394/10		12/16/2014 07:37	1	V1216010.D	Rxi-5SilMS 0.32(mm)
ICV 180-128394/11		12/16/2014 08:06	1		Rxi-5SilMS 0.32(mm)
ICV 180-128394/12		12/16/2014 08:34	1		Rxi-5SilMS 0.32(mm)
ICV 180-128394/13		12/16/2014 09:02	1		Rxi-5SilMS 0.32(mm)
ICV 180-128394/14		12/16/2014 09:30	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: CH732 Start Date: 02/03/2015 05:37

Analysis 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.: 180-43220-1

SDG No.:

Instrument ID: CH731 Start Date: 04/23/2015 09:06

Analysis Batch Number: 139416 End Date: 04/23/2015 21:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-139416/2		04/23/2015 09:06	1	V0423002.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-139416/3		04/23/2015 09:24	1	V0423003.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 09:53	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 10:17	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 10:42	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 11:06	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 11:31	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 11:55	1		Rxi-5SilMS 0.32(mm)
MB 180-139286/1-A		04/23/2015 12:24	1	V0423015.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 12:53	1		Rxi-5SilMS 0.32(mm)
LCS 180-139286/2-A		04/23/2015 13:21	1	V0423017.D	Rxi-5SilMS 0.32(mm)
LCSD 180-139286/3-A		04/23/2015 13:50	1	V0423018.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 14:18	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 14:43	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 15:07	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 15:32	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 16:21	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 16:49	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 17:17	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 18:14	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 18:42	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 19:10	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 19:38	10		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 20:06	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 20:34	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/23/2015 21:02	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: CH731 Start Date: 04/24/2015 08:03

Analysis Batch Number: 139524 End Date: 04/24/2015 18:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-139524/2		04/24/2015 08:03	1	V0424002.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-139524/3		04/24/2015 08:22	1	V0424003.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 11:40	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 12:08	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 12:36	150		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 13:04	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 13:31	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 13:59	1		Rxi-5SilMS 0.32(mm)
180-43220-2	PW-D02	04/24/2015 14:27	1	V0424017.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 14:55	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 15:22	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 16:17	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 16:45	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/24/2015 18:07	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: CH732 Start Date: 04/29/2015 11:13

Analysis Batch Number: 140008 End Date: 04/29/2015 23:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-140008/2		04/29/2015 11:13	1	D0429002.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-140008/3		04/29/2015 11:29	1	D0429003.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 11:57	1		Rxi-5SilMS 0.32(mm)
MB 180-139434/1-A		04/29/2015 12:52	1	D0429006.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 13:20	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 13:48	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 14:16	1		Rxi-5SilMS 0.32(mm)
LCS 180-139434/2-A		04/29/2015 15:41	1	D0429012.D	Rxi-5SilMS 0.32(mm)
LCSD 180-139434/3-A		04/29/2015 16:09	1	D0429013.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 16:37	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 17:05	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 17:33	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 18:01	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 18:29	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 19:25	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 19:53	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 20:21	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 20:49	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 21:17	20		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 21:45	2		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 22:13	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		04/29/2015 22:41	1		Rxi-5SilMS 0.32(mm)
180-43220-1	PW-E01	04/29/2015 23:09	1	D0429028.D	Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Batch Number: 139286 Batch Start Date: 04/22/15 13:10 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 04/23/15 07:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00038	OPQL8270SURi 00029
MB 180-139286/1		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2		25 uL
LCS 180-139286/2		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	25 uL	25 uL
LCSD 180-139286/3		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	25 uL	25 uL
180-43220-A-2	PW-D02	3520C, 8270D LL	T	7 SU	270 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	0725
Time the first extraction started 24 hr	1310
N-evap #	1
Na2SO4 Lot Number	1505618
pH Paper Lot Number	Ph paper HC432654
Prep Solvent Lot #	1535087
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	100 mL
Person's name who did the prep	BT
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.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Batch Number: 139434 Batch Start Date: 04/23/15 14:20 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 04/24/15 08:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00038	OPQL8270SURi 00029
MB 180-139434/1		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2		25 uL
LCS 180-139434/2		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	25 uL	25 uL
LCSD 180-139434/3		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	25 uL	25 uL
180-43220-A-1	PW-E01	3520C, 8270D LL	T	7 SU	270 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	0835
Time the first extraction started 24 hr	1420
N-evap #	1
Na2SO4 Lot Number	1505618
pH Paper Lot Number	Ph paper HC432654
Prep Solvent Lot #	1543718
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	100 mL
Person's name who did the prep	BT
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: 180-43220-1

SDG No.:

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
PW-E01	180-43220-1
PW-D02	180-43220-2
PW-C02	180-43220-3

Comments:

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

Client Sample ID: PW-E01 Lab Sample ID: 180-43220-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG ID.:

Matrix: Water Date Sampled: 04/16/2015 14:15

Reporting Basis: WET Date Received: 04/18/2015 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-43-9	Cadmium	ND	10	1.1	ug/L			10	6020A
7439-92-1	Lead	ND	10	0.19	ug/L			10	6020A
7440-02-0	Nickel	ND	10	1.7	ug/L			10	6020A
7440-66-6	Zinc	ND	50	9.6	ug/L			10	6020A
7440-50-8	Copper	ND	20	2.4	ug/L			10	6020A

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

Client Sample ID: PW-D02 Lab Sample ID: 180-43220-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG ID.:

Matrix: Water Date Sampled: 04/17/2015 10:50

Reporting Basis: WET Date Received: 04/18/2015 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-43-9	Cadmium	ND	10	1.1	ug/L			10	6020A
7439-92-1	Lead	0.74	10	0.19	ug/L	J		10	6020A
7440-02-0	Nickel	ND	10	1.7	ug/L			10	6020A
7440-66-6	Zinc	22	50	9.6	ug/L	J		10	6020A
7440-50-8	Copper	2.6	20	2.4	ug/L	J		10	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: PW-C02 Lab Sample ID: 180-43220-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG ID.:

Matrix: Water Date Sampled: 04/17/2015 13:15

Reporting Basis: WET Date Received: 04/18/2015 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.095	0.20	0.078	ug/L	J		1	7470A

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

Client Sample ID: PW-C02 Lab Sample ID: 180-43220-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG ID.:

Matrix: Water Date Sampled: 04/17/2015 13:15

Reporting Basis: WET Date Received: 04/18/2015 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-43-9	Cadmium	1.1	10	1.1	ug/L	J		10	6020A
7439-92-1	Lead	30	10	0.19	ug/L			10	6020A
7440-02-0	Nickel	3.5	10	1.7	ug/L	J		10	6020A
7440-66-6	Zinc	210	50	9.6	ug/L			10	6020A
7440-50-8	Copper	18	20	2.4	ug/L	J		10	6020A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

ICV Source: MICVX_00031 Concentration Units: ug/L

CCV Source: MCCV1X_00074

Analyte	ICV 180-139903/5 04/27/2015 10:51				CCV 180-139903/10 04/27/2015 11:20				CCV 180-139903/22 04/27/2015 12:25			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Cadmium	79.8		80.0	100	95.0		100	95	95.3		100	95
Copper	81.7		80.0	102	94.9		100	95	94.5		100	94
Lead	80.2		80.0	100	95.3		100	95	99.5		100	100
Nickel	84.3		80.0	105	97.7		100	98	96.7		100	97
Zinc	81.4		80.0	102	92.6		100	93	94.2		100	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.: 180-43220-1

SDG No.:

ICV Source: MICVX_00031 Concentration Units: ug/L

CCV Source: MCCV1X_00074

Analyte	CCV 180-139903/34 04/27/2015 13:30				CCV 180-139903/46 04/27/2015 14:35				CCV 180-139903/58 04/27/2015 15:40			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Cadmium	94.8		100	95	94.6		100	95	93.6		100	94
Copper	94.3		100	94	91.6		100	92	91.6		100	92
Lead	99.2		100	99	99.8		100	100	97.6		100	98
Nickel	96.6		100	97	95.3		100	95	93.5		100	94
Zinc	93.9		100	94	92.8		100	93	91.2		100	91

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.: 180-43220-1

SDG No.:

ICV Source: MHgWorkingicv_01006 Concentration Units: ug/L

CCV Source: MHgworkingCal_01035

Analyte	ICV 180-140288/7-A 05/01/2015 12:58				CCV 180-140288/10-A 05/01/2015 13:04				CCV 180-140288/10-A 05/01/2015 13:40			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.44		2.50	98	5.08		5.00	102	5.16		5.00	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.: 180-43220-1

SDG No.:

ICV Source: MHgWorkingicv_01006 Concentration Units: ug/L

CCV Source: MHgworkingCal_01035

Analyte	CCV 180-140288/10-A 05/01/2015 14:03											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.01		5.00	100								

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.: 180-43220-1

SDG No.:

Method: 6020A Instrument ID: X

Lab Sample ID: CRI 180-139903/7 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cadmium	1.00	1.11		111	70-130
Lead	1.00	0.989	J	99	70-130
Nickel	1.00	0.981	J	98	70-130
Zinc	5.00	4.92	J	98	70-130
Copper	2.00	2.06		103	70-130

Lab Sample ID: CRI 180-139903/131 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cadmium	1.00	1.25		125	70-130
Lead	1.00	1.04		104	70-130
Nickel	1.00	1.18		118	70-130
Zinc	5.00	5.13		103	70-130
Copper	2.00	2.05		102	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.: 180-43220-1

SDG No.:

Method: 7470A Instrument ID: K

Lab Sample ID: CRA 180-140288/9-A Concentration Units: ug/L

CRQL Check Standard Source: MHgworkingCal_01035

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.193	J	97	50-150

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-139903/6 04/27/2015 10:56		CCB1 180-139903/11 04/27/2015 11:29		CCB2 180-139903/23 04/27/2015 12:34		CCB3 180-139903/35 04/27/2015 13:39	
		Found	C	Found	C	Found	C	Found	C
Cadmium	1.0	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	
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.: 180-43220-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB4 180-139903/47 04/27/2015 14:44		CCB5 180-139903/59 04/27/2015 15:49					
		Found	C	Found	C	Found	C	Found	C
Cadmium	1.0	ND		ND					
Copper	2.0	ND		ND					
Lead	1.0	ND		ND					
Nickel	1.0	ND		ND					
Zinc	5.0	ND		ND					

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-140288/8-A 05/01/2015 13:00		CCB 180-140288/11-A 05/01/2015 13:06		CCB 180-140288/11-A 05/01/2015 13:42		CCB 180-140288/11-A 05/01/2015 14:05	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-139168/1-A

Instrument Code: X Batch No.: 139903

CAS No.	Analyte	Concentration	C	Q	Method
7440-43-9	Cadmium	ND			6020A
7439-92-1	Lead	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 - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-139169/1-A

Instrument Code: X Batch No.: 139903

CAS No.	Analyte	Concentration	C	Q	Method
7440-43-9	Cadmium	ND			6020A
7439-92-1	Lead	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.: 180-43220-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-140252/1-A

Instrument Code: K Batch No.: 140313

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.: 180-43220-1

SDG No.:

Lab Sample ID: ICSA 180-139903/8 Instrument ID: X

Lab File ID: X50427A1.xml ICS Source: MICSAX_00065

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Cadmium		**1.30**	
Copper		**1.17**	
Lead		**0.198**	
Nickel		**0.238**	
Zinc		**2.11**	
Aluminum	*100000*	*96020*	*96*
Antimony		*-0.253*	
Arsenic		*0.122*	
Barium		*0.119*	
Beryllium		*-0.0640*	
Boron		*28.3*	
Calcium	*100000*	*96860*	*97*
Chromium		*1.40*	
Cobalt		*0.154*	
Iron	*100000*	*96850*	*97*
Magnesium	*100000*	*96680*	*97*
Manganese		*40.0*	
Molybdenum	*2000*	*2118*	*106*
Potassium	*100000*	*96820*	*97*
Selenium		*0.281*	
Silicon		*25.8*	
Silver		*0.0520*	
Sodium	*100000*	*95930*	*96*
Strontium		*0.696*	
Thallium		*0.0570*	
Tin		*-2.10*	
Titanium	*2000*	*1993*	*100*
Vanadium		*-0.0780*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Lab Sample ID: ICSAB 180-139903/9 Instrument ID: X

Lab File ID: X50427A1.xml ICS Source: MICSABX-2_00004

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Cadmium	**20.0**	**22.0**	**110**
Copper	**20.0**	**21.0**	**105**
Lead	**20.0**	**21.0**	**105**
Nickel	**20.0**	**20.5**	**102**
Zinc	**25.0**	**21.7**	**87**
Aluminum	*100000*	*98940*	*99*
Antimony	*20.0*	*20.8*	*104*
Arsenic	*20.0*	*20.5*	*102*
Barium	*20.0*	*20.5*	*103*
Beryllium	*20.0*	*21.4*	*107*
Calcium	*100000*	*98580*	*99*
Chromium	*20.0*	*21.3*	*107*
Cobalt	*20.0*	*19.9*	*99*
Iron	*100000*	*99610*	*100*
Magnesium	*100000*	*99607*	*100*
Manganese	*50.0*	*59.1*	*118*
Molybdenum	*2000*	*2207*	*110*
Potassium	*100000*	*100397*	*100*
Selenium	*50.0*	*53.1*	*106*
Silicon	*500*	*537*	*107*
Silver	*20.0*	*20.2*	*101*
Sodium	*100000*	*99277*	*99*
Strontium	*25.0*	*20.2*	*81*
Thallium	*20.0*	*20.5*	*103*
Tin	*100*	*100*	*100*
Titanium	*2000*	*2056*	*103*
Vanadium	*20.0*	*19.3*	*97*

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

FORM IVA-IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 180-139168/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

Sample Matrix: Water LCS Source: MTAPITTICPMS_00020

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Cadmium	50.0	48.1		96	80	120		6020A
Lead	20.0	19.6		98	80	120		6020A
Nickel	500	465		93	80	120		6020A
Zinc	500	448		90	80	120		6020A
Copper	250	232		93	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 - TOTAL RECOVERABLE

Lab ID: LCS 180-139169/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

Sample Matrix: Water LCS Source: MTAPITTICPMS_00020

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Cadmium	50.0	47.0		94	80	120		6020A
Lead	20.0	19.7		99	80	120		6020A
Nickel	500	460		92	80	120		6020A
Zinc	500	452		90	80	120		6020A
Copper	250	231		92	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 180-140252/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

Sample Matrix: Water LCS Source: MHgworkingCal_01035

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	2.50	2.44		98	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: 180-43220-1

SDG Number:

Matrix: Water Instrument ID: X

Method: 6020A MDL Date: 01/23/2010 18:33

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Cadmium	111	1	0.1144
Copper	65	2	0.2443
Lead	208	1	0.0192
Nickel	60	1	0.1749
Zinc	66	5	0.9609

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job Number: 180-43220-1

SDG Number:

Matrix: Water Instrument ID: X

Method: 6020A XMDL Date: 01/23/2010 18:33

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Cadmium	111	1	0.1144
Copper	65	2	0.2443
Lead	208	1	0.0192
Nickel	60	1	0.1749
Zinc	66	5	0.9609

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-43220-1

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: 180-43220-1

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: 180-43220-1

SDG No.:

Instrument ID: X Date: 03/14/2011 22:35

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Cadmium		13500	6020A
Lead		20000	6020A
Nickel		13500	6020A
Zinc		25000	6020A
Copper		20000	6020A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-139168/1-A	04/21/2015 12:18	139168		50	50
LCS 180-139168/2-A	04/21/2015 12:18	139168		50	50
180-43220-1	04/21/2015 12:18	139168		50	50
180-43220-2	04/21/2015 12:18	139168		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-139169/1-A	04/21/2015 12:22	139169		50	50
LCS 180-139169/2-A	04/21/2015 12:22	139169		50	50
180-43220-3	04/21/2015 12:22	139169		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-140252/1-A	05/01/2015 08:42	140252		50	50
LCS 180-140252/2-A	05/01/2015 08:42	140252		50	50
180-43220-3	05/01/2015 08:42	140252		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: X Analysis Method: 6020A

Start Date: 04/27/2015 09:05 End Date: 04/28/2015 00:06

Lab Sample Id	D/F	Type	Time	Analytes																									
				Cd	Cu	Ni	Pb	Zn																					
ITUNE 180-139903/1			09:05																										
STD1 180-139903/2 IC	1		10:37	X	X	X	X	X																					
STD2 180-139903/3 IC	1		10:41	X	X	X	X	X																					
STD3 180-139903/4 IC	1		10:46	X	X	X	X	X																					
ICV 180-139903/5	1		10:51	X	X	X	X	X																					
ICB 180-139903/6	1		10:56	X	X	X	X	X																					
CRI 180-139903/7	1		11:01	X	X	X	X	X																					
ICSA 180-139903/8	1		11:06	X	X	X	X	X																					
ICSAB 180-139903/9	1		11:11	X	X	X	X	X																					
CCV 180-139903/10	1		11:20	X	X	X	X	X																					
CCB1 180-139903/11	1		11:29	X	X	X	X	X																					
MB 180-139168/1-A	1	R	11:34	X	X	X	X	X																					
ZZZZZZ			11:39																										
LCS 180-139168/2-A	1	R	11:44	X	X	X	X	X																					
ZZZZZZ			11:49																										
ZZZZZZ			11:54																										
ZZZZZZ			11:59																										
ZZZZZZ			12:05																										
ZZZZZZ			12:10																										
ZZZZZZ			12:15																										
ZZZZZZ			12:20																										
CCV 180-139903/22	1		12:25	X	X	X	X	X																					
CCB2 180-139903/23	1		12:34	X	X	X	X	X																					
ZZZZZZ			12:39																										
ZZZZZZ			12:44																										
ZZZZZZ			12:49																										
ZZZZZZ			12:54																										
ZZZZZZ			12:59																										
ZZZZZZ			13:04																										
ZZZZZZ			13:09																										
ZZZZZZ			13:14																										
180-43220-1	10	R	13:20	X	X	X	X	X																					
180-43220-2	10	R	13:25	X	X	X	X	X																					
CCV 180-139903/34	1		13:30	X	X	X	X	X																					
CCB3 180-139903/35	1		13:39	X	X	X	X	X																					
MB 180-139169/1-A	1	R	13:44	X	X	X	X	X																					
LCS 180-139169/2-A	1	R	13:49	X	X	X	X	X																					
ZZZZZZ			13:54																										
ZZZZZZ			13:59																										
ZZZZZZ			14:04																										
ZZZZZZ			14:09																										
ZZZZZZ			14:15																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: X Analysis Method: 6020A

Start Date: 04/27/2015 09:05 End Date: 04/28/2015 00:06

Lab Sample Id	D/F	Type	Time	Analytes																									
				Cd	Cu	Ni	Pb	Zn																					
ZZZZZZ			14:20																										
ZZZZZZ			14:25																										
ZZZZZZ			14:30																										
CCV 180-139903/46	1		14:35	X	X	X	X	X																					
CCB4 180-139903/47	1		14:44	X	X	X	X	X																					
180-43220-3	10	R	14:49	X	X	X	X	X																					
ZZZZZZ			14:54																										
ZZZZZZ			14:59																										
ZZZZZZ			15:04																										
ZZZZZZ			15:09																										
ZZZZZZ			15:14																										
ZZZZZZ			15:19																										
ZZZZZZ			15:25																										
ZZZZZZ			15:30																										
ZZZZZZ			15:35																										
CCV 180-139903/58	1		15:40	X	X	X	X	X																					
CCB5 180-139903/59	1		15:49	X	X	X	X	X																					
ZZZZZZ			15:54																										
ZZZZZZ			15:59																										
ZZZZZZ			16:04																										
ZZZZZZ			16:17																										
ZZZZZZ			16:31																										
ZZZZZZ			16:37																										
ZZZZZZ			16:42																										
ZZZZZZ			16:47																										
ZZZZZZ			16:52																										
CCV 180-139903/69			16:57																										
CCB6 180-139903/70			17:06																										
ZZZZZZ			17:11																										
ZZZZZZ			17:16																										
ZZZZZZ			17:21																										
ZZZZZZ			17:26																										
ZZZZZZ			17:31																										
ZZZZZZ			17:37																										
ZZZZZZ			17:42																										
ZZZZZZ			17:47																										
ZZZZZZ			17:52																										
ZZZZZZ			17:57																										
CCV 180-139903/81			18:02																										
CCB7 180-139903/82			18:11																										
ZZZZZZ			18:16																										
ZZZZZZ			18:21																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: X Analysis Method: 6020A

Start Date: 04/27/2015 09:05 End Date: 04/28/2015 00:06

Lab Sample Id	D/F	Type	Time	Analytes																									
				Cd	Cu	Ni	Pb	Zn																					
ZZZZZZ			18:26																										
ZZZZZZ			18:31																										
ZZZZZZ			18:37																										
ZZZZZZ			18:42																										
ZZZZZZ			18:47																										
ZZZZZZ			18:52																										
ZZZZZZ			18:57																										
ZZZZZZ			19:02																										
CCV 180-139903/93			19:07																										
CCB8 180-139903/94			19:16																										
ZZZZZZ			19:21																										
ZZZZZZ			19:26																										
ZZZZZZ			19:41																										
ZZZZZZ			19:46																										
ZZZZZZ			19:51																										
ZZZZZZ			19:56																										
ZZZZZZ			20:01																										
ZZZZZZ			20:06																										
ZZZZZZ			20:11																										
CCV 180-139903/104			20:16																										
CCB9 180-139903/105			20:25																										
ZZZZZZ			20:31																										
ZZZZZZ			20:36																										
ZZZZZZ			20:41																										
ZZZZZZ			20:46																										
ZZZZZZ			20:51																										
ZZZZZZ			20:56																										
ZZZZZZ			21:01																										
ZZZZZZ			21:07																										
ZZZZZZ			21:12																										
ZZZZZZ			21:17																										
CCV 180-139903/116			21:22																										
CCB10 180-139903/117			21:31																										
ZZZZZZ			21:36																										
ZZZZZZ			21:41																										
ZZZZZZ			21:46																										
ZZZZZZ			21:51																										
ZZZZZZ			21:56																										
ZZZZZZ			22:02																										
ZZZZZZ			22:07																										
ZZZZZZ			22:12																										
ZZZZZZ			22:17																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: X Analysis Method: 6020A

Start Date: 04/27/2015 09:05 End Date: 04/28/2015 00:06

Lab Sample Id	D/F	Type	Time	Analytes																									
				Cd	Cu	Ni	Pb	Zn																					
CCV 180-139903/127			22:22																										
CCB11 180-139903/128			22:32																										
ZZZZZZ			22:37																										
ZZZZZZ			22:42																										
CRI 180-139903/131	1		22:51	X	X	X	X	X																					
CCV 180-139903/132			23:02																										
CCB12 180-139903/133			23:11																										
ZZZZZZ			23:16																										
ZZZZZZ			23:21																										
ZZZZZZ			23:26																										
ZZZZZZ			23:31																										
ZZZZZZ			23:36																										
ZZZZZZ			23:41																										
ZZZZZZ			23:47																										
ZZZZZZ			23:52																										
CCV 180-139903/142			23:57																										
CCB13 180-139903/143			00:06																										

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: K Analysis Method: 7470A

Start Date: 05/01/2015 12:46 End Date: 05/01/2015 15:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 180-140288/1-A			12:46	X																								
IC 180-140288/2-A			12:48	X																								
IC 180-140288/3-A			12:50	X																								
IC 180-140288/4-A			12:52	X																								
IC 180-140288/5-A			12:54	X																								
IC 180-140288/6-A			12:56	X																								
ICV 180-140288/7-A	1		12:58	X																								
ICB 180-140288/8-A	1		13:00	X																								
CRA 180-140288/9-A	1		13:02	X																								
CCV 180-140288/10-A	1		13:04	X																								
CCB 180-140288/11-A	1		13:06	X																								
CCV 180-140313/12			13:08																									
CCB 180-140313/13			13:10																									
MB 180-140252/1-A	1	T	13:21	X																								
LCS 180-140252/2-A	1	T	13:23	X																								
ZZZZZZ			13:25																									
ZZZZZZ			13:27																									
ZZZZZZ			13:29																									
ZZZZZZ			13:31																									
ZZZZZZ			13:33																									
ZZZZZZ			13:35																									
ZZZZZZ			13:37																									
ZZZZZZ			13:39																									
CCV 180-140288/10-A	1		13:40	X																								
CCB 180-140288/11-A	1		13:42	X																								
ZZZZZZ			13:44																									
ZZZZZZ			13:46																									
ZZZZZZ			13:48																									
180-43220-3	1	T	13:50	X																								
ZZZZZZ			13:52																									
ZZZZZZ			13:54																									
ZZZZZZ			13:56																									
ZZZZZZ			13:58																									
ZZZZZZ			13:59																									
ZZZZZZ			14:01																									
CCV 180-140288/10-A	1		14:03	X																								
CCB 180-140288/11-A	1		14:05	X																								
ZZZZZZ			14:07																									
ZZZZZZ			14:09																									
ZZZZZZ			14:11																									
ZZZZZZ			14:13																									
ZZZZZZ			14:15																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: K Analysis Method: 7470A

Start Date: 05/01/2015 12:46 End Date: 05/01/2015 15:50

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			14:17	
ZZZZZZ			14:19	
ZZZZZZ			14:21	
ZZZZZZ			14:22	
ZZZZZZ			14:24	
CCV 180-140288/10-A			14:26	
CCB 180-140288/11-A			14:28	
ZZZZZZ			14:30	
ZZZZZZ			14:32	
ZZZZZZ			14:34	
ZZZZZZ			14:36	
ZZZZZZ			14:38	
ZZZZZZ			14:40	
ZZZZZZ			14:42	
ZZZZZZ			14:43	
ZZZZZZ			14:45	
ZZZZZZ			14:47	
CCV 180-140288/10-A			14:49	
CCB 180-140288/11-A			14:51	
ZZZZZZ			14:53	
ZZZZZZ			14:55	
ZZZZZZ			14:57	
ZZZZZZ			14:59	
ZZZZZZ			15:01	
ZZZZZZ			15:03	
ZZZZZZ			15:05	
ZZZZZZ			15:07	
ZZZZZZ			15:09	
ZZZZZZ			15:10	
CCV 180-140288/10-A			15:12	
CCB 180-140288/11-A			15:14	
ZZZZZZ			15:16	
ZZZZZZ			15:18	
ZZZZZZ			15:20	
ZZZZZZ			15:22	
ZZZZZZ			15:24	
ZZZZZZ			15:26	
ZZZZZZ			15:28	
ZZZZZZ			15:30	
ZZZZZZ			15:32	
ZZZZZZ			15:34	
CCV 180-140288/10-A			15:36	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: K Analysis Method: 7470A

Start Date: 05/01/2015 12:46 End Date: 05/01/2015 15:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
CCB 180-140288/11-A			15:38																									
ZZZZZZ			15:40																									
ZZZZZZ			15:42																									
ZZZZZZ			15:44																									
ZZZZZZ			15:46																									
CCV 180-140288/10-A			15:48																									
CCB 180-140288/11-A			15:50																									

Prep Types:
T = Total/NA

FORM XIII-IN

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

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 180-139903/2 I	10:37	100		100		100		100		100	
STD2 180-139903/3 I	10:41	93		95		93		88		90	
STD3 180-139903/4 I	10:46	97		94		96		94		95	
ICV 180-139903/5	10:51	94		93		95		89		92	
ICB 180-139903/6	10:56	100		96		100		97		98	
CRI 180-139903/7	11:01	102		98		100		96		81	
ICSA 180-139903/8	11:06	83		85		86		76		81	
ICSAB 180-139903/9	11:11	81		84		83		74		79	
CCV 180-139903/10	11:20	90		90		92		85		87	
CCB1 180-139903/11	11:29	99		95		97		92		94	
MB 180-139168/1-A	11:34	99		97		99		94		97	
LCS 180-139168/2-A	11:44	89		79		80		74		77	
CCV 180-139903/22	12:25	88		82		83		77		79	
CCB2 180-139903/23	12:34	93		89		89		85		87	
180-43220-1	13:20	84		83		81		73		77	
180-43220-2	13:25	87		84		82		74		78	
CCV 180-139903/34	13:30	87		82		82		75		77	
CCB3 180-139903/35	13:39	95		88		86		81		83	
MB 180-139169/1-A	13:44	93		89		89		83		86	
LCS 180-139169/2-A	13:49	89		76		75		68		71	
CCV 180-139903/46	14:35	89		84		81		72		75	
CCB4 180-139903/47	14:44	96		90		88		82		84	
180-43220-3	14:49	86		83		80		72		76	
CCV 180-139903/58	15:40	86		83		81		74		73	
CCB5 180-139903/59	15:49	95		88		86		80		83	
CRI 180-139903/131	22:51	74		76		74		77		45	

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

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

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-139903/2 I	10:37	100		100		100					
STD2 180-139903/3 I	10:41	95		93		88					
STD3 180-139903/4 I	10:46	96		95		92					
ICV 180-139903/5	10:51	94		93		87					
ICB 180-139903/6	10:56	98		96		96					
CRI 180-139903/7	11:01	79		96		93					
ICSA 180-139903/8	11:06	87		86		80					
ICSAB 180-139903/9	11:11	85		84		76					
CCV 180-139903/10	11:20	90		89		82					
CCB1 180-139903/11	11:29	94		93		89					
MB 180-139168/1-A	11:34	96		94		92					
LCS 180-139168/2-A	11:44	82		83		75					
CCV 180-139903/22	12:25	83		82		74					
CCB2 180-139903/23	12:34	88		87		86					
180-43220-1	13:20	80		80		72					
180-43220-2	13:25	82		82		73					
CCV 180-139903/34	13:30	82		80		71					
CCB3 180-139903/35	13:39	84		83		78					
MB 180-139169/1-A	13:44	87		85		81					
LCS 180-139169/2-A	13:49	77		76		66					
CCV 180-139903/46	14:35	78		78		66					
CCB4 180-139903/47	14:44	84		83		77					
180-43220-3	14:49	79		77		69					
CCV 180-139903/58	15:40	80		80		69					
CCB5 180-139903/59	15:49	83		82		75					
CRI 180-139903/131	22:51	66		73		71					

Dilution Corrected Concentrations

STD1 1542085 4/27/2015 10:37:05 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:12	99.299%	0.092	0.264	-0.066	0.000	-1.669	0.882	0.533
2	10:36:20	100.146%	-0.085	-0.093	-0.174	0.000	-0.424	-0.442	0.101
3	10:36:28	100.555%	-0.006	-0.171	0.240	0.000	2.093	-0.440	-0.634
x		100.000%	-0.000	0.000	0.000	0.000	0.000	0.000	0.000
σ		0.641%	0.089	0.232	0.215	0.000	1.916	0.764	0.590
%RSD		0.641	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:12	-0.210	-0.815	0.000	0.021	-12.470	1.467	100.941%	0.092
2	10:36:20	0.002	0.927	0.000	1.782	9.791	-1.788	99.776%	-0.065
3	10:36:28	0.208	-0.112	0.000	-1.803	2.684	0.321	99.283%	-0.028
x		-0.000	-0.000	0.000	0.000	0.000	0.000	100.000%	-0.000
σ		0.209	0.876	0.000	1.792	11.370	1.651	0.851%	0.082
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.851	0.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:12	-0.070	0.001	-0.010	0.210	-0.223	-0.001	-0.051	-0.032
2	10:36:20	0.009	0.004	-0.004	0.003	-0.214	0.006	0.072	-0.014
3	10:36:28	0.062	-0.005	0.014	-0.213	0.438	-0.005	-0.021	0.045
x		-0.000	0.000	0.000	-0.000	0.000	-0.000	-0.000	0.000
σ		0.066	0.005	0.013	0.212	0.379	0.006	0.064	0.040
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:12	-0.018	-0.051	0.032	0.069	-0.044	-0.138	0.000	0.000
2	10:36:20	-0.007	0.083	-0.200	-0.059	0.044	1.321	0.000	-0.000
3	10:36:28	0.026	-0.032	0.168	-0.010	-0.000	-1.183	0.000	-0.000
x		-0.000	0.000	0.000	-0.000	-0.000	0.000	0.000	0.000
σ		0.023	0.072	0.186	0.064	0.044	1.258	0.000	0.000
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:12	97.857%	0.007	0.071	99.758%	0.003	0.021	0.000	0.013
2	10:36:20	100.075%	0.030	-0.003	99.661%	0.007	-0.027	0.000	0.021
3	10:36:28	102.068%	-0.037	-0.068	100.581%	-0.010	0.007	-0.000	-0.034
x		100.000%	0.000	-0.000	100.000%	-0.000	0.000	-0.000	0.000
σ		2.106%	0.034	0.070	0.505%	0.009	0.025	0.000	0.030
%RSD		2.106	0.000	0.000	0.505	0.000	0.000	0.000	0.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:12	98.499%	0.048	-0.037	-0.006	0.000	0.015	98.892%	100.219%
2	10:36:20	100.135%	-0.222	0.051	-0.063	0.000	-0.029	100.363%	98.932%
3	10:36:28	101.366%	0.175	-0.014	0.070	0.000	0.014	100.745%	100.850%
x		100.000%	0.000	0.000	0.000	0.000	-0.000	100.000%	100.000%
σ		1.439%	0.203	0.046	0.067	0.000	0.025	0.978%	0.977%
%RSD		1.439	0.000	0.000	0.000	0.000	0.000	0.978	0.977

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:12	-0.007	0.003	-0.019	-0.010	-0.009	99.124%
2	10:36:20	-0.001	-0.000	-0.004	0.003	0.006	100.508%
3	10:36:28	0.008	-0.003	0.023	0.007	0.003	100.368%
x		-0.000	0.000	-0.000	-0.000	-0.000	100.000%
σ		0.008	0.003	0.021	0.009	0.008	0.762%
%RSD		0.000	0.000	0.000	0.000	0.000	0.762

STD2 1533078 4/27/2015 10:41:14 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:20	93.730%	196.900	1.230	1.153	0.000	97550.000	98830.000	97780.000
2	10:40:28	90.978%	202.400	0.556	1.476	0.000	101400.000	100200.000	100600.000
3	10:40:36	92.646%	200.700	0.993	1.061	0.000	101100.000	100900.000	101700.000
x		92.452%	200.000	0.927	1.230	0.000	100000.000	100000.000	100000.000
σ		1.386%	2.830	0.342	0.218	0.000	2129.000	1072.000	2003.000
%RSD		1.499	1.415	36.890	17.710	0.000	2.129	1.072	2.003

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:20	975.400	7.981	0.000	98570.000	98500.000	99110.000	96.778%	3.114
2	10:40:28	1019.000	7.532	0.000	99950.000	99140.000	99460.000	94.412%	1.979
3	10:40:36	1006.000	8.062	0.000	101500.000	102400.000	101400.000	93.625%	2.498
x		1000.000	7.859	0.000	100000.000	100000.000	100000.000	94.938%	2.530
σ		22.320	0.285	0.000	1456.000	2062.000	1251.000	1.641%	0.568
%RSD		2.232	3.632	0.000	1.456	2.062	1.251	1.729	22.460

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:20	196.100	195.500	980.900	48890.000	49520.000	196.700	198.900	198.400
2	10:40:28	201.400	202.800	1002.000	50920.000	50370.000	201.100	203.000	199.800
3	10:40:36	202.500	201.800	1017.000	50190.000	50100.000	202.200	198.100	201.700
x		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		3.425	3.954	18.010	1030.000	436.500	2.891	2.629	1.652
%RSD		1.713	1.977	1.801	2.060	0.873	1.446	1.314	0.826

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:20	200.100	201.800	196.800	202.300	199.800	198.400	0.000	201.700
2	10:40:28	201.800	199.700	199.800	199.800	198.900	204.600	0.000	201.000
3	10:40:36	198.000	198.500	203.400	197.900	201.400	197.000	0.000	197.400
x		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		1.908	1.696	3.282	2.241	1.258	4.036	0.000	2.321
%RSD		0.954	0.848	1.641	1.121	0.629	2.018	0.000	1.160

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:20	90.903%	0.101	0.184	87.008%	202.600	201.600	200.700	202.300
2	10:40:28	93.489%	-0.033	0.053	88.306%	199.100	198.700	198.200	199.300
3	10:40:36	95.142%	0.035	0.147	88.780%	198.300	199.700	201.100	198.400
x		93.178%	0.035	0.128	88.031%	200.000	200.000	200.000	200.000
σ		2.136%	0.067	0.067	0.917%	2.280	1.478	1.587	2.019
%RSD		2.293	193.100	52.660	1.042	1.140	0.739	0.793	1.010

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:20	88.784%	-0.741	0.183	0.040	202.100	200.400	95.076%	92.172%
2	10:40:28	90.728%	-0.939	0.126	0.140	201.700	198.700	93.501%	93.305%
3	10:40:36	90.458%	-0.684	0.179	0.077	196.200	200.900	94.839%	93.330%
x		89.990%	-0.788	0.163	0.086	200.000	200.000	94.472%	92.936%
σ		1.053%	0.134	0.032	0.051	3.268	1.143	0.849%	0.661%
%RSD		1.170	17.030	19.710	58.830	1.634	0.572	0.899	0.711

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:20	198.600	196.600	196.600	197.300	197.900	88.678%
2	10:40:28	200.400	201.600	201.600	200.700	200.500	88.438%
3	10:40:36	201.000	201.800	201.900	202.000	201.700	88.127%
x		200.000	200.000	200.000	200.000	200.000	88.414%
σ		1.279	2.950	2.991	2.435	1.937	0.276%
%RSD		0.639	1.475	1.495	1.218	0.968	0.312

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:26	96.853%	0.630	199.300	202.400	0.000	168.600	138.500	150.100
2	10:45:34	98.324%	0.541	196.800	196.200	0.000	173.000	141.500	147.700
3	10:45:42	96.425%	0.520	203.900	201.400	0.000	173.400	144.500	140.500
x		97.201%	0.563	200.000	200.000	0.000	171.700	141.500	146.100
σ		0.996%	0.059	3.591	3.320	0.000	2.677	2.987	4.987
%RSD		1.025	10.400	1.796	1.660	0.000	1.560	2.112	3.414
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:26	13.410	9970.000	0.000	145.800	139.700	247.200	94.648%	198.200
2	10:45:34	14.440	9974.000	0.000	143.300	201.200	276.200	93.980%	201.900
3	10:45:42	14.780	10060.000	0.000	135.400	198.500	259.300	94.301%	199.900
x		14.210	10000.000	0.000	141.500	179.800	260.900	94.310%	200.000
σ		0.715	48.710	0.000	5.456	34.730	14.550	0.334%	1.878
%RSD		5.033	0.487	0.000	3.856	19.310	5.578	0.354	0.939
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:26	0.454	0.426	2.201	115.500	114.700	0.314	0.510	0.576
2	10:45:34	0.474	0.351	2.165	109.700	107.400	0.288	0.348	0.519
3	10:45:42	0.247	0.474	2.096	101.800	97.770	0.317	0.556	0.565
x		0.392	0.417	2.154	109.000	106.600	0.306	0.471	0.553
σ		0.126	0.062	0.053	6.863	8.497	0.016	0.109	0.030
%RSD		32.200	14.850	2.476	6.296	7.968	5.270	23.130	5.410
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:26	0.518	1.338	1.510	2.379	1.659	3.220	0.000	0.397
2	10:45:34	0.470	1.504	1.480	1.990	0.828	3.413	0.000	0.522
3	10:45:42	0.538	1.138	1.096	1.577	1.409	3.344	0.000	0.460
x		0.509	1.327	1.362	1.982	1.299	3.326	0.000	0.460
σ		0.035	0.184	0.231	0.401	0.427	0.098	0.000	0.063
%RSD		6.828	13.840	16.960	20.240	32.850	2.943	0.000	13.650
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:26	95.142%	197.200	196.500	93.480%	0.298	0.366	0.589	4.996
2	10:45:34	95.815%	201.700	201.100	94.292%	0.323	0.247	0.378	5.007
3	10:45:42	96.978%	201.100	202.300	95.450%	0.348	0.271	0.257	4.782
x		95.978%	200.000	200.000	94.407%	0.323	0.295	0.408	4.928
σ		0.929%	2.404	3.061	0.990%	0.025	0.063	0.168	0.126
%RSD		0.968	1.202	1.531	1.048	7.693	21.300	41.200	2.564
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:26	95.264%	199.000	201.400	200.200	0.635	0.479	94.727%	93.194%
2	10:45:34	94.573%	198.200	200.400	200.400	0.446	0.682	96.697%	95.368%
3	10:45:42	95.363%	202.800	198.200	199.400	0.556	0.658	96.179%	95.604%
x		95.067%	200.000	200.000	200.000	0.546	0.606	95.868%	94.722%
σ		0.430%	2.486	1.629	0.560	0.095	0.111	1.021%	1.329%
%RSD		0.453	1.243	0.814	0.280	17.410	18.310	1.065	1.403
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:45:26	0.342	0.368	0.348	0.392	0.333	91.291%		
2	10:45:34	0.422	0.377	0.382	0.311	0.330	92.268%		
3	10:45:42	0.358	0.327	0.301	0.321	0.324	92.218%		
x		0.374	0.357	0.344	0.342	0.329	91.926%		
σ		0.042	0.027	0.040	0.044	0.005	0.550%		
%RSD		11.320	7.450	11.730	12.940	1.419	0.598		

ICV 1527873 4/27/2015 10:51:22 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	10:50:29	94.992%	80.200	82.240	85.660	0.000	42030.000	39640.000	39780.000
2	10:50:37	92.560%	83.640	85.480	88.580	0.000	41910.000	40480.000	40550.000
3	10:50:45	95.026%	81.890	85.690	86.140	0.000	40890.000	40470.000	40070.000
x		94.193%	102.385%	105.585%	108.494%	0.000	104.024%	100.494%	100.333%
σ		1.414%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.501	2.104	2.290	1.806	0.000	1.512	1.195	0.963
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:50:29	423.000	4091.000	0.000	41360.000	39680.000	37310.000	92.409%	80.760
2	10:50:37	431.100	4257.000	0.000	41320.000	40390.000	38340.000	92.493%	82.880
3	10:50:45	424.800	4184.000	0.000	41390.000	40190.000	38300.000	93.162%	83.460
x		106.577%	104.435%	0.000	103.391%	100.215%	94.952%	92.688%	102.959%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.413%	n/a
%RSD		1.002	1.992	0.000	0.083	0.905	1.540	0.445	1.724
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:50:29	84.330	83.480	383.300	20130.000	19730.000	82.180	85.130	82.150
2	10:50:37	84.530	84.790	388.000	20610.000	20090.000	83.790	84.260	81.650
3	10:50:45	84.100	83.960	389.000	20230.000	19840.000	81.500	83.540	81.530
x		105.399%	105.098%	96.682%	101.622%	99.430%	103.115%	105.387%	102.219%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.260	0.790	0.784	1.240	0.934	1.425	0.940	0.404
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:50:29	80.880	82.850	79.530	82.340	82.250	80.840	0.000	80.330
2	10:50:37	82.740	81.530	81.900	83.360	82.500	75.500	0.000	81.270
3	10:50:45	81.400	79.670	82.100	81.380	82.990	78.610	0.000	79.840
x		102.088%	101.691%	101.470%	102.949%	103.224%	97.898%	0.000	100.600%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.174	1.967	1.761	1.199	0.456	3.426	0.000	0.904
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:50:29	94.761%	82.670	85.110	88.506%	80.800	80.320	80.150	82.250
2	10:50:37	93.835%	83.900	84.740	88.947%	78.480	80.090	80.770	82.330
3	10:50:45	96.278%	82.840	83.420	90.236%	79.470	79.010	78.480	82.410
x		94.958%	103.919%	105.530%	89.230%	99.482%	99.761%	99.751%	102.914%
σ		1.233%	n/a	n/a	0.899%	n/a	n/a	n/a	n/a
%RSD		1.299	0.801	1.050	1.008	1.463	0.875	1.486	0.093
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:50:29	90.574%	81.810	79.970	81.370	76.770	79.590	92.642%	91.584%
2	10:50:37	92.238%	81.060	81.590	81.340	84.200	78.500	93.495%	94.166%
3	10:50:45	92.580%	82.480	80.760	80.900	80.250	81.320	95.686%	93.527%
x		91.798%	102.231%	100.963%	101.500%	100.507%	99.753%	93.941%	93.092%
σ		1.073%	n/a	n/a	n/a	n/a	n/a	1.571%	1.345%
%RSD		1.169	0.866	1.006	0.325	4.621	1.777	1.672	1.444
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:50:29	82.430	81.540	81.140	78.860	79.970	87.043%		
2	10:50:37	83.230	82.050	81.290	78.890	79.920	87.520%		
3	10:50:45	83.900	83.290	82.400	80.540	80.850	87.300%		
x		103.986%	102.868%	102.012%	99.288%	100.310%	87.288%		
σ		n/a	n/a	n/a	n/a	n/a	0.238%		
%RSD		0.884	1.094	0.845	1.208	0.652	0.273		

ICB 4/27/2015 10:56:28 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:55:35	99.786%	-0.145	1.839	0.477	0.000	13.280	0.015	0.778
2	10:55:43	99.637%	0.019	0.917	0.281	0.000	14.230	0.052	1.874
3	10:55:51	100.271%	0.076	-0.031	0.080	0.000	13.920	0.632	1.271
x		99.898%	-0.017	0.909	0.279	0.000	13.810	0.233	1.308
σ		0.332%	0.114	0.935	0.198	0.000	0.484	0.346	0.549
%RSD		0.332	681.800	102.900	71.020	0.000	3.507	148.400	41.980

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:55:35	-0.902	13.550	0.000	20.890	7.261	1.644	97.375%	-0.321
2	10:55:43	-0.997	10.930	0.000	19.300	-11.150	2.543	96.246%	-0.385
3	10:55:51	-1.292	9.003	0.000	21.310	17.610	2.724	95.703%	-0.349
x		-1.064	11.160	0.000	20.500	4.574	2.303	96.441%	-0.352
σ		0.203	2.284	0.000	1.056	14.570	0.579	0.853%	0.032
%RSD		19.080	20.460	0.000	5.153	318.500	25.110	0.884	9.163

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:55:35	-0.085	-0.019	0.040	19.200	24.140	-0.005	-0.064	0.008
2	10:55:43	-0.048	-0.036	0.031	15.590	15.140	0.010	-0.048	-0.016
3	10:55:51	-0.168	-0.021	0.012	13.650	16.880	0.006	-0.079	-0.040
x		-0.100	-0.025	0.028	16.140	18.720	0.004	-0.064	-0.016
σ		0.061	0.009	0.014	2.817	4.770	0.008	0.016	0.024
%RSD		60.940	36.630	51.840	17.450	25.480	201.200	24.690	153.100

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:55:35	0.042	0.183	0.037	0.023	0.134	1.705	0.000	0.005
2	10:55:43	-0.005	-0.184	-0.109	-0.043	0.001	0.708	0.000	0.009
3	10:55:51	-0.063	-0.115	-0.226	0.045	0.088	0.403	0.000	0.004
x		-0.009	-0.038	-0.099	0.008	0.074	0.939	0.000	0.006
σ		0.053	0.195	0.132	0.046	0.068	0.681	0.000	0.003
%RSD		596.700	506.600	133.000	543.200	91.160	72.540	0.000	43.020

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:55:35	98.779%	0.762	0.698	96.371%	-0.033	-0.022	-0.000	-0.041
2	10:55:43	99.912%	0.597	0.562	96.703%	-0.013	-0.018	-0.000	-0.051
3	10:55:51	100.639%	0.228	0.340	96.996%	-0.005	-0.009	-0.000	-0.079
x		99.777%	0.529	0.534	96.690%	-0.017	-0.017	-0.000	-0.057
σ		0.937%	0.273	0.181	0.313%	0.015	0.007	0.000	0.019
%RSD		0.939	51.720	33.850	0.324	87.820	40.080	45.970	34.050

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:55:35	96.712%	-2.221	-0.359	-0.396	0.037	-0.029	97.015%	95.340%
2	10:55:43	98.778%	-1.989	-0.343	-0.298	0.000	-0.029	98.336%	96.673%
3	10:55:51	98.370%	-2.056	-0.379	-0.398	0.036	-0.029	99.575%	96.732%
x		97.953%	-2.089	-0.360	-0.364	0.024	-0.029	98.309%	96.248%
σ		1.095%	0.120	0.018	0.057	0.021	0.000	1.280%	0.787%
%RSD		1.117	5.719	5.064	15.670	86.620	0.000	1.302	0.818

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:55:35	0.112	0.152	-0.034	-0.031	-0.034	94.968%
2	10:55:43	0.097	0.115	-0.014	-0.031	-0.032	95.741%
3	10:55:51	0.113	0.118	-0.038	-0.022	-0.032	96.210%
x		0.107	0.128	-0.028	-0.028	-0.033	95.640%
σ		0.009	0.021	0.013	0.005	0.002	0.628%
%RSD		8.071	16.000	46.120	18.270	4.865	0.656

CRI 1525173 4/27/2015 11:01:33 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:41	101.312%	1.040	18.160	18.990	0.000	470.600	474.500	473.100
2	11:00:49	101.040%	0.853	16.840	18.730	0.000	473.300	460.200	464.000
3	11:00:57	102.789%	0.968	18.300	18.150	0.000	464.700	461.200	458.400
x		101.714%	95.381%	355.314%	372.490%	0.000	586.883%	465.308%	465.139%
σ		0.941%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.925	9.856	4.543	2.303	0.000	0.933	1.707	1.597
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:41	31.100	469.900	0.000	526.100	510.700	434.300	99.161%	4.830
2	11:00:49	31.100	471.800	0.000	534.800	545.900	447.100	98.192%	5.359
3	11:00:57	33.830	465.600	0.000	545.300	448.400	448.500	97.613%	6.212
x		106.712%	93.819%	0.000	535.402%	501.686%	443.280%	98.322%	109.339%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.782%	n/a
%RSD		4.926	0.675	0.000	1.796	9.842	1.766	0.796	12.750
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:41	1.205	2.118	4.762	55.320	62.370	0.405	0.808	1.965
2	11:00:49	1.136	2.080	4.820	55.200	59.920	0.436	1.060	2.234
3	11:00:57	1.189	2.111	4.948	56.110	59.320	0.418	1.075	1.810
x		117.669%	105.148%	96.868%	111.088%	121.071%	83.930%	98.085%	100.156%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.038	0.948	1.969	0.891	2.673	3.692	15.290	10.700
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:41	2.285	5.176	5.323	0.782	4.206	4.764	0.000	4.635
2	11:00:49	2.120	4.690	3.996	0.794	4.390	2.996	0.000	4.670
3	11:00:57	1.769	4.881	4.433	0.788	4.662	6.527	0.000	4.464
x		102.905%	98.313%	91.680%	78.829%	88.395%	95.247%	0.000	91.794%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		12.790	4.981	14.750	0.760	5.191	37.070	0.000	2.407
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:41	98.635%	4.558	3.921	95.662%	1.128	1.122	0.941	1.179
2	11:00:49	100.079%	4.550	4.255	96.652%	1.227	1.116	0.803	1.201
3	11:00:57	101.289%	4.506	3.955	95.986%	1.154	1.123	1.597	1.427
x		100.001%	90.760%	80.869%	96.100%	116.972%	112.057%	111.364%	126.928%
σ		1.329%	n/a	n/a	0.504%	n/a	n/a	n/a	n/a
%RSD		1.329	0.609	4.544	0.525	4.368	0.332	38.120	10.820
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:41	81.002%	2.831	1.907	1.955	11.390	11.180	77.110%	94.724%
2	11:00:49	81.699%	3.311	1.705	1.716	9.955	11.000	78.637%	96.943%
3	11:00:57	80.671%	4.736	1.822	1.713	12.980	11.460	79.653%	97.154%
x		81.124%	72.525%	90.553%	89.733%	114.412%	112.154%	78.466%	96.273%
σ		0.525%	n/a	n/a	n/a	n/a	n/a	1.280%	1.346%
%RSD		0.647	27.330	5.602	7.714	13.210	2.075	1.631	1.398
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:00:41	0.803	0.839	0.983	1.024	0.953	92.713%		
2	11:00:49	0.925	0.949	1.003	1.057	1.028	92.248%		
3	11:00:57	0.883	0.982	0.917	0.985	0.985	93.205%		
x		87.052%	92.357%	96.763%	102.181%	98.848%	92.722%		
σ		n/a	n/a	n/a	n/a	n/a	0.478%		
%RSD		7.131	8.125	4.632	3.533	3.783	0.516		

ICSA 1533081 4/27/2015 11:06:41 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:48	83.750%	-0.063	1.568	28.260	0.000	93920.000	93290.000	94260.000
2	11:05:56	82.320%	0.007	3.254	29.410	0.000	95780.000	94520.000	96970.000
3	11:06:03	81.462%	-0.137	3.969	27.350	0.000	98090.000	96250.000	98800.000
x		82.511%	-0.064	2.930	28.340	0.000	95930.000	94690.000	96680.000
σ		1.156%	0.072	1.232	1.029	0.000	2088.000	1488.000	2284.000
%RSD		1.401	111.800	42.050	3.630	0.000	2.177	1.572	2.363
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:48	94940.000	25.790	0.000	95920.000	95860.000	96840.000	85.837%	1974.000
2	11:05:56	95600.000	26.400	0.000	96690.000	95390.000	97760.000	85.737%	1995.000
3	11:06:03	97520.000	25.320	0.000	97840.000	99340.000	99170.000	84.526%	2011.000
x		96020.000	25.830	0.000	96820.000	96860.000	97920.000	85.367%	1993.000
σ		1341.000	0.543	0.000	970.100	2160.000	1175.000	0.730%	18.500
%RSD		1.397	2.102	0.000	1.002	2.230	1.200	0.855	0.928
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:48	0.024	1.415	39.750	96160.000	98750.000	0.155	0.080	0.752
2	11:05:56	-0.146	1.319	39.920	96530.000	99270.000	0.133	0.369	0.787
3	11:06:03	-0.112	1.451	40.420	97860.000	102000.000	0.173	0.264	0.962
x		-0.078	1.395	40.030	96850.000	100000.000	0.154	0.238	0.834
σ		0.090	0.068	0.347	891.200	1730.000	0.020	0.146	0.113
%RSD		115.700	4.879	0.867	0.920	1.730	13.040	61.520	13.500
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:48	1.165	2.551	1.577	0.175	0.315	2.565	0.000	0.748
2	11:05:56	1.232	2.103	1.509	0.126	0.213	0.926	0.000	0.726
3	11:06:03	1.102	1.663	1.423	0.066	0.314	2.139	0.000	0.614
x		1.166	2.106	1.503	0.122	0.281	1.877	0.000	0.696
σ		0.065	0.444	0.077	0.054	0.059	0.851	0.000	0.072
%RSD		5.544	21.090	5.119	44.470	21.000	45.310	0.000	10.360
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:48	85.086%	2071.000	2124.000	76.024%	0.076	0.043	1.321	1.033
2	11:05:56	85.249%	2060.000	2116.000	76.199%	0.060	0.059	1.428	0.994
3	11:06:03	86.026%	2046.000	2115.000	76.610%	0.019	-0.001	1.147	0.793
x		85.454%	2059.000	2118.000	76.278%	0.052	0.034	1.299	0.940
σ		0.502%	12.500	5.171	0.301%	0.029	0.031	0.142	0.128
%RSD		0.588	0.607	0.244	0.394	56.960	91.960	10.930	13.660
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:48	81.097%	-1.985	-0.216	-0.169	0.043	0.180	86.370%	85.717%
2	11:05:56	81.505%	-2.161	-0.283	-0.250	0.170	0.101	86.755%	86.660%
3	11:06:03	81.392%	-2.147	-0.261	-0.200	0.042	0.075	86.908%	86.164%
x		81.331%	-2.098	-0.253	-0.207	0.085	0.119	86.678%	86.180%
σ		0.211%	0.098	0.034	0.041	0.073	0.055	0.277%	0.472%
%RSD		0.259	4.659	13.540	19.830	86.460	46.150	0.319	0.547
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:05:48	0.052	0.071	0.226	0.199	0.190	81.162%		
2	11:05:56	0.057	0.042	0.141	0.239	0.207	80.324%		
3	11:06:03	0.057	0.059	0.186	0.175	0.197	79.856%		
x		0.055	0.057	0.184	0.204	0.198	80.447%		
σ		0.003	0.014	0.042	0.032	0.009	0.662%		
%RSD		4.817	25.220	22.980	15.870	4.523	0.822		

ICSAB 1551804 4/27/2015 11:11:49 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:10:56	82.193%	20.450	54.530	78.140	0.000	97840.000	97440.000	97920.000
2	11:11:04	82.132%	21.500	53.850	78.060	0.000	99390.000	96240.000	99700.000
3	11:11:11	79.792%	22.370	56.090	79.830	0.000	100600.000	99970.000	101200.000
x		81.372%	107.194%	109.650%	157.352%	0.000	99.268%	97.880%	99.596%
σ		1.369%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.682	4.498	2.100	1.266	0.000	1.378	1.947	1.637
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:10:56	96950.000	530.500	0.000	99090.000	96480.000	98560.000	84.942%	2026.000
2	11:11:04	98670.000	527.600	0.000	100800.000	98860.000	99570.000	83.475%	2058.000
3	11:11:11	101200.000	552.100	0.000	101300.000	100400.000	101400.000	83.186%	2085.000
x		98.946%	107.349%	0.000	100.391%	98.566%	99.849%	83.868%	102.812%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.941%	n/a
%RSD		2.172	2.494	0.000	1.158	1.984	1.454	1.122	1.435
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:10:56	18.400	21.030	58.890	97730.000	100300.000	19.120	19.810	20.540
2	11:11:04	19.870	21.710	58.790	100700.000	104500.000	20.400	20.380	21.150
3	11:11:11	19.690	21.270	59.710	100400.000	102900.000	20.120	21.170	20.390
x		96.606%	106.695%	295.656%	99.610%	102.574%	99.402%	102.273%	103.466%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		4.144	1.602	0.850	1.638	2.058	3.400	3.357	1.935
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:10:56	20.650	20.980	19.890	20.770	53.650	50.660	0.000	20.090
2	11:11:04	21.080	21.520	19.780	20.130	52.230	56.010	0.000	20.570
3	11:11:11	21.390	22.610	21.400	20.490	53.380	49.650	0.000	19.880
x		105.209%	86.811%	81.418%	102.327%	106.169%	104.209%	0.000	100.907%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.769	3.819	4.454	1.580	1.424	6.559	0.000	1.754
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:10:56	82.787%	2152.000	2211.000	72.645%	20.510	19.980	21.590	24.620
2	11:11:04	83.047%	2136.000	2205.000	74.289%	19.670	20.050	21.220	23.370
3	11:11:11	84.127%	2136.000	2206.000	74.126%	20.470	19.910	23.110	23.120
x		83.320%	107.081%	110.365%	73.687%	101.090%	99.899%	109.864%	118.531%
σ		0.711%	n/a	n/a	0.905%	n/a	n/a	n/a	n/a
%RSD		0.853	0.425	0.160	1.229	2.341	0.362	4.560	3.392
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:10:56	77.752%	101.900	20.770	20.660	19.940	20.430	84.131%	82.771%
2	11:11:04	79.058%	101.000	20.420	20.100	19.280	20.470	86.238%	83.624%
3	11:11:11	79.369%	98.570	21.340	19.700	19.460	20.690	84.888%	85.260%
x		78.726%	100.473%	104.217%	100.778%	97.793%	102.660%	85.086%	83.885%
σ		0.858%	n/a	n/a	n/a	n/a	n/a	1.067%	1.265%
%RSD		1.090	1.701	2.242	2.399	1.739	0.678	1.254	1.508
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:10:56	20.710	20.410	21.060	21.020	20.690	75.924%		
2	11:11:04	20.320	20.560	21.330	21.060	20.960	76.845%		
3	11:11:11	21.300	20.580	21.600	21.780	21.490	76.189%		
x		103.887%	102.582%	106.656%	106.421%	105.219%	76.320%		
σ		n/a	n/a	n/a	n/a	n/a	0.474%		
%RSD		2.380	0.462	1.281	2.025	1.932	0.621		

CCV 1533080 4/27/2015 11:20:43 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:19:49	90.414%	97.230	92.620	95.990	0.000	48600.000	46280.000	47430.000
2	11:19:57	89.556%	98.430	91.400	98.610	0.000	49540.000	48120.000	48630.000
3	11:20:04	90.670%	96.390	93.670	98.290	0.000	50220.000	48350.000	48220.000
x		90.213%	97.350%	92.563%	97.629%	0.000	98.903%	95.168%	96.185%
σ		0.583%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.646	1.049	1.228	1.463	0.000	1.645	2.379	1.262

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:19:49	490.400	4908.000	0.000	48440.000	46880.000	44270.000	90.600%	95.240
2	11:19:57	495.400	4868.000	0.000	48320.000	47290.000	44690.000	90.267%	95.260
3	11:20:04	503.900	4889.000	0.000	48860.000	47890.000	45540.000	89.197%	99.350
x		99.319%	97.766%	0.000	97.088%	94.700%	89.667%	90.022%	96.616%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.733%	n/a
%RSD		1.375	0.416	0.000	0.582	1.071	1.448	0.814	2.455

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:19:49	93.470	95.750	449.400	23510.000	23270.000	94.010	95.460	95.180
2	11:19:57	96.330	95.870	456.300	24090.000	23650.000	95.750	97.750	96.520
3	11:20:04	96.710	98.020	468.400	24200.000	23970.000	96.430	99.740	96.210
x		95.504%	96.545%	91.602%	95.733%	94.515%	95.399%	97.650%	95.968%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.852	1.324	2.096	1.551	1.489	1.310	2.190	0.733

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:19:49	95.650	92.920	93.600	94.730	94.850	98.770	0.000	92.610
2	11:19:57	92.070	94.740	94.180	95.090	98.270	96.760	0.000	93.690
3	11:20:04	96.940	90.050	93.020	95.430	99.700	97.790	0.000	94.240
x		94.884%	92.568%	93.601%	95.085%	97.607%	97.774%	0.000	93.513%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.660	2.553	0.619	0.367	2.556	1.027	0.000	0.888

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:19:49	91.704%	95.360	97.670	83.869%	94.310	94.340	96.780	97.930
2	11:19:57	92.509%	97.510	98.670	85.537%	93.500	93.290	94.520	95.720
3	11:20:04	92.579%	95.560	98.260	85.039%	93.240	94.120	93.760	95.660
x		92.264%	96.140%	98.199%	84.815%	93.684%	93.917%	95.023%	96.437%
σ		0.486%	n/a	n/a	0.857%	n/a	n/a	n/a	n/a
%RSD		0.527	1.235	0.514	1.010	0.594	0.588	1.652	1.342

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:19:49	86.040%	91.020	94.550	91.130	95.120	96.690	88.887%	88.551%
2	11:19:57	88.090%	90.330	93.330	91.120	94.230	97.520	90.379%	89.431%
3	11:20:04	87.944%	89.860	93.440	93.570	90.190	95.940	89.604%	89.428%
x		87.358%	90.405%	93.772%	91.938%	93.178%	96.713%	89.623%	89.137%
σ		1.144%	n/a	n/a	n/a	n/a	n/a	0.747%	0.507%
%RSD		1.309	0.647	0.720	1.537	2.818	0.817	0.833	0.569

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:19:49	94.640	94.220	95.210	95.910	94.770	82.270%
2	11:19:57	93.570	93.560	95.530	95.900	94.960	82.504%
3	11:20:04	96.940	95.650	95.570	96.280	96.020	81.643%
x		95.052%	94.477%	95.437%	96.029%	95.249%	82.139%
σ		n/a	n/a	n/a	n/a	n/a	0.445%
%RSD		1.810	1.133	0.210	0.224	0.709	0.542

CCB1 4/27/2015 11:29:34 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:41	101.349%	-0.090	0.003	-0.308	0.000	12.880	1.975	5.168
2	11:28:49	97.923%	-0.127	0.512	-0.390	0.000	15.250	5.476	6.433
3	11:28:57	97.587%	-0.095	0.049	0.037	0.000	17.190	3.343	3.563
x		98.953%	-0.104	0.188	-0.220	0.000	15.110	3.598	5.055
σ		2.082%	0.020	0.281	0.227	0.000	2.156	1.765	1.438
%RSD		2.104	19.370	149.500	103.000	0.000	14.270	49.040	28.450

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:41	-1.325	4.224	0.000	43.470	14.140	7.261	95.104%	-0.137
2	11:28:49	-0.704	2.740	0.000	46.350	22.030	6.303	94.767%	-0.205
3	11:28:57	-0.568	4.002	0.000	43.910	10.740	8.569	94.269%	-0.272
x		-0.866	3.656	0.000	44.580	15.640	7.378	94.713%	-0.205
σ		0.404	0.801	0.000	1.554	5.793	1.137	0.420%	0.068
%RSD		46.620	21.910	0.000	3.486	37.050	15.420	0.443	33.180

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:41	-0.037	0.002	0.047	12.590	8.935	0.007	0.052	0.039
2	11:28:49	-0.094	-0.003	0.048	12.170	6.912	-0.001	-0.028	-0.024
3	11:28:57	0.000	-0.018	0.112	10.840	12.740	0.014	0.068	-0.025
x		-0.044	-0.006	0.069	11.870	9.530	0.007	0.030	-0.003
σ		0.047	0.010	0.037	0.917	2.961	0.008	0.051	0.036
%RSD		108.600	166.900	53.790	7.725	31.070	115.700	169.200	1062.000

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:41	0.022	0.079	-0.192	-0.077	0.093	0.418	0.000	0.005
2	11:28:49	-0.013	-0.155	-0.191	-0.110	0.139	-0.041	0.000	0.019
3	11:28:57	0.021	-0.110	-0.163	-0.069	0.091	0.937	0.000	0.023
x		0.010	-0.062	-0.182	-0.086	0.108	0.438	0.000	0.016
σ		0.020	0.124	0.016	0.022	0.027	0.489	0.000	0.010
%RSD		203.900	199.200	8.829	25.560	25.400	111.700	0.000	61.100

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:41	96.573%	0.564	0.489	91.409%	-0.007	-0.021	-0.000	-0.040
2	11:28:49	95.994%	0.576	0.544	92.547%	0.006	-0.012	0.048	-0.059
3	11:28:57	98.647%	0.615	0.508	93.375%	0.009	-0.013	0.024	-0.050
x		97.071%	0.585	0.514	92.444%	0.003	-0.015	0.024	-0.050
σ		1.395%	0.027	0.028	0.987%	0.009	0.005	0.024	0.010
%RSD		1.437	4.543	5.470	1.068	311.400	33.110	100.900	20.010

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:41	92.617%	-2.437	-0.288	-0.242	0.000	-0.029	93.225%	92.025%
2	11:28:49	93.977%	-2.447	-0.323	-0.297	0.000	0.017	94.286%	93.346%
3	11:28:57	95.012%	-2.549	-0.299	-0.308	0.037	-0.006	94.718%	92.777%
x		93.869%	-2.478	-0.303	-0.282	0.012	-0.006	94.076%	92.716%
σ		1.201%	0.062	0.018	0.036	0.022	0.023	0.769%	0.663%
%RSD		1.280	2.490	5.880	12.630	173.200	385.500	0.817	0.715

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:41	0.036	0.055	-0.027	-0.005	-0.027	88.539%
2	11:28:49	0.063	0.065	-0.036	0.024	-0.019	89.225%
3	11:28:57	0.073	0.051	-0.050	-0.025	-0.031	90.150%
x		0.058	0.057	-0.038	-0.002	-0.026	89.304%
σ		0.019	0.007	0.011	0.025	0.006	0.808%
%RSD		33.450	12.490	29.710	1124.000	23.690	0.905

MB 180-139168/1-A 4/27/2015 11:34:39 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:47	98.762%	-0.244	-0.388	-0.452	0.000	4.572	2.577	1.269
2	11:33:55	99.323%	-0.133	-0.603	-0.111	0.000	4.039	-0.169	0.187
3	11:34:03	98.325%	-0.222	0.161	-0.156	0.000	6.740	-0.115	2.967
x		98.803%	-0.199	-0.277	-0.240	0.000	5.117	0.765	1.474
σ		0.500%	0.059	0.394	0.185	0.000	1.431	1.570	1.401
%RSD		0.506	29.420	142.400	77.310	0.000	27.960	205.400	95.030
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:47	-0.115	2.764	0.000	38.010	5.508	0.560	97.112%	-0.320
2	11:33:55	0.012	1.604	0.000	33.140	-2.172	0.959	97.534%	-0.458
3	11:34:03	0.173	0.138	0.000	34.190	9.543	2.224	96.565%	-0.146
x		0.023	1.502	0.000	35.120	4.293	1.248	97.071%	-0.308
σ		0.144	1.316	0.000	2.562	5.951	0.869	0.486%	0.157
%RSD		623.800	87.610	0.000	7.295	138.600	69.610	0.501	50.850
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:47	-0.082	-0.026	0.001	3.999	2.269	0.003	-0.016	0.060
2	11:33:55	-0.047	-0.012	0.026	3.628	4.570	-0.001	0.014	0.039
3	11:34:03	-0.067	-0.021	0.041	3.537	2.940	-0.001	0.016	-0.022
x		-0.065	-0.019	0.023	3.721	3.260	0.000	0.005	0.026
σ		0.018	0.007	0.020	0.245	1.184	0.002	0.018	0.042
%RSD		26.920	37.290	88.540	6.581	36.310	1779.000	377.400	165.800
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:47	0.055	0.142	0.041	-0.154	0.046	-0.383	0.000	0.014
2	11:33:55	0.041	0.273	0.211	-0.136	0.134	2.239	0.000	0.000
3	11:34:03	0.124	0.552	0.272	-0.127	0.001	1.994	0.000	0.005
x		0.073	0.322	0.175	-0.139	0.060	1.283	0.000	0.006
σ		0.044	0.210	0.120	0.014	0.067	1.448	0.000	0.007
%RSD		60.510	65.060	68.420	10.110	111.900	112.900	0.000	114.700
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:47	97.293%	0.311	0.167	93.455%	-0.008	-0.017	-0.000	-0.060
2	11:33:55	99.122%	0.063	0.319	94.463%	-0.021	-0.017	0.023	-0.060
3	11:34:03	99.164%	0.208	0.209	95.416%	-0.033	-0.022	-0.000	-0.069
x		98.526%	0.194	0.232	94.445%	-0.020	-0.019	0.008	-0.063
σ		1.068%	0.124	0.079	0.980%	0.013	0.003	0.013	0.006
%RSD		1.084	63.990	33.990	1.038	62.530	14.970	175.100	8.820
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:47	95.479%	-2.729	-0.420	-0.369	0.000	-0.006	95.867%	93.391%
2	11:33:55	96.409%	-2.578	-0.364	-0.362	0.000	-0.006	95.897%	94.821%
3	11:34:03	97.662%	-2.717	-0.310	-0.405	0.037	-0.029	94.836%	93.488%
x		96.517%	-2.675	-0.365	-0.379	0.012	-0.014	95.533%	93.900%
σ		1.096%	0.084	0.055	0.023	0.021	0.013	0.604%	0.799%
%RSD		1.135	3.131	15.090	6.113	173.200	94.040	0.632	0.851
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:33:47	0.000	0.015	-0.011	-0.007	-0.014	91.869%		
2	11:33:55	0.007	0.015	-0.054	-0.011	-0.036	91.604%		
3	11:34:03	0.014	0.017	-0.037	-0.031	-0.031	92.641%		
x		0.007	0.016	-0.034	-0.016	-0.027	92.038%		
σ		0.007	0.001	0.021	0.013	0.011	0.539%		
%RSD		94.720	4.379	62.580	78.070	42.450	0.585		

PB 180-139066/1-E 4/27/2015 11:39:42 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	11:38:50	99.678%	-0.093	0.783	-0.183	0.000	6.641	-0.362	-1.160
2	11:38:58	99.403%	-0.062	-0.338	-0.825	0.000	2.811	0.045	1.864
3	11:39:06	103.958%	-0.276	0.121	-0.463	0.000	2.856	-1.206	-0.040
x		101.013%	-0.144	0.188	-0.490	0.000	4.102	-0.508	0.221
σ		2.554%	0.116	0.564	0.322	0.000	2.199	0.638	1.529
%RSD		2.528	80.510	299.200	65.590	0.000	53.590	125.700	691.200
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:50	0.248	2.227	0.000	34.890	-9.541	4.258	97.161%	-0.389
2	11:38:58	-0.766	1.298	0.000	38.130	0.031	1.215	96.719%	-0.353
3	11:39:06	-0.130	0.392	0.000	36.590	13.510	0.516	96.220%	-0.316
x		-0.216	1.306	0.000	36.530	1.334	1.996	96.700%	-0.352
σ		0.513	0.918	0.000	1.623	11.580	1.989	0.471%	0.036
%RSD		237.400	70.260	0.000	4.442	868.200	99.660	0.487	10.270
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:50	-0.087	-0.021	-0.002	2.263	3.266	-0.001	0.126	-0.034
2	11:38:58	-0.058	-0.016	0.028	2.218	2.259	-0.005	0.031	-0.022
3	11:39:06	-0.045	-0.014	0.016	2.426	-0.106	-0.005	-0.016	0.028
x		-0.063	-0.017	0.014	2.302	1.806	-0.004	0.047	-0.009
σ		0.021	0.004	0.015	0.110	1.731	0.002	0.073	0.033
%RSD		33.770	22.610	111.200	4.768	95.820	59.660	153.900	344.400
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:50	0.101	-0.045	-0.049	-0.131	0.090	-0.833	0.000	0.000
2	11:38:58	0.136	-0.022	0.097	-0.113	0.179	2.117	0.000	0.000
3	11:39:06	0.054	0.046	0.096	-0.146	0.001	2.698	0.000	0.000
x		0.097	-0.007	0.048	-0.130	0.090	1.327	0.000	0.000
σ		0.041	0.047	0.084	0.017	0.089	1.893	0.000	0.000
%RSD		42.600	669.100	174.700	12.770	98.970	142.700	0.000	82.130
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:50	98.126%	-0.028	0.116	93.452%	-0.012	-0.022	-0.000	-0.050
2	11:38:58	98.950%	0.197	0.170	94.521%	-0.008	-0.022	0.023	-0.050
3	11:39:06	99.884%	0.047	0.092	95.915%	-0.004	-0.013	-0.000	-0.051
x		98.987%	0.072	0.126	94.629%	-0.008	-0.019	0.008	-0.050
σ		0.880%	0.114	0.040	1.235%	0.004	0.005	0.014	0.000
%RSD		0.889	158.400	31.860	1.305	49.010	26.210	176.500	0.318
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:50	95.881%	-2.740	-0.439	-0.387	0.000	-0.006	94.848%	93.402%
2	11:38:58	95.857%	-2.647	-0.395	-0.438	0.000	-0.006	95.792%	94.882%
3	11:39:06	96.719%	-2.652	-0.371	-0.396	0.000	-0.029	97.527%	95.801%
x		96.153%	-2.680	-0.402	-0.407	0.000	-0.014	96.055%	94.695%
σ		0.491%	0.052	0.034	0.027	0.000	0.013	1.359%	1.210%
%RSD		0.511	1.953	8.555	6.730	0.000	94.700	1.415	1.278
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:38:50	0.032	0.008	-0.028	-0.006	-0.030	90.464%		
2	11:38:58	0.011	0.007	-0.037	-0.026	-0.035	91.178%		
3	11:39:06	0.000	0.003	-0.033	-0.002	-0.019	91.096%		
x		0.014	0.006	-0.032	-0.011	-0.028	90.913%		
σ		0.016	0.003	0.004	0.013	0.008	0.391%		
%RSD		111.800	51.580	13.630	114.900	29.030	0.430		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:52	87.516%	46.180	911.800	938.400	0.000	43050.000	41440.000	41690.000
2	11:43:59	90.404%	43.860	896.200	914.100	0.000	42940.000	40370.000	40900.000
3	11:44:07	90.305%	45.110	915.900	943.300	0.000	43580.000	41410.000	41980.000
x		89.408%	45.050	908.000	931.900	0.000	43190.000	41070.000	41530.000
σ		1.640%	1.162	10.390	15.660	0.000	344.900	610.100	560.300
%RSD		1.834	2.579	1.145	1.681	0.000	0.798	1.486	1.349
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:52	1711.000	8578.000	0.000	45920.000	45000.000	42120.000	79.438%	858.400
2	11:43:59	1647.000	8383.000	0.000	45530.000	45670.000	43230.000	79.029%	892.600
3	11:44:07	1673.000	8563.000	0.000	46150.000	46220.000	43620.000	79.299%	902.600
x		1677.000	8508.000	0.000	45860.000	45630.000	42990.000	79.255%	884.500
σ		32.090	108.600	0.000	314.300	608.300	776.100	0.208%	23.190
%RSD		1.913	1.276	0.000	0.685	1.333	1.805	0.262	2.621
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:52	448.600	184.000	421.600	947.500	1088.000	457.700	463.400	233.500
2	11:43:59	453.700	184.000	429.300	960.700	1039.000	458.600	469.100	233.600
3	11:44:07	459.300	188.000	437.800	947.900	1101.000	455.300	461.100	231.800
x		453.900	185.300	429.600	952.000	1076.000	457.200	464.600	233.000
σ		5.363	2.314	8.145	7.471	32.680	1.725	4.121	0.988
%RSD		1.182	1.249	1.896	0.785	3.037	0.377	0.887	0.424
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:52	233.200	447.500	449.700	37.670	9.248	11.480	0.000	901.100
2	11:43:59	230.900	444.500	442.100	36.570	8.460	10.510	0.000	903.300
3	11:44:07	231.500	452.400	451.500	38.090	9.259	12.720	0.000	908.800
x		231.800	448.100	447.800	37.450	8.989	11.570	0.000	904.400
σ		1.188	4.004	4.972	0.784	0.458	1.104	0.000	3.946
%RSD		0.513	0.893	1.110	2.094	5.098	9.542	0.000	0.436
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:52	79.556%	952.300	972.200	73.371%	47.050	45.850	48.120	86.740
2	11:43:59	80.620%	939.500	957.700	74.068%	46.050	44.920	50.280	87.530
3	11:44:07	80.744%	954.500	969.600	74.420%	45.920	46.930	45.900	88.150
x		80.307%	948.800	966.500	73.953%	46.340	45.900	48.100	87.480
σ		0.653%	8.104	7.725	0.534%	0.618	1.009	2.189	0.708
%RSD		0.813	0.854	0.799	0.722	1.334	2.198	4.550	0.809
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:52	75.701%	1846.000	462.200	454.600	1774.000	1807.000	80.465%	82.039%
2	11:43:59	77.148%	1820.000	458.000	448.400	1751.000	1758.000	82.841%	81.624%
3	11:44:07	77.493%	1835.000	461.500	452.400	1780.000	1789.000	83.453%	84.192%
x		76.781%	1834.000	460.600	451.800	1768.000	1785.000	82.253%	82.618%
σ		0.951%	13.350	2.238	3.125	15.150	24.570	1.578%	1.379%
%RSD		1.238	0.728	0.486	0.692	0.857	1.377	1.919	1.669
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:43:52	47.250	47.010	19.480	19.540	19.720	73.959%		
2	11:43:59	47.970	46.870	19.630	19.640	19.540	74.362%		
3	11:44:07	47.500	47.110	19.160	19.580	19.510	75.611%		
x		47.580	47.000	19.420	19.590	19.590	74.644%		
σ		0.365	0.120	0.238	0.049	0.113	0.861%		
%RSD		0.767	0.255	1.223	0.249	0.579	1.154		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:55	79.841%	-0.028	298.200	326.700	0.000	688600.000	81540.000	82400.000
2	11:49:03	82.262%	-0.042	298.500	319.700	0.000	679900.000	79560.000	80540.000
3	11:49:10	81.487%	0.012	299.900	317.300	0.000	700300.000	81830.000	83810.000
x		81.196%	-0.019	298.900	321.200	0.000	689600.000	80980.000	82250.000
σ		1.236%	0.028	0.931	4.864	0.000	10250.000	1231.000	1639.000
%RSD		1.522	144.700	0.312	1.514	0.000	1.486	1.521	1.992
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:55	9.905	44.660	0.000	24040.000	25770.000	23930.000	85.917%	0.816
2	11:49:03	7.937	37.930	0.000	23980.000	25940.000	24240.000	86.187%	0.927
3	11:49:10	9.483	69.830	0.000	24470.000	26030.000	24770.000	84.812%	1.150
x		9.108	50.810	0.000	24160.000	25910.000	24310.000	85.638%	0.964
σ		1.036	16.820	0.000	268.800	131.700	425.200	0.729%	0.170
%RSD		11.380	33.100	0.000	1.112	0.508	1.749	0.851	17.610
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:55	-0.233	0.689	0.804	9.461	88.150	0.099	0.225	0.780
2	11:49:03	0.376	0.714	0.854	8.901	95.920	0.077	-0.029	0.728
3	11:49:10	-0.105	0.794	0.708	8.830	99.420	0.086	0.282	0.751
x		0.013	0.733	0.789	9.064	94.500	0.087	0.159	0.753
σ		0.321	0.055	0.074	0.346	5.767	0.011	0.165	0.026
%RSD		2521.000	7.500	9.444	3.815	6.103	12.540	103.700	3.480
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:55	0.884	0.606	0.740	0.132	0.265	44.790	0.000	475.700
2	11:49:03	0.908	0.577	0.156	0.104	0.212	53.660	0.000	476.900
3	11:49:10	0.648	0.347	0.677	0.089	0.213	54.210	0.000	485.500
x		0.813	0.510	0.524	0.109	0.230	50.890	0.000	479.400
σ		0.144	0.142	0.320	0.022	0.030	5.286	0.000	5.356
%RSD		17.700	27.850	61.070	19.990	12.950	10.390	0.000	1.117
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:55	84.927%	3.650	2.990	77.833%	-0.022	-0.034	0.028	0.032
2	11:49:03	85.179%	2.862	2.932	78.393%	-0.007	-0.023	-0.000	0.064
3	11:49:10	85.199%	2.555	2.634	78.879%	-0.002	-0.023	-0.000	-0.024
x		85.102%	3.022	2.852	78.369%	-0.011	-0.027	0.009	0.024
σ		0.152%	0.565	0.191	0.524%	0.010	0.006	0.016	0.045
%RSD		0.178	18.690	6.690	0.668	96.650	22.830	175.700	184.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:55	81.991%	0.125	-0.226	-0.301	1.057	1.767	86.566%	86.216%
2	11:49:03	82.797%	-0.385	-0.337	-0.303	1.799	1.465	87.553%	86.818%
3	11:49:10	82.943%	-0.487	-0.366	-0.304	1.165	1.507	88.538%	87.561%
x		82.577%	-0.249	-0.310	-0.302	1.340	1.580	87.552%	86.865%
σ		0.512%	0.328	0.074	0.001	0.401	0.164	0.986%	0.674%
%RSD		0.621	131.700	23.890	0.433	29.920	10.370	1.127	0.776
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:48:55	0.078	0.052	0.007	0.023	0.026	78.043%		
2	11:49:03	0.066	0.056	0.056	0.067	0.040	78.398%		
3	11:49:10	0.038	0.050	0.027	0.078	0.048	78.514%		
x		0.061	0.053	0.030	0.056	0.038	78.318%		
σ		0.020	0.003	0.025	0.029	0.011	0.246%		
%RSD		33.620	6.611	82.520	51.950	28.390	0.314		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:53:57	93.659%	-0.251	63.320	62.880	0.000	137800.000	15560.000	15540.000
2	11:54:05	93.140%	-0.206	58.290	62.370	0.000	139900.000	15610.000	15810.000
3	11:54:13	93.968%	-0.154	59.370	64.450	0.000	138400.000	15640.000	16100.000
x		93.589%	-0.204	60.330	63.230	0.000	138700.000	15600.000	15820.000
σ		0.418%	0.048	2.648	1.087	0.000	1069.000	39.900	282.000
%RSD		0.447	23.640	4.389	1.719	0.000	0.771	0.256	1.783
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:53:57	0.657	9.844	0.000	4906.000	5089.000	4714.000	94.671%	-0.064
2	11:54:05	0.716	7.915	0.000	4948.000	5165.000	4777.000	94.140%	-0.307
3	11:54:13	0.644	7.629	0.000	5011.000	5125.000	4870.000	93.774%	-0.093
x		0.672	8.463	0.000	4955.000	5126.000	4787.000	94.195%	-0.155
σ		0.038	1.205	0.000	52.890	37.760	78.130	0.451%	0.133
%RSD		5.644	14.240	0.000	1.067	0.737	1.632	0.479	85.990
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:53:57	0.129	0.106	0.153	1.005	10.940	0.027	-0.025	0.123
2	11:54:05	-0.016	0.189	0.189	1.304	21.520	0.007	-0.058	0.187
3	11:54:13	0.297	0.158	0.173	1.123	15.650	0.027	0.059	0.268
x		0.137	0.151	0.172	1.144	16.040	0.020	-0.008	0.192
σ		0.157	0.042	0.018	0.151	5.297	0.011	0.060	0.073
%RSD		114.500	27.970	10.540	13.200	33.030	56.870	731.100	37.790
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:53:57	0.162	20.870	19.310	-0.117	0.099	9.084	0.000	94.470
2	11:54:05	0.222	20.390	20.450	-0.123	0.098	14.000	0.000	94.530
3	11:54:13	0.262	21.390	19.840	-0.132	0.242	9.170	0.000	95.040
x		0.215	20.880	19.870	-0.124	0.146	10.750	0.000	94.680
σ		0.051	0.501	0.569	0.007	0.083	2.816	0.000	0.316
%RSD		23.480	2.400	2.866	6.030	56.670	26.190	0.000	0.334
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:53:57	91.242%	0.690	0.429	84.509%	-0.019	-0.019	0.026	-0.047
2	11:54:05	92.241%	0.620	0.546	86.002%	0.013	-0.025	-0.000	-0.058
3	11:54:13	91.238%	0.422	0.568	85.934%	-0.010	-0.025	-0.000	-0.048
x		91.573%	0.577	0.514	85.482%	-0.005	-0.023	0.008	-0.051
σ		0.578%	0.139	0.074	0.843%	0.017	0.003	0.015	0.006
%RSD		0.631	24.080	14.470	0.986	330.900	13.410	175.700	11.790
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:53:57	87.064%	-2.233	-0.440	-0.405	0.202	0.220	89.160%	90.413%
2	11:54:05	88.158%	-2.245	-0.441	-0.425	0.397	0.460	91.214%	90.221%
3	11:54:13	88.562%	-1.925	-0.401	-0.407	0.474	0.311	91.770%	91.329%
x		87.928%	-2.135	-0.427	-0.412	0.357	0.330	90.715%	90.654%
σ		0.775%	0.181	0.023	0.011	0.140	0.121	1.375%	0.592%
%RSD		0.881	8.493	5.397	2.656	39.210	36.710	1.516	0.653
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:53:57	-0.005	0.001	-0.016	0.008	-0.009	82.893%		
2	11:54:05	-0.005	-0.001	-0.020	-0.018	-0.010	82.211%		
3	11:54:13	-0.013	-0.001	0.013	0.019	0.000	82.437%		
x		-0.008	-0.000	-0.008	0.003	-0.007	82.514%		
σ		0.004	0.001	0.018	0.019	0.006	0.347%		
%RSD		54.620	339.700	236.500	586.600	87.010	0.421		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:02	81.124%	5.297	356.000	382.400	0.000	615300.000	75190.000	76050.000
2	11:59:10	83.581%	4.581	352.500	370.600	0.000	596100.000	74720.000	74570.000
3	11:59:18	84.949%	4.582	349.200	371.000	0.000	609300.000	74010.000	74910.000
x		83.218%	4.820	352.500	374.700	0.000	606900.000	74640.000	75180.000
σ		1.938%	0.413	3.405	6.711	0.000	9842.000	592.600	777.000
%RSD		2.329	8.570	0.966	1.791	0.000	1.622	0.794	1.034

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:02	188.800	990.800	0.000	25890.000	27010.000	25190.000	86.612%	83.410
2	11:59:10	196.300	969.100	0.000	26110.000	27920.000	25790.000	86.255%	88.000
3	11:59:18	195.000	984.600	0.000	26250.000	28370.000	26310.000	85.082%	89.540
x		193.400	981.500	0.000	26080.000	27770.000	25760.000	85.983%	86.990
σ		4.006	11.160	0.000	182.500	692.900	560.000	0.800%	3.187
%RSD		2.072	1.137	0.000	0.700	2.495	2.174	0.931	3.664

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:02	43.210	18.120	40.580	92.270	169.700	43.880	43.600	22.040
2	11:59:10	44.790	18.060	41.320	92.250	176.900	43.430	44.410	22.330
3	11:59:18	44.370	18.610	42.140	92.850	176.500	43.690	47.060	22.020
x		44.120	18.260	41.350	92.460	174.300	43.670	45.020	22.130
σ		0.818	0.301	0.780	0.344	4.055	0.229	1.810	0.174
%RSD		1.854	1.647	1.887	0.372	2.326	0.525	4.020	0.787

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:02	22.240	46.180	41.520	3.436	1.256	32.730	0.000	507.700
2	11:59:10	22.310	43.120	43.500	3.391	1.341	26.990	0.000	506.900
3	11:59:18	22.390	42.710	44.550	3.667	1.811	30.580	0.000	508.500
x		22.310	44.000	43.190	3.498	1.469	30.100	0.000	507.700
σ		0.076	1.895	1.536	0.148	0.299	2.903	0.000	0.786
%RSD		0.340	4.307	3.557	4.229	20.350	9.645	0.000	0.155

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:02	83.284%	92.620	96.270	75.411%	4.349	4.399	4.034	8.468
2	11:59:10	84.977%	95.590	98.040	75.822%	4.538	4.535	4.268	8.595
3	11:59:18	84.799%	93.680	95.510	76.652%	4.294	4.614	4.119	8.271
x		84.353%	93.960	96.610	75.962%	4.394	4.516	4.140	8.445
σ		0.930%	1.507	1.296	0.632%	0.128	0.109	0.118	0.163
%RSD		1.103	1.603	1.341	0.832	2.914	2.407	2.857	1.933

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:02	80.199%	177.200	44.600	46.510	174.000	178.900	83.885%	83.563%
2	11:59:10	80.598%	174.200	45.000	44.540	182.900	178.700	84.714%	84.908%
3	11:59:18	81.193%	174.900	44.800	43.810	178.100	176.400	85.176%	84.170%
x		80.663%	175.400	44.800	44.950	178.300	178.000	84.592%	84.214%
σ		0.500%	1.570	0.198	1.400	4.462	1.384	0.654%	0.673%
%RSD		0.620	0.895	0.441	3.115	2.502	0.777	0.773	0.799

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:02	4.412	4.661	1.991	1.938	1.852	74.514%
2	11:59:10	4.766	4.634	1.975	2.161	1.965	74.872%
3	11:59:18	4.626	4.582	1.886	1.812	1.800	75.580%
x		4.601	4.626	1.951	1.970	1.872	74.989%
σ		0.179	0.040	0.057	0.177	0.084	0.542%
%RSD		3.882	0.867	2.902	8.963	4.512	0.723

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:04:09	84.628%	4.877	332.500	358.900	0.000	577200.000	71400.000	71610.000
2	12:04:16	82.894%	4.599	360.500	362.800	0.000	593400.000	71620.000	72800.000
3	12:04:24	78.416%	5.045	375.000	388.700	0.000	621900.000	75020.000	76310.000
x		81.980%	4.840	356.000	370.100	0.000	597500.000	72680.000	73570.000
σ		3.206%	0.226	21.620	16.170	0.000	22630.000	2027.000	2444.000
%RSD		3.911	4.662	6.073	4.368	0.000	3.787	2.789	3.323

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:04:09	185.900	975.400	0.000	25130.000	25890.000	24500.000	86.751%	84.700
2	12:04:16	187.500	991.800	0.000	25340.000	27000.000	25220.000	85.840%	83.470
3	12:04:24	193.400	1003.000	0.000	25660.000	27410.000	25540.000	84.042%	92.440
x		188.900	990.000	0.000	25370.000	26760.000	25090.000	85.544%	86.870
σ		3.988	13.810	0.000	266.800	788.500	531.300	1.379%	4.860
%RSD		2.111	1.395	0.000	1.052	2.946	2.118	1.612	5.595

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:04:09	43.990	18.190	40.790	92.040	176.800	44.270	44.890	22.640
2	12:04:16	43.430	18.420	42.120	92.490	178.500	43.530	44.930	22.580
3	12:04:24	45.410	18.800	43.200	94.470	173.100	44.480	46.280	22.250
x		44.280	18.470	42.040	93.000	176.100	44.090	45.360	22.490
σ		1.020	0.308	1.204	1.294	2.743	0.501	0.793	0.208
%RSD		2.303	1.665	2.863	1.391	1.557	1.135	1.749	0.924

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:04:09	22.610	44.130	41.130	3.704	1.421	51.360	0.000	502.900
2	12:04:16	22.340	44.980	45.180	3.708	1.467	39.960	0.000	504.200
3	12:04:24	23.100	45.090	45.920	3.684	1.363	44.700	0.000	503.600
x		22.680	44.730	44.080	3.698	1.417	45.340	0.000	503.600
σ		0.387	0.521	2.576	0.013	0.052	5.727	0.000	0.673
%RSD		1.708	1.165	5.844	0.355	3.673	12.630	0.000	0.134

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:04:09	82.565%	96.670	99.590	75.740%	4.415	4.436	4.916	8.601
2	12:04:16	83.323%	98.430	99.000	76.801%	4.505	4.353	4.130	8.580
3	12:04:24	83.878%	98.680	98.340	76.368%	4.417	4.447	4.355	8.170
x		83.255%	97.930	98.980	76.303%	4.446	4.412	4.467	8.450
σ		0.659%	1.095	0.627	0.534%	0.051	0.052	0.405	0.243
%RSD		0.791	1.118	0.633	0.700	1.155	1.168	9.065	2.878

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:04:09	79.284%	181.000	47.010	45.310	176.500	183.400	84.510%	84.497%
2	12:04:16	79.966%	182.000	46.580	46.630	181.000	183.100	85.881%	84.276%
3	12:04:24	81.836%	181.400	45.440	45.590	188.900	180.300	85.749%	85.703%
x		80.362%	181.500	46.340	45.840	182.100	182.300	85.380%	84.825%
σ		1.321%	0.486	0.810	0.695	6.295	1.693	0.757%	0.768%
%RSD		1.644	0.268	1.748	1.515	3.457	0.928	0.886	0.906

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:04:09	4.333	4.734	1.895	1.846	1.952	75.850%
2	12:04:16	4.674	4.529	1.899	2.002	1.921	77.168%
3	12:04:24	4.864	4.935	1.889	1.905	1.978	76.655%
x		4.624	4.733	1.894	1.918	1.951	76.558%
σ		0.269	0.203	0.005	0.079	0.028	0.664%
%RSD		5.818	4.296	0.266	4.111	1.460	0.868

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:13	82.683%	5.065	365.500	392.400	0.000	648200.000	79470.000	80750.000
2	12:09:21	81.738%	5.365	382.600	401.800	0.000	653300.000	80840.000	81750.000
3	12:09:28	81.772%	5.040	368.400	404.900	0.000	658600.000	81260.000	82510.000
x		82.064%	5.157	372.200	399.700	0.000	653400.000	80520.000	81670.000
σ		0.536%	0.181	9.128	6.470	0.000	5215.000	939.000	884.600
%RSD		0.653	3.504	2.453	1.619	0.000	0.798	1.166	1.083
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:13	197.400	1099.000	0.000	27750.000	28650.000	26890.000	85.829%	99.250
2	12:09:21	195.900	1087.000	0.000	28170.000	29710.000	27670.000	84.074%	102.600
3	12:09:28	198.600	1115.000	0.000	28280.000	29680.000	27900.000	84.952%	101.000
x		197.300	1101.000	0.000	28070.000	29350.000	27490.000	84.952%	100.900
σ		1.376	13.730	0.000	280.000	603.100	526.000	0.878%	1.677
%RSD		0.698	1.247	0.000	0.998	2.055	1.914	1.033	1.661
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:13	45.960	19.070	42.560	94.530	192.100	45.040	45.070	23.760
2	12:09:21	48.550	19.520	43.390	97.310	188.000	46.390	46.380	23.650
3	12:09:28	46.630	18.810	43.950	96.260	181.300	46.580	45.290	23.550
x		47.050	19.140	43.300	96.030	187.100	46.000	45.580	23.650
σ		1.344	0.359	0.697	1.404	5.462	0.840	0.699	0.105
%RSD		2.856	1.878	1.609	1.462	2.919	1.826	1.533	0.445
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:13	24.090	43.820	44.650	3.769	1.476	45.590	0.000	538.000
2	12:09:21	24.400	47.920	45.780	3.947	1.477	52.180	0.000	542.500
3	12:09:28	24.210	44.520	46.320	3.922	1.948	55.140	0.000	542.400
x		24.230	45.420	45.590	3.879	1.634	50.970	0.000	541.000
σ		0.155	2.190	0.853	0.097	0.273	4.890	0.000	2.596
%RSD		0.641	4.822	1.870	2.493	16.680	9.595	0.000	0.480
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:13	82.658%	111.600	112.400	74.386%	4.342	4.287	4.634	9.151
2	12:09:21	83.202%	107.400	114.000	74.354%	4.562	4.155	5.421	9.523
3	12:09:28	82.915%	112.100	112.700	75.142%	4.234	4.481	4.899	9.566
x		82.925%	110.400	113.000	74.627%	4.380	4.308	4.985	9.413
σ		0.272%	2.574	0.832	0.446%	0.167	0.164	0.401	0.228
%RSD		0.328	2.331	0.736	0.598	3.818	3.803	8.036	2.424
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:13	78.451%	206.700	51.860	51.100	187.900	193.400	82.904%	83.852%
2	12:09:21	78.347%	209.600	51.410	50.560	190.600	189.700	83.243%	83.225%
3	12:09:28	79.325%	207.300	50.820	52.450	186.500	192.400	84.227%	83.949%
x		78.708%	207.900	51.360	51.370	188.300	191.800	83.458%	83.675%
σ		0.537%	1.526	0.517	0.974	2.104	1.932	0.687%	0.393%
%RSD		0.682	0.734	1.007	1.895	1.117	1.007	0.824	0.469
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:09:13	4.924	4.725	2.025	2.049	2.024	73.628%		
2	12:09:21	4.862	4.922	1.910	2.050	1.996	74.047%		
3	12:09:28	4.853	4.761	1.996	1.965	2.046	74.119%		
x		4.880	4.803	1.977	2.022	2.022	73.931%		
σ		0.039	0.105	0.060	0.049	0.025	0.265%		
%RSD		0.790	2.183	3.029	2.418	1.244	0.358		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:19	80.443%	-0.069	396.900	421.300	0.000	942300.000	108900.000	111600.000
2	12:14:27	80.433%	0.157	394.000	426.700	0.000	953800.000	112100.000	113500.000
3	12:14:35	77.995%	-0.069	408.200	440.400	0.000	968000.000	114200.000	115500.000
x		79.624%	0.006	399.700	429.400	0.000	954700.000	111800.000	113500.000
σ		1.411%	0.131	7.496	9.852	0.000	12910.000	2673.000	1980.000
%RSD		1.772	2021.000	1.875	2.294	0.000	1.352	2.392	1.745

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:19	1.588	17.140	0.000	33520.000	34940.000	32120.000	83.543%	0.462
2	12:14:27	2.183	14.410	0.000	33970.000	34920.000	32490.000	83.611%	0.740
3	12:14:35	2.273	14.140	0.000	33760.000	35170.000	33010.000	82.843%	0.713
x		2.015	15.230	0.000	33750.000	35010.000	32540.000	83.332%	0.638
σ		0.372	1.660	0.000	229.400	138.500	447.900	0.425%	0.153
%RSD		18.490	10.900	0.000	0.680	0.396	1.377	0.510	23.960

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:19	-0.549	0.859	0.244	-0.103	101.200	0.026	0.126	0.163
2	12:14:27	0.174	0.966	0.205	-0.300	107.200	0.013	0.089	0.273
3	12:14:35	0.194	1.069	0.185	-0.304	98.020	0.053	0.165	0.268
x		-0.060	0.965	0.211	-0.236	102.200	0.031	0.127	0.235
σ		0.423	0.105	0.030	0.115	4.683	0.021	0.038	0.062
%RSD		701.800	10.890	14.100	48.790	4.584	66.900	30.280	26.460

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:19	0.170	0.610	1.133	0.025	0.381	58.280	0.000	638.600
2	12:14:27	0.337	1.100	0.824	0.088	0.382	54.870	0.000	642.100
3	12:14:35	0.061	1.134	1.201	0.088	0.436	61.320	0.000	645.900
x		0.190	0.948	1.053	0.067	0.400	58.160	0.000	642.200
σ		0.139	0.294	0.201	0.036	0.032	3.226	0.000	3.646
%RSD		73.260	30.970	19.090	53.770	7.933	5.547	0.000	0.568

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:19	82.053%	1.668	1.835	73.143%	0.006	-0.027	0.030	-0.019
2	12:14:27	81.742%	1.735	1.446	73.400%	-0.011	-0.022	-0.000	-0.021
3	12:14:35	81.726%	1.253	1.589	73.588%	-0.005	-0.005	-0.000	-0.020
x		81.840%	1.552	1.623	73.377%	-0.003	-0.018	0.010	-0.020
σ		0.184%	0.261	0.197	0.224%	0.008	0.012	0.017	0.001
%RSD		0.225	16.810	12.110	0.305	249.100	66.290	175.400	4.023

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:19	76.021%	-0.076	0.093	0.012	1.042	0.445	81.491%	81.405%
2	12:14:27	78.264%	-0.098	0.008	0.289	0.840	1.169	82.883%	82.787%
3	12:14:35	77.297%	-0.806	0.021	0.107	0.753	0.896	84.074%	82.660%
x		77.194%	-0.327	0.041	0.136	0.878	0.837	82.816%	82.284%
σ		1.125%	0.415	0.046	0.141	0.148	0.366	1.293%	0.764%
%RSD		1.457	127.100	112.600	103.700	16.890	43.730	1.561	0.929

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:19	0.009	0.012	0.009	-0.019	-0.007	70.714%
2	12:14:27	-0.004	0.012	-0.003	-0.037	-0.010	71.416%
3	12:14:35	-0.017	0.013	0.002	-0.026	-0.000	72.408%
x		-0.004	0.012	0.003	-0.027	-0.006	71.513%
σ		0.013	0.001	0.006	0.009	0.005	0.851%
%RSD		355.300	6.499	227.200	34.550	90.040	1.191

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:19:24	96.383%	-0.205	8.871	11.730	0.000	3212.000	2987.000	2956.000
2	12:19:31	92.481%	-0.236	11.090	11.860	0.000	3232.000	2970.000	2990.000
3	12:19:39	94.833%	-0.265	10.670	12.330	0.000	3189.000	2970.000	2989.000
x		94.566%	-0.235	10.210	11.970	0.000	3211.000	2975.000	2978.000
σ		1.965%	0.030	1.177	0.314	0.000	21.190	9.860	19.380
%RSD		2.077	12.560	11.530	2.618	0.000	0.660	0.331	0.651

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:19:24	2.162	2491.000	0.000	1046.000	46580.000	44820.000	83.808%	1.370
2	12:19:31	1.838	2583.000	0.000	1048.000	47860.000	45740.000	84.054%	2.233
3	12:19:39	3.374	2554.000	0.000	1017.000	47980.000	45820.000	84.553%	1.430
x		2.458	2543.000	0.000	1037.000	47470.000	45460.000	84.138%	1.678
σ		0.810	46.910	0.000	17.420	780.100	559.500	0.380%	0.482
%RSD		32.940	1.845	0.000	1.680	1.643	1.231	0.451	28.720

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:19:24	0.944	4.210	0.927	6.810	149.600	0.076	0.222	1.129
2	12:19:31	0.782	4.217	1.030	7.133	145.100	0.075	0.351	1.374
3	12:19:39	0.145	4.294	1.028	6.935	152.800	0.079	0.180	1.239
x		0.624	4.241	0.995	6.959	149.200	0.077	0.251	1.247
σ		0.423	0.047	0.059	0.163	3.864	0.002	0.089	0.123
%RSD		67.780	1.101	5.896	2.341	2.590	2.838	35.460	9.830

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:19:24	1.025	2.129	1.781	0.472	0.173	7.313	0.000	182.400
2	12:19:31	1.383	2.175	2.403	0.521	0.280	5.950	0.000	182.700
3	12:19:39	1.193	2.592	2.094	0.465	0.331	4.732	0.000	181.400
x		1.200	2.299	2.093	0.486	0.261	5.998	0.000	182.200
σ		0.179	0.255	0.311	0.030	0.081	1.291	0.000	0.655
%RSD		14.920	11.090	14.860	6.262	30.880	21.530	0.000	0.360

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:19:24	79.944%	0.426	0.466	75.668%	0.015	0.051	0.058	0.003
2	12:19:31	80.232%	0.542	0.447	75.164%	0.025	0.017	0.029	-0.010
3	12:19:39	80.907%	0.355	0.554	75.994%	0.030	0.000	-0.000	0.083
x		80.361%	0.441	0.489	75.609%	0.024	0.022	0.029	0.025
σ		0.494%	0.095	0.057	0.418%	0.008	0.026	0.029	0.050
%RSD		0.615	21.450	11.600	0.553	33.360	114.500	100.700	199.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:19:24	78.197%	0.477	0.194	0.125	13.640	13.440	81.491%	80.651%
2	12:19:31	79.347%	-0.300	0.115	-0.028	13.330	13.350	83.039%	83.062%
3	12:19:39	78.640%	-0.402	0.059	-0.014	13.230	12.930	82.970%	82.990%
x		78.728%	-0.075	0.123	0.028	13.400	13.240	82.500%	82.234%
σ		0.580%	0.480	0.067	0.085	0.216	0.272	0.875%	1.371%
%RSD		0.737	641.400	54.920	303.400	1.612	2.058	1.060	1.668

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:19:24	-0.004	0.017	-0.011	0.008	-0.008	76.017%
2	12:19:31	-0.013	0.009	-0.012	-0.010	0.005	76.886%
3	12:19:39	-0.009	0.005	-0.048	-0.010	-0.024	78.085%
x		-0.009	0.010	-0.024	-0.004	-0.009	76.996%
σ		0.004	0.006	0.021	0.010	0.014	1.038%
%RSD		47.920	62.550	88.140	251.200	168.000	1.349

CCV 1533080 4/27/2015 12:25:22 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:28	87.327%	97.270	98.730	97.680	0.000	50040.000	46810.000	46770.000
2	12:24:36	87.862%	98.160	91.710	96.820	0.000	50070.000	47690.000	47880.000
3	12:24:44	88.827%	96.900	91.500	97.050	0.000	51080.000	47790.000	48150.000
x		88.005%	97.443%	93.980%	97.184%	0.000	100.795%	94.853%	95.201%
σ		0.760%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.864	0.668	4.378	0.462	0.000	1.181	1.137	1.536
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:28	480.600	4889.000	0.000	48570.000	47300.000	44490.000	83.322%	94.120
2	12:24:36	503.500	4909.000	0.000	49480.000	49190.000	46380.000	81.316%	99.850
3	12:24:44	504.600	4975.000	0.000	49610.000	49340.000	47420.000	80.397%	96.250
x		99.250%	98.490%	0.000	98.440%	97.221%	92.201%	81.679%	96.740%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.496%	n/a
%RSD		2.731	0.921	0.000	1.147	2.334	3.221	1.831	2.996
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:28	92.970	94.260	460.600	23950.000	23370.000	94.470	95.720	94.220
2	12:24:36	95.400	95.330	480.100	24210.000	23120.000	95.680	97.490	96.360
3	12:24:44	97.690	98.170	482.200	24230.000	23640.000	98.490	97.000	95.200
x		95.354%	95.922%	94.863%	96.519%	93.499%	96.213%	96.736%	95.262%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.475	2.107	2.506	0.642	1.114	2.146	0.945	1.124
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:28	94.130	93.350	91.240	95.420	100.200	103.000	0.000	93.080
2	12:24:36	93.610	94.910	92.970	96.490	92.650	97.260	0.000	94.390
3	12:24:44	95.650	94.220	98.600	96.830	98.290	84.840	0.000	95.190
x		94.467%	94.160%	94.270%	96.248%	97.058%	95.027%	0.000	94.222%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.123	0.830	4.086	0.761	4.057	9.758	0.000	1.129
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:28	83.043%	94.610	95.210	76.004%	94.800	95.040	93.060	97.550
2	12:24:36	83.610%	94.510	98.180	76.967%	92.420	95.700	96.070	97.460
3	12:24:44	82.674%	96.150	97.800	77.078%	94.110	95.360	96.680	93.980
x		83.109%	95.089%	97.065%	76.683%	93.778%	95.367%	95.268%	96.331%
σ		0.471%	n/a	n/a	0.591%	n/a	n/a	n/a	n/a
%RSD		0.567	0.968	1.664	0.771	1.307	0.349	2.036	2.111
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:28	76.996%	93.740	95.530	93.910	96.790	92.200	82.691%	82.075%
2	12:24:36	78.927%	92.270	94.160	93.490	88.700	89.890	83.447%	81.962%
3	12:24:44	79.625%	91.160	94.540	92.230	92.430	96.720	83.156%	82.513%
x		78.516%	92.387%	94.745%	93.210%	92.642%	92.936%	83.098%	82.183%
σ		1.362%	n/a	n/a	n/a	n/a	n/a	0.381%	0.291%
%RSD		1.734	1.401	0.745	0.941	4.369	3.734	0.459	0.354
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:24:28	98.100	98.390	100.800	98.230	99.660	72.876%		
2	12:24:36	97.450	97.740	102.500	99.440	99.640	74.000%		
3	12:24:44	98.580	97.790	99.690	99.770	99.220	74.605%		
x		98.044%	97.970%	101.003%	99.147%	99.510%	73.827%		
σ		n/a	n/a	n/a	n/a	n/a	0.878%		
%RSD		0.582	0.370	1.419	0.820	0.248	1.189		

CCB2 4/27/2015 12:34:13 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	12:33:21	92.200%	-0.258	0.869	0.258	0.000	102.200	2.786	6.807
2	12:33:29	93.662%	-0.207	0.739	0.264	0.000	99.240	3.572	6.747
3	12:33:37	94.174%	-0.209	0.368	0.270	0.000	100.200	2.532	3.360
x		93.345%	-0.225	0.659	0.264	0.000	100.500	2.964	5.638
σ		1.024%	0.028	0.260	0.006	0.000	1.525	0.542	1.973
%RSD		1.097	12.680	39.490	2.294	0.000	1.516	18.300	34.990
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:21	-0.846	4.768	0.000	28.690	39.770	12.690	89.687%	-0.471
2	12:33:29	-1.177	2.644	0.000	23.690	11.530	13.360	89.250%	-0.582
3	12:33:37	-1.081	1.062	0.000	28.550	-6.702	7.899	88.773%	-0.319
x		-1.035	2.825	0.000	26.980	14.860	11.320	89.237%	-0.457
σ		0.170	1.860	0.000	2.845	23.410	2.978	0.457%	0.132
%RSD		16.470	65.840	0.000	10.550	157.500	26.320	0.512	28.860
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:21	0.049	0.006	0.058	8.438	6.551	0.020	-0.086	0.132
2	12:33:29	-0.167	0.009	0.075	8.013	8.763	0.016	-0.069	0.056
3	12:33:37	-0.140	0.011	0.054	7.548	7.239	0.012	-0.001	0.088
x		-0.086	0.009	0.062	8.000	7.517	0.016	-0.052	0.092
σ		0.118	0.003	0.011	0.445	1.132	0.004	0.045	0.038
%RSD		137.100	31.040	17.810	5.563	15.060	26.680	86.410	41.280
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:21	0.034	-0.088	-0.174	-0.067	0.354	-0.223	0.000	0.021
2	12:33:29	-0.044	-0.216	-0.272	-0.063	0.301	1.104	0.000	0.031
3	12:33:37	0.045	-0.068	0.108	-0.116	0.053	1.361	0.000	0.010
x		0.012	-0.124	-0.113	-0.082	0.236	0.748	0.000	0.021
σ		0.048	0.080	0.197	0.030	0.161	0.850	0.000	0.010
%RSD		408.100	64.790	174.700	36.120	68.140	113.700	0.000	49.730
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:21	87.514%	0.202	0.132	84.379%	-0.004	-0.009	0.104	-0.079
2	12:33:29	88.824%	0.079	0.101	84.993%	-0.005	0.005	-0.000	-0.058
3	12:33:37	91.448%	0.102	0.195	85.949%	-0.023	0.005	0.077	-0.016
x		89.262%	0.128	0.143	85.107%	-0.011	0.000	0.060	-0.051
σ		2.003%	0.065	0.048	0.791%	0.011	0.008	0.054	0.032
%RSD		2.244	51.240	33.800	0.930	100.100	1727.000	89.600	62.580
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:21	86.244%	-2.626	-0.307	-0.252	0.000	-0.029	87.601%	85.947%
2	12:33:29	87.702%	-2.329	-0.283	-0.293	0.040	0.045	88.619%	86.821%
3	12:33:37	86.932%	-2.653	-0.316	-0.217	0.040	-0.004	88.986%	88.427%
x		86.959%	-2.536	-0.302	-0.254	0.027	0.004	88.402%	87.065%
σ		0.730%	0.180	0.017	0.038	0.023	0.038	0.717%	1.258%
%RSD		0.839	7.082	5.667	15.070	86.600	972.400	0.811	1.444
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:33:21	0.042	0.047	-0.044	-0.024	-0.036	84.800%		
2	12:33:29	0.060	0.045	-0.031	-0.029	-0.038	85.956%		
3	12:33:37	0.063	0.051	-0.040	-0.024	-0.032	85.755%		
x		0.055	0.048	-0.038	-0.026	-0.035	85.504%		
σ		0.011	0.003	0.007	0.003	0.003	0.618%		
%RSD		20.400	6.533	17.920	11.880	8.238	0.722		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:29	87.662%	-0.198	7.253	8.157	0.000	2861.000	2959.000	2974.000
2	12:38:37	92.391%	-0.236	4.656	8.239	0.000	2765.000	2854.000	2869.000
3	12:38:45	89.313%	-0.283	6.176	7.685	0.000	2849.000	2911.000	2885.000
x		89.789%	-0.239	6.028	8.027	0.000	2825.000	2908.000	2909.000
σ		2.400%	0.043	1.305	0.299	0.000	52.210	52.740	56.680
%RSD		2.673	17.840	21.650	3.722	0.000	1.848	1.814	1.948
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:29	2.740	2425.000	0.000	926.300	45470.000	43070.000	77.314%	3.351
2	12:38:37	2.959	2381.000	0.000	906.000	46100.000	43620.000	78.094%	3.608
3	12:38:45	2.028	2404.000	0.000	902.600	46410.000	44720.000	77.869%	3.749
x		2.575	2403.000	0.000	911.600	45990.000	43810.000	77.759%	3.569
σ		0.486	21.900	0.000	12.830	478.800	839.200	0.401%	0.202
%RSD		18.890	0.911	0.000	1.407	1.041	1.916	0.516	5.648
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:29	0.147	2.187	0.631	13.950	155.800	0.043	0.110	1.152
2	12:38:37	-0.904	2.498	0.683	12.620	140.400	0.085	0.284	1.035
3	12:38:45	0.070	2.465	0.675	10.890	145.300	0.062	0.326	1.064
x		-0.229	2.384	0.663	12.490	147.200	0.063	0.240	1.084
σ		0.586	0.171	0.028	1.535	7.853	0.021	0.115	0.061
%RSD		256.000	7.170	4.166	12.300	5.335	33.320	47.830	5.634
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:29	1.112	2.486	2.790	0.387	0.070	2.068	0.000	176.600
2	12:38:37	1.360	2.306	2.967	0.414	0.348	4.284	0.000	175.800
3	12:38:45	1.059	2.638	2.814	0.436	0.125	3.001	0.000	176.900
x		1.177	2.477	2.857	0.413	0.181	3.117	0.000	176.400
σ		0.161	0.166	0.096	0.024	0.147	1.112	0.000	0.575
%RSD		13.650	6.718	3.352	5.928	81.240	35.680	0.000	0.326
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:29	77.010%	0.296	0.471	72.738%	0.017	0.008	-0.000	-0.019
2	12:38:37	78.279%	0.221	0.334	73.789%	0.005	-0.022	-0.000	-0.008
3	12:38:45	77.642%	0.205	0.249	74.175%	0.010	-0.016	-0.000	-0.020
x		77.644%	0.240	0.351	73.567%	0.011	-0.010	-0.000	-0.016
σ		0.635%	0.049	0.112	0.744%	0.006	0.016	0.000	0.007
%RSD		0.817	20.290	31.800	1.011	52.490	154.100	20.520	43.120
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:29	76.141%	-1.348	0.016	0.099	11.860	12.640	79.353%	79.696%
2	12:38:37	77.001%	-1.473	-0.006	-0.078	13.110	13.570	81.119%	81.266%
3	12:38:45	77.462%	-1.469	0.069	-0.090	12.640	13.600	80.906%	80.615%
x		76.868%	-1.430	0.026	-0.023	12.540	13.270	80.459%	80.526%
σ		0.670%	0.071	0.039	0.106	0.633	0.547	0.964%	0.789%
%RSD		0.872	4.939	148.600	463.600	5.048	4.119	1.198	0.980
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:38:29	0.075	0.062	-0.015	-0.020	-0.013	74.013%		
2	12:38:37	0.029	0.063	-0.057	0.008	-0.019	75.360%		
3	12:38:45	0.036	0.045	-0.006	0.025	0.002	76.074%		
x		0.047	0.057	-0.026	0.004	-0.010	75.149%		
σ		0.025	0.010	0.027	0.023	0.011	1.047%		
%RSD		53.660	17.930	104.200	515.800	111.200	1.393		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:32	96.175%	-0.331	6.008	6.787	0.000	2788.000	2846.000	2836.000
2	12:43:39	95.736%	-0.267	5.772	6.958	0.000	2764.000	2825.000	2913.000
3	12:43:47	94.608%	-0.296	6.366	7.305	0.000	2787.000	2881.000	2887.000
x		95.507%	-0.298	6.049	7.017	0.000	2780.000	2851.000	2879.000
σ		0.808%	0.032	0.299	0.264	0.000	13.830	28.100	39.540
%RSD		0.846	10.810	4.939	3.765	0.000	0.498	0.986	1.374
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:32	3.871	2294.000	0.000	965.200	46500.000	44760.000	81.170%	4.794
2	12:43:39	3.231	2304.000	0.000	973.100	47040.000	45570.000	80.427%	4.019
3	12:43:47	2.726	2326.000	0.000	965.900	48140.000	46510.000	79.920%	4.174
x		3.276	2308.000	0.000	968.100	47230.000	45610.000	80.506%	4.329
σ		0.574	16.260	0.000	4.347	839.100	876.800	0.629%	0.410
%RSD		17.510	0.705	0.000	0.449	1.777	1.922	0.781	9.474
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:32	-0.877	2.676	1.003	14.600	163.900	0.097	0.239	0.933
2	12:43:39	0.018	2.604	0.946	14.930	144.300	0.074	0.276	0.903
3	12:43:47	1.590	2.657	0.926	15.250	151.300	0.135	0.082	1.079
x		0.244	2.646	0.958	14.930	153.200	0.102	0.199	0.972
σ		1.249	0.037	0.040	0.326	9.959	0.031	0.103	0.094
%RSD		512.300	1.401	4.174	2.183	6.502	29.960	51.740	9.707
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:32	0.683	15.970	14.860	0.618	0.354	2.735	0.000	185.900
2	12:43:39	1.124	16.250	16.370	0.429	0.347	3.027	0.000	182.300
3	12:43:47	1.226	14.200	14.440	0.469	0.346	7.044	0.000	185.900
x		1.011	15.470	15.220	0.505	0.349	4.268	0.000	184.700
σ		0.289	1.108	1.014	0.100	0.005	2.408	0.000	2.088
%RSD		28.570	7.164	6.660	19.750	1.361	56.410	0.000	1.130
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:32	75.621%	0.165	0.013	71.636%	0.018	-0.015	0.030	-0.018
2	12:43:39	77.755%	0.124	0.173	71.693%	0.001	-0.003	-0.000	-0.042
3	12:43:47	78.275%	0.290	0.177	73.358%	-0.021	-0.021	-0.000	-0.055
x		77.217%	0.193	0.121	72.229%	-0.001	-0.013	0.010	-0.038
σ		1.407%	0.086	0.094	0.978%	0.020	0.009	0.018	0.019
%RSD		1.822	44.660	77.330	1.354	2523.000	69.070	176.000	49.170
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:32	74.595%	-2.109	-0.024	-0.022	14.100	14.970	79.710%	78.898%
2	12:43:39	74.778%	-1.728	-0.168	-0.034	13.140	15.120	80.000%	79.510%
3	12:43:47	75.932%	-1.958	-0.001	0.076	14.050	13.830	81.569%	79.654%
x		75.102%	-1.932	-0.064	0.007	13.760	14.640	80.426%	79.354%
σ		0.725%	0.192	0.091	0.060	0.541	0.706	1.000%	0.401%
%RSD		0.966	9.919	141.600	884.000	3.936	4.820	1.244	0.506
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:43:32	0.000	0.012	0.023	0.041	0.022	72.419%		
2	12:43:39	0.030	0.004	-0.009	0.004	0.019	73.336%		
3	12:43:47	-0.004	0.018	0.048	0.003	0.031	74.126%		
x		0.009	0.011	0.021	0.016	0.024	73.294%		
σ		0.018	0.007	0.029	0.021	0.006	0.854%		
%RSD		211.500	61.770	139.500	133.400	25.850	1.166		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	94.183%	-0.188	4.933	7.373	0.000	3247.000	3158.000	3188.000
2	12:48:41	95.779%	-0.246	5.837	7.811	0.000	3229.000	3121.000	3192.000
3	12:48:48	94.318%	-0.349	6.184	7.861	0.000	3288.000	3190.000	3225.000
x		94.760%	-0.261	5.651	7.682	0.000	3255.000	3156.000	3202.000
σ		0.885%	0.082	0.646	0.269	0.000	30.640	34.450	19.970
%RSD		0.934	31.380	11.430	3.495	0.000	0.942	1.091	0.624
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	2.982	2379.000	0.000	1007.000	47250.000	46010.000	81.730%	2.684
2	12:48:41	2.682	2372.000	0.000	1022.000	48800.000	46880.000	80.752%	2.314
3	12:48:48	2.601	2429.000	0.000	1022.000	49180.000	47740.000	80.589%	2.649
x		2.755	2393.000	0.000	1017.000	48410.000	46880.000	81.024%	2.549
σ		0.200	31.120	0.000	8.949	1021.000	867.500	0.617%	0.205
%RSD		7.274	1.300	0.000	0.880	2.110	1.851	0.761	8.023
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	0.226	2.207	1.393	32.380	161.300	0.069	0.850	16.280
2	12:48:41	0.070	2.460	1.161	33.560	183.100	0.064	0.834	16.020
3	12:48:48	0.359	2.530	1.264	32.810	175.400	0.087	0.867	16.160
x		0.218	2.399	1.273	32.920	173.300	0.073	0.850	16.160
σ		0.144	0.170	0.116	0.596	11.060	0.012	0.017	0.130
%RSD		66.140	7.091	9.121	1.810	6.381	16.420	1.974	0.805
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	16.490	32.500	34.020	0.400	0.180	1.912	0.000	197.800
2	12:48:41	17.060	32.260	32.320	0.385	0.234	4.917	0.000	196.100
3	12:48:48	15.940	31.730	31.270	0.297	0.558	4.994	0.000	195.800
x		16.500	32.160	32.530	0.361	0.324	3.941	0.000	196.600
σ		0.560	0.392	1.389	0.055	0.205	1.757	0.000	1.108
%RSD		3.397	1.219	4.270	15.320	63.220	44.590	0.000	0.564
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	77.243%	-0.031	0.041	73.083%	-0.016	-0.015	0.030	-0.054
2	12:48:41	78.306%	0.051	0.091	73.855%	-0.011	-0.004	0.030	-0.043
3	12:48:48	79.707%	0.099	0.163	73.896%	0.000	-0.010	-0.000	-0.067
x		78.419%	0.040	0.098	73.611%	-0.009	-0.010	0.020	-0.055
σ		1.236%	0.066	0.061	0.458%	0.008	0.005	0.017	0.012
%RSD		1.576	166.300	62.350	0.622	92.180	54.930	87.050	21.740
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	74.444%	-2.319	-0.127	-0.109	15.310	13.340	80.324%	80.826%
2	12:48:41	76.415%	-2.405	0.066	-0.161	12.250	14.970	82.049%	80.513%
3	12:48:48	76.459%	-2.147	-0.215	-0.066	14.380	13.890	82.319%	82.158%
x		75.773%	-2.291	-0.092	-0.112	13.980	14.060	81.564%	81.166%
σ		1.151%	0.131	0.144	0.048	1.572	0.828	1.082%	0.874%
%RSD		1.519	5.728	156.600	42.620	11.240	5.884	1.327	1.077
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:48:33	-0.008	0.000	0.234	0.284	0.275	74.841%		
2	12:48:41	-0.013	-0.007	0.260	0.267	0.236	76.074%		
3	12:48:48	-0.013	0.000	0.206	0.218	0.213	76.771%		
x		-0.011	-0.002	0.234	0.256	0.241	75.895%		
σ		0.002	0.004	0.027	0.034	0.031	0.977%		
%RSD		21.750	191.800	11.540	13.240	12.890	1.288		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:37	93.042%	-0.282	6.167	7.593	0.000	3053.000	2859.000	2863.000
2	12:53:45	93.734%	-0.283	5.111	7.860	0.000	3099.000	2877.000	2883.000
3	12:53:53	94.970%	-0.361	6.609	7.428	0.000	3133.000	2957.000	2958.000
x		93.916%	-0.309	5.962	7.627	0.000	3095.000	2897.000	2901.000
σ		0.977%	0.045	0.769	0.218	0.000	40.160	52.100	50.150
%RSD		1.040	14.690	12.900	2.853	0.000	1.297	1.798	1.728
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:37	0.597	2325.000	0.000	942.800	44660.000	43300.000	82.381%	2.657
2	12:53:45	1.081	2350.000	0.000	935.900	46070.000	44250.000	81.407%	2.452
3	12:53:53	0.112	2344.000	0.000	954.700	46440.000	45020.000	80.728%	2.767
x		0.597	2340.000	0.000	944.500	45720.000	44190.000	81.505%	2.625
σ		0.485	13.010	0.000	9.536	937.900	861.600	0.831%	0.160
%RSD		81.210	0.556	0.000	1.010	2.051	1.950	1.020	6.083
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:37	1.489	2.302	0.455	3.947	152.200	0.055	0.251	2.518
2	12:53:45	0.352	2.452	0.424	4.487	144.900	0.083	0.099	2.438
3	12:53:53	0.167	2.452	0.498	4.330	133.900	0.073	0.234	2.391
x		0.669	2.402	0.459	4.255	143.700	0.070	0.195	2.449
σ		0.716	0.086	0.037	0.277	9.232	0.014	0.083	0.064
%RSD		107.000	3.596	8.142	6.521	6.425	20.420	42.610	2.626
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:37	2.487	4.672	4.348	0.217	0.347	1.912	0.000	190.300
2	12:53:45	2.518	4.957	3.626	0.395	0.124	3.431	0.000	188.400
3	12:53:53	2.533	3.632	4.856	0.318	0.453	2.492	0.000	186.000
x		2.513	4.420	4.277	0.310	0.308	2.612	0.000	188.200
σ		0.024	0.697	0.618	0.089	0.168	0.766	0.000	2.167
%RSD		0.944	15.780	14.450	28.730	54.480	29.350	0.000	1.151
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:37	77.188%	0.038	0.148	72.885%	-0.032	-0.015	-0.000	-0.067
2	12:53:45	77.192%	0.072	0.106	72.683%	0.001	-0.027	-0.000	-0.054
3	12:53:53	78.772%	0.118	0.069	73.835%	-0.016	-0.027	-0.000	-0.043
x		77.717%	0.076	0.108	73.134%	-0.016	-0.023	-0.000	-0.055
σ		0.913%	0.040	0.040	0.615%	0.016	0.007	0.000	0.012
%RSD		1.175	53.030	36.650	0.841	104.600	29.070	54.780	21.530
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:37	75.223%	-2.459	-0.242	-0.220	14.600	13.290	80.696%	80.510%
2	12:53:45	74.360%	-2.252	-0.191	-0.119	13.090	13.070	80.558%	81.078%
3	12:53:53	76.552%	-2.342	-0.285	-0.256	13.350	13.380	81.569%	80.851%
x		75.378%	-2.351	-0.239	-0.199	13.680	13.250	80.941%	80.813%
σ		1.104%	0.104	0.047	0.071	0.806	0.160	0.548%	0.286%
%RSD		1.465	4.410	19.640	35.700	5.891	1.205	0.677	0.354
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:53:37	-0.012	-0.007	-0.031	0.033	0.011	74.215%		
2	12:53:45	-0.013	-0.005	-0.011	-0.015	0.004	75.015%		
3	12:53:53	-0.008	0.000	-0.011	0.014	-0.003	75.816%		
x		-0.011	-0.004	-0.018	0.011	0.004	75.016%		
σ		0.002	0.004	0.012	0.024	0.007	0.800%		
%RSD		20.860	94.570	66.160	225.100	157.800	1.067		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:40	92.181%	-0.268	6.754	8.299	0.000	3248.000	3050.000	3078.000
2	12:58:48	92.525%	-0.226	6.646	7.660	0.000	3292.000	3073.000	3101.000
3	12:58:56	91.910%	-0.268	6.854	8.132	0.000	3341.000	3118.000	3156.000
x		92.206%	-0.254	6.752	8.030	0.000	3294.000	3081.000	3112.000
σ		0.308%	0.025	0.104	0.331	0.000	46.540	34.700	40.450
%RSD		0.335	9.676	1.541	4.127	0.000	1.413	1.126	1.300

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:40	1.405	2390.000	0.000	1030.000	47980.000	45870.000	80.118%	2.462
2	12:58:48	1.330	2415.000	0.000	1046.000	49180.000	46620.000	80.068%	2.132
3	12:58:56	0.954	2426.000	0.000	1032.000	49960.000	47510.000	79.659%	2.772
x		1.230	2410.000	0.000	1036.000	49040.000	46660.000	79.948%	2.455
σ		0.242	18.630	0.000	8.765	994.700	821.800	0.252%	0.320
%RSD		19.630	0.773	0.000	0.846	2.028	1.761	0.315	13.040

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:40	0.350	2.227	0.592	3.120	148.200	0.047	0.299	2.610
2	12:58:48	-1.166	2.420	0.641	3.119	157.700	0.070	0.279	3.013
3	12:58:56	-0.378	2.420	0.671	3.517	146.000	0.075	0.123	2.579
x		-0.398	2.356	0.634	3.252	150.700	0.064	0.234	2.734
σ		0.758	0.111	0.040	0.230	6.222	0.015	0.096	0.242
%RSD		190.600	4.726	6.258	7.060	4.130	23.640	41.230	8.866

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:40	2.944	4.821	5.248	0.276	0.126	4.508	0.000	198.000
2	12:58:48	2.620	4.843	5.019	0.394	0.407	4.221	0.000	196.800
3	12:58:56	2.971	4.100	5.165	0.227	0.406	-0.724	0.000	198.900
x		2.845	4.588	5.144	0.299	0.313	2.668	0.000	197.900
σ		0.196	0.423	0.116	0.086	0.162	2.942	0.000	1.044
%RSD		6.875	9.217	2.252	28.590	51.770	110.200	0.000	0.527

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:40	76.567%	-0.011	0.154	71.401%	-0.015	0.009	-0.000	-0.054
2	12:58:48	76.843%	0.109	0.098	71.931%	-0.026	-0.027	-0.000	-0.054
3	12:58:56	77.208%	0.076	0.112	70.400%	-0.015	-0.021	-0.000	-0.067
x		76.873%	0.058	0.121	71.244%	-0.019	-0.013	-0.000	-0.058
σ		0.321%	0.062	0.029	0.778%	0.006	0.019	0.000	0.007
%RSD		0.418	107.200	24.000	1.091	34.150	146.900	11.340	12.220

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:40	74.013%	-2.460	-0.173	-0.259	14.860	14.700	78.597%	79.288%
2	12:58:48	74.911%	-2.508	-0.216	-0.164	12.520	13.770	79.353%	78.363%
3	12:58:56	75.674%	-2.227	-0.108	-0.231	14.150	13.160	79.380%	78.812%
x		74.866%	-2.398	-0.166	-0.218	13.840	13.880	79.110%	78.821%
σ		0.832%	0.151	0.054	0.049	1.197	0.775	0.444%	0.463%
%RSD		1.111	6.278	32.840	22.380	8.646	5.584	0.562	0.587

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:40	-0.017	-0.001	0.035	-0.001	0.017	71.528%
2	12:58:48	-0.004	0.001	0.067	0.035	0.039	72.397%
3	12:58:56	-0.017	0.001	0.044	0.034	0.031	73.196%
x		-0.012	0.000	0.049	0.023	0.029	72.374%
σ		0.007	0.001	0.016	0.020	0.011	0.834%
%RSD		59.830	548.500	33.230	89.800	39.830	1.153

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:03:43	89.824%	-0.273	1.632	2.689	0.000	1442.000	5023.000	5146.000
2	13:03:51	90.210%	-0.331	1.979	2.484	0.000	1428.000	5116.000	5118.000
3	13:03:59	88.636%	-0.362	1.693	2.718	0.000	1432.000	5177.000	5271.000
x		89.557%	-0.322	1.768	2.630	0.000	1434.000	5105.000	5178.000
σ		0.821%	0.045	0.185	0.128	0.000	6.914	77.510	81.370
%RSD		0.916	13.910	10.480	4.854	0.000	0.482	1.518	1.571

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:03:43	102.900	370.000	0.000	186.400	33020.000	31550.000	83.970%	2.751
2	13:03:51	100.700	372.200	0.000	199.900	34630.000	32350.000	83.436%	3.529
3	13:03:59	101.200	369.500	0.000	186.200	34280.000	32520.000	83.244%	2.103
x		101.600	370.600	0.000	190.800	33970.000	32140.000	83.550%	2.794
σ		1.130	1.435	0.000	7.853	846.900	519.500	0.376%	0.714
%RSD		1.112	0.387	0.000	4.115	2.493	1.616	0.450	25.560

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:03:43	0.479	0.784	133.400	2845.000	2797.000	0.902	0.769	0.427
2	13:03:51	0.555	0.725	136.100	2928.000	2833.000	1.026	0.997	0.346
3	13:03:59	0.353	0.746	137.700	2878.000	2806.000	1.010	0.914	0.466
x		0.462	0.752	135.700	2884.000	2812.000	0.979	0.893	0.413
σ		0.102	0.030	2.187	41.930	18.650	0.068	0.116	0.061
%RSD		22.150	3.979	1.611	1.454	0.663	6.896	12.950	14.800

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:03:43	0.470	3.055	2.022	0.192	0.066	-0.603	0.000	330.300
2	13:03:51	0.373	2.368	2.493	0.191	0.393	-0.746	0.000	330.600
3	13:03:59	0.395	2.995	2.413	0.197	0.332	1.618	0.000	328.400
x		0.413	2.806	2.309	0.193	0.263	0.090	0.000	329.700
σ		0.051	0.381	0.252	0.003	0.174	1.325	0.000	1.155
%RSD		12.390	13.570	10.920	1.487	66.000	1476.000	0.000	0.350

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:03:43	78.776%	-0.118	-0.121	74.262%	-0.021	-0.033	-0.000	-0.055
2	13:03:51	79.168%	0.014	-0.039	75.570%	-0.022	-0.028	-0.000	-0.079
3	13:03:59	81.090%	-0.071	-0.051	75.849%	-0.032	-0.022	-0.000	-0.079
x		79.678%	-0.059	-0.070	75.227%	-0.025	-0.028	-0.000	-0.071
σ		1.238%	0.067	0.044	0.847%	0.006	0.005	0.000	0.013
%RSD		1.554	114.300	63.230	1.126	24.360	19.810	17.730	18.940

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:03:43	78.181%	-2.876	-0.457	-0.406	2.054	2.722	81.269%	79.828%
2	13:03:51	78.032%	-2.787	-0.442	-0.479	2.446	2.600	82.187%	81.208%
3	13:03:59	78.755%	-2.816	-0.442	-0.428	2.113	2.139	83.165%	81.233%
x		78.322%	-2.826	-0.447	-0.438	2.204	2.487	82.207%	80.756%
σ		0.382%	0.045	0.009	0.038	0.212	0.308	0.948%	0.804%
%RSD		0.487	1.608	1.947	8.573	9.596	12.370	1.153	0.995

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:03:43	-0.004	-0.005	0.101	0.094	0.085	76.121%
2	13:03:51	-0.017	-0.008	0.092	0.112	0.092	75.736%
3	13:03:59	-0.013	-0.003	0.054	0.116	0.086	76.745%
x		-0.011	-0.006	0.083	0.107	0.087	76.200%
σ		0.006	0.003	0.025	0.012	0.004	0.509%
%RSD		55.610	46.550	30.180	10.770	4.208	0.668

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:51	86.267%	2.132	9.718	10.900	0.000	1960.000	12010.000	11880.000
2	13:08:59	85.250%	1.534	10.180	9.879	0.000	2003.000	12380.000	12450.000
3	13:09:07	84.104%	1.694	11.460	10.190	0.000	2039.000	12550.000	12480.000
x		85.207%	1.787	10.450	10.320	0.000	2001.000	12310.000	12270.000
σ		1.082%	0.310	0.902	0.523	0.000	39.360	273.000	333.500
%RSD		1.270	17.330	8.630	5.061	0.000	1.967	2.217	2.718
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:51	2278.000	1569.000	0.000	156.700	15630.000	14770.000	90.435%	323.500
2	13:08:59	2364.000	1587.000	0.000	166.100	15900.000	14950.000	88.427%	325.300
3	13:09:07	2448.000	1590.000	0.000	161.800	16240.000	15200.000	87.515%	330.000
x		2363.000	1582.000	0.000	161.600	15930.000	14970.000	88.793%	326.300
σ		84.790	11.750	0.000	4.706	305.300	215.300	1.494%	3.359
%RSD		3.588	0.743	0.000	2.913	1.917	1.438	1.682	1.029
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:51	795.800	290.600	3956.000	19060.000	18530.000	3.564	35.840	4.950
2	13:08:59	807.900	300.200	4022.000	19490.000	19020.000	3.606	35.330	5.332
3	13:09:07	827.400	302.100	4090.000	19400.000	19080.000	3.590	34.090	5.266
x		810.300	297.600	4023.000	19320.000	18880.000	3.587	35.080	5.183
σ		15.930	6.162	67.370	227.700	304.300	0.021	0.900	0.204
%RSD		1.966	2.070	1.675	1.179	1.612	0.588	2.566	3.944
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:51	5.484	14.600	14.970	-0.008	0.393	0.665	0.000	67.620
2	13:08:59	5.080	15.160	14.140	-0.000	0.339	1.949	0.000	67.690
3	13:09:07	5.782	14.410	15.030	-0.004	0.389	2.081	0.000	67.620
x		5.449	14.720	14.710	-0.004	0.374	1.565	0.000	67.640
σ		0.352	0.387	0.494	0.004	0.030	0.782	0.000	0.041
%RSD		6.466	2.631	3.357	94.570	8.047	49.960	0.000	0.060
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:51	90.072%	-0.155	-0.164	73.530%	-0.021	-0.021	0.029	-0.079
2	13:08:59	92.497%	-0.125	-0.074	73.728%	-0.016	-0.004	-0.000	0.016
3	13:09:07	92.206%	-0.141	-0.135	74.665%	-0.000	-0.011	-0.000	-0.055
x		91.592%	-0.140	-0.124	73.974%	-0.013	-0.012	0.010	-0.039
σ		1.324%	0.015	0.046	0.607%	0.011	0.009	0.017	0.049
%RSD		1.446	10.780	36.900	0.820	86.910	70.840	175.200	125.100
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:51	76.238%	-2.857	-0.456	-0.426	12.860	15.780	81.257%	80.233%
2	13:08:59	76.884%	-2.898	-0.426	-0.437	14.850	14.470	81.479%	80.280%
3	13:09:07	77.520%	-2.810	-0.434	-0.458	14.980	14.430	81.857%	80.025%
x		76.881%	-2.855	-0.439	-0.440	14.230	14.890	81.531%	80.179%
σ		0.641%	0.044	0.016	0.016	1.189	0.767	0.303%	0.136%
%RSD		0.834	1.528	3.633	3.745	8.358	5.152	0.372	0.169
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:08:51	0.004	0.019	1.145	0.969	1.079	75.216%		
2	13:08:59	-0.012	0.009	1.302	1.120	1.108	74.798%		
3	13:09:07	0.020	0.007	1.168	1.112	1.088	75.745%		
x		0.004	0.012	1.205	1.067	1.092	75.253%		
σ		0.016	0.007	0.085	0.085	0.015	0.475%		
%RSD		420.200	55.430	7.048	7.998	1.367	0.631		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:59	83.421%	-0.243	7.454	7.130	0.000	75870.000	54210.000	53960.000
2	13:14:07	82.015%	-0.078	7.713	7.836	0.000	77450.000	54810.000	54480.000
3	13:14:15	83.464%	-0.304	5.071	7.625	0.000	76290.000	53590.000	55200.000
x		82.967%	-0.208	6.746	7.530	0.000	76530.000	54200.000	54550.000
σ		0.824%	0.117	1.456	0.362	0.000	820.100	606.700	622.900
%RSD		0.993	56.160	21.590	4.809	0.000	1.072	1.119	1.142

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:59	142.000	213.000	0.000	2459.000	76750.000	75430.000	81.952%	453.800
2	13:14:07	144.300	206.900	0.000	2499.000	77580.000	76440.000	81.768%	466.700
3	13:14:15	148.200	211.700	0.000	2525.000	78670.000	77860.000	80.932%	476.400
x		144.800	210.500	0.000	2495.000	77670.000	76570.000	81.551%	465.700
σ		3.173	3.238	0.000	33.300	959.600	1220.000	0.543%	11.340
%RSD		2.191	1.538	0.000	1.335	1.236	1.593	0.666	2.435

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:59	102.800	40.070	745.900	924.800	1171.000	0.140	3.432	0.467
2	13:14:07	105.300	39.250	757.700	942.900	1196.000	0.222	3.720	0.594
3	13:14:15	106.500	40.500	780.000	933.400	1144.000	0.194	3.499	0.441
x		104.900	39.940	761.200	933.700	1171.000	0.185	3.550	0.501
σ		1.879	0.633	17.320	9.022	25.840	0.042	0.151	0.082
%RSD		1.791	1.584	2.275	0.966	2.208	22.440	4.241	16.290

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:59	0.768	8.375	6.363	0.070	0.065	4.963	0.000	156.700
2	13:14:07	0.642	8.461	7.963	0.064	0.011	2.929	0.000	159.100
3	13:14:15	0.524	6.959	7.493	0.060	0.116	3.492	0.000	156.900
x		0.645	7.932	7.273	0.064	0.064	3.795	0.000	157.600
σ		0.122	0.844	0.823	0.005	0.053	1.050	0.000	1.318
%RSD		18.960	10.640	11.310	7.862	82.580	27.670	0.000	0.836

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:59	80.433%	24.430	24.230	72.614%	0.039	-0.021	0.089	0.101
2	13:14:07	80.577%	24.160	26.510	73.239%	0.102	0.030	0.088	0.028
3	13:14:15	82.981%	25.950	26.150	74.450%	0.069	0.001	0.059	0.016
x		81.330%	24.840	25.630	73.435%	0.070	0.003	0.079	0.048
σ		1.431%	0.962	1.224	0.933%	0.032	0.026	0.017	0.046
%RSD		1.760	3.874	4.775	1.271	45.560	794.500	21.940	95.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:59	76.089%	1.004	-0.409	-0.372	4.195	3.314	80.153%	78.211%
2	13:14:07	77.033%	0.697	-0.449	-0.394	3.294	3.835	80.819%	80.618%
3	13:14:15	76.759%	0.719	-0.379	-0.320	4.316	4.039	81.875%	79.986%
x		76.627%	0.807	-0.412	-0.362	3.935	3.729	80.949%	79.605%
σ		0.485%	0.171	0.035	0.038	0.558	0.374	0.868%	1.248%
%RSD		0.634	21.190	8.522	10.480	14.190	10.040	1.072	1.568

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:59	-0.008	-0.003	1.306	1.013	1.095	70.730%
2	13:14:07	-0.008	-0.010	1.387	0.974	1.097	71.233%
3	13:14:15	-0.012	-0.005	1.196	1.065	1.103	71.311%
x		-0.009	-0.006	1.296	1.017	1.098	71.092%
σ		0.003	0.004	0.096	0.046	0.004	0.315%
%RSD		26.750	66.910	7.413	4.494	0.358	0.444

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:07	85.133%	-0.201	83.710	92.110	0.000	234900.000	27220.000	27250.000
2	13:19:14	83.718%	-0.292	91.260	93.440	0.000	241500.000	27830.000	27760.000
3	13:19:22	84.052%	-0.185	82.780	97.790	0.000	238300.000	27990.000	27970.000
x		84.301%	-0.226	85.910	94.450	0.000	238200.000	27680.000	27660.000
σ		0.740%	0.058	4.652	2.973	0.000	3308.000	404.600	372.700
%RSD		0.877	25.690	5.414	3.148	0.000	1.389	1.462	1.348
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:07	0.548	501.500	0.000	7217.000	11040.000	10270.000	83.498%	0.463
2	13:19:14	1.413	499.300	0.000	7305.000	11470.000	10510.000	82.555%	0.316
3	13:19:22	0.928	503.100	0.000	7214.000	11610.000	10650.000	83.261%	0.227
x		0.963	501.300	0.000	7245.000	11380.000	10480.000	83.105%	0.335
σ		0.434	1.935	0.000	51.780	296.000	190.700	0.491%	0.119
%RSD		45.030	0.386	0.000	0.715	2.602	1.820	0.590	35.550
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:07	0.320	0.630	36.950	619.100	617.800	0.022	-0.134	0.094
2	13:19:14	0.457	0.685	37.930	625.000	643.200	0.049	0.091	0.108
3	13:19:22	-0.322	0.669	37.980	617.500	618.300	0.040	-0.060	0.128
x		0.151	0.661	37.620	620.500	626.400	0.037	-0.034	0.110
σ		0.416	0.029	0.580	3.980	14.510	0.014	0.115	0.017
%RSD		274.800	4.327	1.541	0.641	2.316	37.130	336.900	15.820
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:07	0.161	0.679	0.477	0.611	0.174	16.730	0.000	168.300
2	13:19:14	0.118	0.428	0.425	0.591	0.278	13.340	0.000	166.300
3	13:19:22	0.172	0.370	-0.299	0.584	0.384	14.790	0.000	166.800
x		0.150	0.492	0.201	0.595	0.278	14.950	0.000	167.100
σ		0.029	0.164	0.434	0.014	0.105	1.699	0.000	1.013
%RSD		19.150	33.410	215.900	2.401	37.830	11.360	0.000	0.606
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:07	79.661%	0.270	0.295	72.504%	-0.010	-0.033	-0.000	-0.079
2	13:19:14	81.427%	0.278	0.255	73.619%	-0.016	-0.039	-0.000	-0.079
3	13:19:22	81.319%	0.260	0.201	74.171%	-0.021	-0.039	-0.000	-0.079
x		80.802%	0.270	0.250	73.431%	-0.016	-0.037	-0.000	-0.079
σ		0.990%	0.009	0.047	0.849%	0.006	0.003	0.000	0.000
%RSD		1.225	3.310	18.820	1.156	34.850	9.113	78.750	0.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:07	77.217%	-2.860	-0.457	-0.447	13.270	14.440	79.910%	80.117%
2	13:19:14	77.163%	-2.808	-0.464	-0.447	12.760	13.630	79.593%	80.418%
3	13:19:22	77.785%	-2.799	-0.480	-0.448	12.700	12.980	81.482%	80.709%
x		77.388%	-2.822	-0.467	-0.447	12.910	13.680	80.328%	80.415%
σ		0.344%	0.033	0.012	0.000	0.315	0.731	1.012%	0.296%
%RSD		0.445	1.166	2.555	0.055	2.438	5.340	1.259	0.369
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:19:07	-0.012	-0.008	-0.024	-0.006	-0.015	70.384%		
2	13:19:14	-0.017	-0.006	-0.014	0.017	0.000	71.723%		
3	13:19:22	-0.012	-0.010	-0.041	-0.013	-0.024	72.311%		
x		-0.014	-0.008	-0.026	-0.001	-0.013	71.473%		
σ		0.002	0.002	0.014	0.016	0.012	0.988%		
%RSD		18.100	22.240	52.450	1954.000	96.780	1.382		

180-43220-D-2-A @10 4/27/2015 1:25:09 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:15	88.181%	-0.212	88.740	94.220	0.000	203800.000	23200.000	22790.000
2	13:24:22	86.345%	-0.193	89.470	97.310	0.000	214300.000	23570.000	23790.000
3	13:24:30	86.391%	-0.158	91.250	101.700	0.000	211900.000	23260.000	23300.000
x		86.972%	-0.188	89.820	97.730	0.000	210000.000	23340.000	23300.000
σ		1.047%	0.027	1.293	3.736	0.000	5479.000	200.100	500.000
%RSD		1.204	14.380	1.440	3.823	0.000	2.609	0.857	2.146

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:15	25.880	218.500	0.000	6895.000	8962.000	8338.000	84.970%	0.130
2	13:24:22	28.330	216.100	0.000	7046.000	9438.000	8565.000	84.161%	0.414
3	13:24:30	26.440	220.000	0.000	7130.000	9401.000	8708.000	83.596%	0.223
x		26.880	218.200	0.000	7023.000	9267.000	8537.000	84.242%	0.256
σ		1.284	1.943	0.000	119.000	264.600	186.600	0.691%	0.145
%RSD		4.777	0.890	0.000	1.695	2.855	2.186	0.820	56.710

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:15	0.066	0.611	91.120	632.900	659.200	0.118	0.086	0.406
2	13:24:22	0.405	0.648	93.660	633.500	655.700	0.070	0.088	0.220
3	13:24:30	-0.054	0.751	95.790	651.000	658.200	0.062	-0.004	0.310
x		0.139	0.670	93.520	639.200	657.700	0.084	0.056	0.312
σ		0.238	0.073	2.339	10.260	1.809	0.030	0.052	0.093
%RSD		171.400	10.840	2.501	1.606	0.275	36.450	93.000	29.780

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:15	0.264	1.439	1.697	0.415	0.328	14.050	0.000	139.900
2	13:24:22	0.321	2.638	1.580	0.383	0.010	9.890	0.000	138.500
3	13:24:30	0.185	2.381	1.913	0.402	0.116	12.660	0.000	141.000
x		0.257	2.153	1.730	0.400	0.151	12.200	0.000	139.800
σ		0.068	0.631	0.169	0.016	0.162	2.119	0.000	1.263
%RSD		26.630	29.330	9.767	4.037	107.000	17.370	0.000	0.904

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:15	81.657%	0.178	-0.080	73.842%	0.011	-0.010	-0.000	-0.067
2	13:24:22	81.734%	0.111	0.096	74.178%	-0.006	-0.022	-0.000	-0.079
3	13:24:30	81.501%	0.028	-0.050	74.902%	0.020	-0.016	-0.000	-0.056
x		81.631%	0.105	-0.011	74.308%	0.008	-0.016	-0.000	-0.067
σ		0.119%	0.075	0.094	0.542%	0.013	0.006	0.000	0.012
%RSD		0.145	71.330	856.900	0.729	155.400	35.530	79.690	17.270

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:15	77.666%	-2.951	-0.465	-0.448	5.649	6.242	81.164%	80.474%
2	13:24:22	78.559%	-2.865	-0.488	-0.417	5.898	6.913	82.001%	82.621%
3	13:24:30	78.499%	-2.991	-0.473	-0.469	6.449	6.714	81.560%	82.566%
x		78.241%	-2.936	-0.475	-0.444	5.999	6.623	81.575%	81.887%
σ		0.499%	0.064	0.012	0.026	0.409	0.344	0.419%	1.224%
%RSD		0.638	2.189	2.482	5.862	6.820	5.199	0.513	1.495

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:15	-0.012	-0.008	0.034	0.114	0.068	72.284%
2	13:24:22	-0.017	-0.012	0.044	0.040	0.064	73.011%
3	13:24:30	-0.008	-0.012	0.053	0.146	0.089	73.742%
x		-0.012	-0.011	0.044	0.100	0.074	73.012%
σ		0.004	0.002	0.010	0.054	0.013	0.729%
%RSD		33.590	19.550	21.830	54.340	17.860	0.998

CCV 1533080 4/27/2015 1:30:14 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:21	87.479%	98.480	93.560	97.190	0.000	49950.000	46440.000	47030.000
2	13:29:29	88.041%	98.800	94.300	101.600	0.000	49540.000	47900.000	47710.000
3	13:29:37	86.605%	99.260	96.210	98.550	0.000	50570.000	47340.000	48450.000
x		87.375%	98.846%	94.691%	99.107%	0.000	100.038%	94.448%	95.466%
σ		0.723%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.828	0.395	1.447	2.265	0.000	1.036	1.559	1.492
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:21	501.100	4884.000	0.000	48410.000	47180.000	45060.000	82.966%	90.640
2	13:29:29	497.500	4897.000	0.000	49690.000	47710.000	46000.000	82.081%	97.860
3	13:29:37	508.000	4931.000	0.000	50410.000	47300.000	46310.000	81.704%	101.900
x		100.436%	98.082%	0.000	99.006%	94.793%	91.582%	82.250%	96.800%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.648%	n/a
%RSD		1.061	0.502	0.000	2.047	0.583	1.419	0.788	5.893
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:21	94.460	97.670	463.100	24060.000	23620.000	94.760	93.350	94.860
2	13:29:29	94.040	95.820	470.600	24330.000	23940.000	96.460	97.870	96.710
3	13:29:37	96.810	96.970	472.900	24250.000	24080.000	96.240	98.450	95.870
x		95.104%	96.821%	93.772%	96.850%	95.513%	95.820%	96.558%	95.816%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.571	0.962	1.091	0.579	0.988	0.964	2.894	0.970
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:21	94.160	93.470	90.180	96.370	100.600	97.860	0.000	95.310
2	13:29:29	94.320	92.550	93.220	94.780	94.280	99.740	0.000	94.760
3	13:29:37	94.490	95.550	94.810	96.250	98.990	92.680	0.000	96.630
x		94.322%	93.855%	92.737%	95.800%	97.952%	96.761%	0.000	95.568%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.179	1.637	2.535	0.927	3.343	3.779	0.000	1.004
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:21	80.826%	95.700	96.250	74.230%	93.270	95.180	94.890	95.620
2	13:29:29	82.352%	96.300	98.470	74.892%	94.850	93.380	95.940	97.650
3	13:29:37	82.445%	96.070	99.390	75.509%	93.810	95.090	93.610	96.990
x		81.874%	96.021%	98.035%	74.877%	93.974%	94.550%	94.815%	96.754%
σ		0.909%	n/a	n/a	0.640%	n/a	n/a	n/a	n/a
%RSD		1.110	0.319	1.648	0.855	0.855	1.072	1.233	1.072
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:21	76.132%	90.690	92.450	94.050	94.130	90.610	81.587%	78.596%
2	13:29:29	77.077%	90.760	94.100	94.050	94.160	97.400	80.786%	79.349%
3	13:29:37	78.351%	90.860	92.180	93.910	96.270	92.170	82.469%	81.538%
x		77.187%	90.768%	92.910%	94.004%	94.855%	93.393%	81.614%	79.828%
σ		1.114%	n/a	n/a	n/a	n/a	n/a	0.842%	1.528%
%RSD		1.443	0.094	1.119	0.088	1.293	3.808	1.031	1.914
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:29:21	98.960	98.410	100.500	98.420	99.120	70.075%		
2	13:29:29	99.570	98.130	100.100	99.520	98.970	70.623%		
3	13:29:37	99.420	97.120	98.820	99.520	99.440	71.249%		
x		99.315%	97.885%	99.819%	99.154%	99.175%	70.649%		
σ		n/a	n/a	n/a	n/a	n/a	0.587%		
%RSD		0.320	0.694	0.887	0.644	0.241	0.831		

CCB3 4/27/2015 1:39:10 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:17	94.800%	-0.264	-0.840	0.058	0.000	67.880	6.831	7.646
2	13:38:25	95.789%	-0.341	0.450	-0.649	0.000	70.610	9.941	6.856
3	13:38:33	95.344%	-0.160	-0.020	-0.088	0.000	70.520	5.502	6.498
x		95.311%	-0.255	-0.137	-0.227	0.000	69.670	7.424	7.000
σ		0.495%	0.091	0.653	0.373	0.000	1.550	2.279	0.587
%RSD		0.520	35.720	478.300	164.800	0.000	2.225	30.690	8.387
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:17	-0.720	2.383	0.000	14.580	7.473	15.240	89.181%	-0.395
2	13:38:25	-0.715	1.052	0.000	9.958	18.340	12.470	88.196%	-0.655
3	13:38:33	-0.135	0.785	0.000	23.000	4.550	11.820	86.817%	-0.310
x		-0.523	1.406	0.000	15.850	10.120	13.180	88.065%	-0.453
σ		0.337	0.856	0.000	6.612	7.269	1.815	1.187%	0.180
%RSD		64.320	60.840	0.000	41.720	71.810	13.780	1.348	39.700
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:17	-0.026	0.012	0.080	10.540	8.551	0.016	-0.032	0.040
2	13:38:25	-0.078	-0.012	0.117	9.641	9.339	-0.001	0.109	0.109
3	13:38:33	-0.022	-0.000	0.078	8.954	8.700	0.025	0.005	0.083
x		-0.042	-0.000	0.092	9.711	8.863	0.013	0.027	0.078
σ		0.031	0.012	0.022	0.795	0.419	0.013	0.073	0.035
%RSD		74.030	11200.000	23.570	8.184	4.724	96.840	269.500	44.730
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:17	0.037	-0.187	-0.006	-0.011	0.261	2.844	0.000	0.027
2	13:38:25	0.076	-0.084	-0.040	-0.092	0.107	0.975	0.000	0.053
3	13:38:33	0.037	-0.161	-0.269	-0.145	0.207	2.274	0.000	0.001
x		0.050	-0.144	-0.105	-0.083	0.192	2.031	0.000	0.027
σ		0.022	0.053	0.143	0.067	0.078	0.958	0.000	0.026
%RSD		44.640	36.920	136.500	81.730	40.740	47.170	0.000	96.900
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:17	85.094%	-0.001	0.211	81.175%	-0.013	0.008	-0.000	-0.068
2	13:38:25	86.648%	0.104	0.113	81.192%	-0.018	0.008	0.027	-0.079
3	13:38:33	87.510%	0.042	0.141	80.979%	0.002	0.002	0.027	-0.057
x		86.417%	0.048	0.155	81.115%	-0.010	0.006	0.018	-0.068
σ		1.225%	0.053	0.051	0.118%	0.010	0.003	0.016	0.011
%RSD		1.417	109.800	32.760	0.146	104.800	52.240	87.260	15.940
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:17	81.849%	-2.792	-0.188	-0.230	0.086	-0.003	83.624%	82.768%
2	13:38:25	84.044%	-2.813	-0.224	-0.324	0.000	-0.003	85.179%	83.516%
3	13:38:33	84.073%	-2.789	-0.302	-0.284	0.042	-0.003	83.960%	82.843%
x		83.322%	-2.798	-0.238	-0.279	0.043	-0.003	84.254%	83.042%
σ		1.275%	0.013	0.059	0.047	0.043	0.000	0.818%	0.412%
%RSD		1.531	0.466	24.640	16.920	100.600	9.717	0.971	0.496
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:38:17	0.087	0.088	-0.047	-0.022	-0.034	77.692%		
2	13:38:25	0.047	0.072	-0.038	-0.033	-0.039	78.262%		
3	13:38:33	0.043	0.045	-0.028	-0.022	-0.030	78.167%		
x		0.059	0.068	-0.038	-0.025	-0.034	78.040%		
σ		0.024	0.021	0.010	0.007	0.005	0.306%		
%RSD		41.590	31.490	26.420	25.720	14.130	0.392		

MB 180-139169/1-A 4/27/2015 1:44:18 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:25	93.573%	-0.250	-0.601	0.592	0.000	51.750	-0.809	-0.046
2	13:43:33	94.571%	-0.167	-0.555	-0.557	0.000	48.800	-0.629	1.206
3	13:43:41	91.493%	-0.300	-0.692	-0.432	0.000	55.260	-0.489	-0.090
x		93.212%	-0.239	-0.616	-0.132	0.000	51.940	-0.642	0.357
σ		1.570%	0.067	0.070	0.630	0.000	3.234	0.161	0.736
%RSD		1.685	27.970	11.320	477.100	0.000	6.226	25.030	206.200
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:25	-0.588	2.838	0.000	4.820	17.290	5.968	89.832%	-0.435
2	13:43:33	-0.637	0.366	0.000	3.720	13.200	9.507	89.872%	-0.509
3	13:43:41	-0.473	0.861	0.000	21.140	12.350	4.778	87.831%	-0.541
x		-0.566	1.355	0.000	9.893	14.280	6.751	89.179%	-0.495
σ		0.084	1.308	0.000	9.754	2.639	2.460	1.167%	0.055
%RSD		14.900	96.530	0.000	98.600	18.480	36.430	1.309	11.050
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:25	-0.005	-0.015	0.054	1.440	-0.120	0.003	-0.052	0.070
2	13:43:33	-0.121	-0.015	-0.003	1.100	4.672	-0.005	-0.087	0.104
3	13:43:41	-0.056	-0.028	-0.008	1.123	-0.441	-0.001	-0.051	0.079
x		-0.061	-0.020	0.014	1.221	1.370	-0.001	-0.063	0.084
σ		0.058	0.007	0.034	0.190	2.863	0.004	0.020	0.018
%RSD		95.780	37.530	238.100	15.590	209.000	530.100	32.260	20.970
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:25	0.085	0.566	0.532	-0.146	0.302	1.373	0.000	-0.005
2	13:43:33	0.072	0.188	0.597	-0.135	0.154	1.343	0.000	-0.005
3	13:43:41	0.073	0.191	0.321	-0.151	0.104	0.052	0.000	0.011
x		0.077	0.315	0.484	-0.144	0.187	0.923	0.000	0.001
σ		0.007	0.218	0.145	0.008	0.103	0.754	0.000	0.009
%RSD		9.159	69.010	29.930	5.554	55.160	81.750	0.000	1637.000
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:25	88.272%	-0.112	-0.034	82.709%	-0.023	-0.029	-0.000	-0.068
2	13:43:33	88.128%	-0.112	-0.082	83.074%	-0.014	-0.024	-0.000	-0.047
3	13:43:41	89.430%	0.006	-0.073	83.715%	-0.028	-0.039	0.052	-0.068
x		88.610%	-0.073	-0.063	83.166%	-0.021	-0.031	0.017	-0.061
σ		0.714%	0.068	0.025	0.509%	0.007	0.008	0.030	0.012
%RSD		0.806	93.170	40.100	0.613	34.170	25.470	174.600	20.230
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:25	84.961%	-2.886	-0.397	-0.364	0.041	-0.004	86.608%	84.567%
2	13:43:33	85.310%	-2.957	-0.397	-0.336	0.000	-0.004	87.613%	85.592%
3	13:43:41	87.553%	-3.019	-0.440	-0.349	0.041	-0.029	86.440%	85.066%
x		85.941%	-2.954	-0.411	-0.350	0.027	-0.012	86.887%	85.075%
σ		1.407%	0.066	0.025	0.014	0.024	0.015	0.635%	0.513%
%RSD		1.637	2.238	6.118	4.021	86.610	119.500	0.731	0.603
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:43:25	0.010	0.011	-0.019	-0.017	-0.013	80.473%		
2	13:43:33	0.010	0.011	-0.029	-0.023	-0.028	80.464%		
3	13:43:41	-0.001	0.009	-0.048	0.021	-0.014	80.972%		
x		0.006	0.010	-0.032	-0.006	-0.018	80.636%		
σ		0.007	0.001	0.015	0.023	0.008	0.291%		
%RSD		104.100	9.752	46.600	371.800	46.310	0.361		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	88.714%	43.940	919.300	923.000	0.000	44880.000	41770.000	42630.000
2	13:48:41	89.127%	44.610	912.100	926.300	0.000	43980.000	41840.000	42510.000
3	13:48:48	87.655%	44.950	938.000	954.400	0.000	45710.000	42870.000	42980.000
x		88.499%	44.500	923.100	934.500	0.000	44850.000	42160.000	42710.000
σ		0.760%	0.515	13.390	17.240	0.000	865.200	618.500	242.100
%RSD		0.858	1.156	1.451	1.845	0.000	1.929	1.467	0.567

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	1716.000	8469.000	0.000	45780.000	45810.000	43570.000	75.814%	881.800
2	13:48:41	1705.000	8542.000	0.000	46610.000	46380.000	44020.000	76.073%	904.400
3	13:48:48	1723.000	8663.000	0.000	46930.000	47180.000	44610.000	76.411%	902.900
x		1715.000	8558.000	0.000	46440.000	46460.000	44070.000	76.099%	896.400
σ		8.724	98.170	0.000	594.600	686.800	517.600	0.300%	12.640
%RSD		0.509	1.147	0.000	1.280	1.478	1.175	0.394	1.410

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	459.500	185.500	424.500	915.600	1062.000	461.300	466.300	234.500
2	13:48:41	456.700	185.800	428.600	927.500	1045.000	460.400	455.400	232.200
3	13:48:48	468.500	188.700	437.300	922.500	1016.000	454.400	456.900	233.400
x		461.600	186.700	430.100	921.900	1041.000	458.700	459.500	233.400
σ		6.153	1.751	6.568	5.936	23.170	3.736	5.907	1.130
%RSD		1.333	0.938	1.527	0.644	2.226	0.815	1.285	0.484

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	229.400	444.300	447.000	37.140	10.850	9.281	0.000	917.000
2	13:48:41	235.400	450.900	448.700	37.560	9.958	10.320	0.000	921.400
3	13:48:48	227.200	459.500	456.500	38.790	10.760	12.680	0.000	930.900
x		230.700	451.600	450.700	37.830	10.530	10.760	0.000	923.100
σ		4.204	7.574	5.069	0.857	0.494	1.740	0.000	7.131
%RSD		1.823	1.677	1.125	2.264	4.689	16.170	0.000	0.773

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	75.299%	963.900	978.700	67.303%	46.160	46.710	45.950	85.400
2	13:48:41	75.485%	967.800	989.400	68.318%	46.400	46.400	46.780	89.240
3	13:48:48	75.407%	985.300	996.100	68.352%	48.170	46.690	48.220	89.460
x		75.397%	972.300	988.100	67.991%	46.910	46.600	46.980	88.030
σ		0.094%	11.360	8.780	0.596%	1.097	0.174	1.147	2.285
%RSD		0.124	1.169	0.889	0.876	2.339	0.372	2.440	2.595

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	70.143%	1855.000	463.200	458.400	1779.000	1807.000	75.905%	75.565%
2	13:48:41	71.378%	1831.000	457.600	453.000	1769.000	1813.000	76.472%	75.457%
3	13:48:48	70.277%	1873.000	466.800	459.800	1793.000	1795.000	78.108%	76.431%
x		70.599%	1853.000	462.500	457.100	1780.000	1805.000	76.828%	75.817%
σ		0.678%	21.040	4.651	3.561	11.700	9.109	1.144%	0.534%
%RSD		0.960	1.135	1.006	0.779	0.657	0.505	1.489	0.704

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	48.510	48.160	19.900	19.640	19.640	65.797%
2	13:48:41	49.890	48.380	19.930	19.700	19.820	66.492%
3	13:48:48	49.420	49.120	19.680	19.980	19.690	66.764%
x		49.270	48.550	19.830	19.770	19.720	66.351%
σ		0.699	0.506	0.135	0.185	0.094	0.499%
%RSD		1.418	1.042	0.682	0.934	0.479	0.752

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:39	95.531%	-0.181	25.730	28.750	0.000	366.800	20.700	17.740
2	13:53:47	97.981%	-0.334	28.730	27.860	0.000	380.800	17.080	16.780
3	13:53:55	95.843%	-0.183	25.990	29.890	0.000	383.800	17.870	17.120
x		96.452%	-0.233	26.820	28.830	0.000	377.100	18.550	17.210
σ		1.333%	0.088	1.662	1.016	0.000	9.050	1.906	0.487
%RSD		1.382	37.810	6.198	3.522	0.000	2.400	10.270	2.830
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:39	18.150	125.400	0.000	-50.020	155.900	176.100	83.091%	1.388
2	13:53:47	18.090	123.100	0.000	-41.700	156.000	199.100	81.168%	2.584
3	13:53:55	17.220	124.800	0.000	-33.250	173.800	188.800	80.385%	2.369
x		17.820	124.400	0.000	-41.660	161.900	188.000	81.548%	2.114
σ		0.519	1.241	0.000	8.384	10.320	11.540	1.392%	0.638
%RSD		2.910	0.998	0.000	20.130	6.371	6.137	1.707	30.160
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:39	-0.374	3.337	0.790	21.570	17.810	0.027	0.155	0.699
2	13:53:47	0.571	3.138	0.767	22.280	23.840	0.055	0.139	0.681
3	13:53:55	-1.034	3.308	0.946	21.650	16.970	0.037	0.082	0.655
x		-0.279	3.261	0.835	21.840	19.540	0.040	0.126	0.678
σ		0.807	0.108	0.098	0.389	3.745	0.014	0.038	0.022
%RSD		288.800	3.299	11.690	1.779	19.160	35.820	30.480	3.244
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:39	0.514	9.800	9.241	-0.092	0.070	-0.350	0.000	0.355
2	13:53:47	0.618	9.490	9.301	-0.016	0.069	2.502	0.000	0.497
3	13:53:55	0.709	7.763	9.142	-0.039	0.181	-0.668	0.000	0.431
x		0.614	9.018	9.228	-0.049	0.106	0.495	0.000	0.428
σ		0.097	1.098	0.080	0.039	0.065	1.745	0.000	0.071
%RSD		15.840	12.170	0.870	79.900	60.750	353.000	0.000	16.550
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:39	75.609%	2.472	2.315	71.559%	-0.021	-0.021	-0.000	0.021
2	13:53:47	76.952%	2.106	1.786	72.364%	-0.026	-0.021	-0.000	0.007
3	13:53:55	77.080%	1.465	1.469	72.609%	0.001	-0.015	0.030	0.007
x		76.547%	2.014	1.857	72.177%	-0.015	-0.019	0.010	0.011
σ		0.815%	0.510	0.427	0.549%	0.014	0.003	0.017	0.008
%RSD		1.064	25.330	23.000	0.761	93.460	17.220	175.100	70.890
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:39	73.021%	0.254	-0.324	-0.345	0.142	0.436	78.009%	76.287%
2	13:53:47	74.424%	0.207	-0.367	-0.380	0.280	0.201	78.270%	76.597%
3	13:53:55	74.340%	-0.377	-0.351	-0.413	0.511	0.456	79.353%	77.901%
x		73.928%	0.028	-0.347	-0.379	0.311	0.364	78.544%	76.928%
σ		0.787%	0.352	0.022	0.034	0.186	0.142	0.712%	0.856%
%RSD		1.064	1259.000	6.269	8.966	59.960	39.000	0.907	1.113
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:53:39	0.037	0.051	0.063	0.027	0.048	68.356%		
2	13:53:47	0.014	0.074	0.021	0.013	0.017	69.710%		
3	13:53:55	0.040	0.045	0.025	0.043	0.027	70.697%		
x		0.031	0.057	0.036	0.028	0.031	69.587%		
σ		0.014	0.015	0.023	0.015	0.016	1.175%		
%RSD		46.220	26.910	62.500	54.300	51.130	1.689		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:49	83.325%	-0.267	116.100	128.500	0.000	285600.000	32170.000	32410.000
2	13:58:57	84.273%	-0.294	120.700	127.200	0.000	292100.000	32410.000	32460.000
3	13:59:05	82.116%	-0.189	125.700	134.600	0.000	295300.000	33410.000	33290.000
x		83.238%	-0.250	120.800	130.100	0.000	291000.000	32660.000	32720.000
σ		1.081%	0.054	4.825	3.934	0.000	4890.000	654.400	491.100
%RSD		1.299	21.680	3.993	3.025	0.000	1.681	2.004	1.501
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:49	-0.258	345.900	0.000	10560.000	11710.000	10620.000	83.021%	0.110
2	13:58:57	-0.375	353.900	0.000	10770.000	11590.000	10830.000	82.763%	0.474
3	13:59:05	-0.228	348.300	0.000	10730.000	11730.000	10930.000	82.897%	0.111
x		-0.287	349.400	0.000	10690.000	11680.000	10800.000	82.894%	0.232
σ		0.078	4.146	0.000	112.300	74.340	158.100	0.129%	0.210
%RSD		27.190	1.187	0.000	1.051	0.637	1.464	0.156	90.560
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:49	1.030	0.559	651.700	0.737	43.220	0.040	0.225	0.332
2	13:58:57	0.464	0.618	656.100	0.632	42.910	0.081	0.188	0.244
3	13:59:05	0.633	0.647	664.600	0.965	36.330	0.117	0.130	0.212
x		0.709	0.608	657.500	0.778	40.820	0.079	0.181	0.263
σ		0.291	0.045	6.566	0.170	3.892	0.038	0.048	0.062
%RSD		41.030	7.419	0.999	21.880	9.535	48.260	26.530	23.650
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:49	0.317	1.291	1.505	0.952	0.229	20.670	0.000	200.600
2	13:58:57	0.106	1.072	0.706	0.969	0.283	20.950	0.000	204.700
3	13:59:05	0.287	1.395	0.630	1.041	0.227	17.280	0.000	201.900
x		0.237	1.253	0.947	0.987	0.246	19.630	0.000	202.400
σ		0.114	0.165	0.485	0.048	0.032	2.044	0.000	2.113
%RSD		48.240	13.190	51.220	4.818	12.960	10.410	0.000	1.044
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:49	79.463%	0.854	0.968	71.246%	-0.021	-0.021	-0.000	-0.067
2	13:58:57	79.591%	0.793	0.771	72.669%	-0.027	-0.027	-0.000	-0.055
3	13:59:05	80.235%	0.837	0.797	73.058%	-0.027	-0.033	-0.000	-0.079
x		79.763%	0.828	0.845	72.324%	-0.025	-0.027	-0.000	-0.067
σ		0.414%	0.031	0.107	0.954%	0.003	0.006	0.000	0.012
%RSD		0.519	3.792	12.620	1.319	13.290	21.980	44.010	17.990
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:49	75.800%	-2.371	-0.361	-0.393	4.520	5.316	78.519%	78.848%
2	13:58:57	75.750%	-2.528	-0.361	-0.339	4.669	5.920	79.934%	80.150%
3	13:59:05	76.029%	-2.518	-0.339	-0.308	5.130	6.176	81.059%	80.050%
x		75.860%	-2.472	-0.354	-0.347	4.773	5.804	79.838%	79.683%
σ		0.149%	0.088	0.013	0.043	0.318	0.442	1.273%	0.724%
%RSD		0.196	3.553	3.716	12.350	6.667	7.607	1.594	0.909
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:58:49	-0.008	0.007	-0.034	0.008	-0.012	68.039%		
2	13:58:57	0.006	0.003	-0.029	0.001	-0.017	69.242%		
3	13:59:05	0.028	0.003	-0.012	0.001	-0.004	68.819%		
x		0.009	0.005	-0.025	0.003	-0.011	68.700%		
σ		0.018	0.002	0.012	0.004	0.006	0.611%		
%RSD		209.000	51.270	46.600	128.000	58.790	0.889		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:56	85.215%	-0.225	121.300	133.800	0.000	279500.000	31560.000	31410.000
2	14:04:04	82.757%	-0.106	127.900	135.000	0.000	287800.000	32560.000	32740.000
3	14:04:12	83.305%	-0.291	127.900	135.300	0.000	289900.000	32280.000	32420.000
x		83.759%	-0.208	125.700	134.700	0.000	285800.000	32130.000	32190.000
σ		1.290%	0.094	3.819	0.774	0.000	5475.000	514.500	695.300
%RSD		1.540	45.190	3.038	0.574	0.000	1.916	1.601	2.160
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:56	4.448	355.400	0.000	10720.000	11130.000	10260.000	85.387%	-0.186
2	14:04:04	6.814	364.200	0.000	10720.000	11050.000	10470.000	85.123%	-0.106
3	14:04:12	4.720	362.100	0.000	10740.000	11280.000	10530.000	84.598%	-0.141
x		5.327	360.600	0.000	10720.000	11150.000	10420.000	85.036%	-0.144
σ		1.295	4.580	0.000	9.392	117.900	138.700	0.402%	0.040
%RSD		24.310	1.270	0.000	0.088	1.058	1.331	0.472	27.670
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:56	0.025	0.639	799.100	7.124	44.190	0.066	0.106	0.301
2	14:04:04	0.680	0.751	809.600	7.266	32.690	0.044	0.215	0.334
3	14:04:12	0.446	0.684	823.200	7.484	43.670	0.075	0.126	0.383
x		0.383	0.691	810.600	7.291	40.180	0.061	0.149	0.339
σ		0.332	0.056	12.080	0.182	6.491	0.016	0.058	0.041
%RSD		86.590	8.142	1.490	2.491	16.150	26.350	39.170	12.180
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:56	0.185	1.319	0.931	0.526	0.118	16.510	0.000	201.500
2	14:04:04	0.224	1.551	1.416	0.675	0.116	19.170	0.000	199.100
3	14:04:12	0.089	1.733	1.666	0.661	0.172	20.040	0.000	203.600
x		0.166	1.534	1.337	0.621	0.135	18.570	0.000	201.400
σ		0.070	0.208	0.374	0.083	0.032	1.840	0.000	2.275
%RSD		42.050	13.520	27.940	13.300	23.330	9.909	0.000	1.129
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:56	79.812%	1.499	1.215	72.762%	-0.021	-0.027	0.030	-0.079
2	14:04:04	81.136%	1.540	1.498	73.687%	0.016	-0.039	-0.000	-0.079
3	14:04:12	80.111%	1.495	1.495	74.343%	-0.011	-0.039	-0.000	-0.079
x		80.353%	1.511	1.403	73.597%	-0.005	-0.035	0.010	-0.079
σ		0.694%	0.025	0.163	0.794%	0.019	0.007	0.017	0.000
%RSD		0.864	1.649	11.610	1.079	364.900	19.260	175.200	0.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:56	76.199%	-2.635	-0.339	-0.415	5.843	6.158	79.842%	79.324%
2	14:04:04	77.040%	-2.564	-0.348	-0.395	5.125	5.426	81.485%	80.391%
3	14:04:12	77.297%	-2.758	-0.279	-0.342	5.859	5.442	80.696%	80.731%
x		76.845%	-2.653	-0.322	-0.384	5.609	5.675	80.674%	80.149%
σ		0.574%	0.098	0.038	0.038	0.419	0.418	0.822%	0.734%
%RSD		0.747	3.689	11.690	9.788	7.469	7.368	1.019	0.916
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:03:56	0.001	-0.003	-0.024	0.013	-0.010	69.837%		
2	14:04:04	-0.012	0.003	0.015	0.012	0.006	70.476%		
3	14:04:12	-0.017	-0.005	0.025	-0.001	0.010	71.355%		
x		-0.009	-0.001	0.005	0.008	0.002	70.556%		
σ		0.009	0.004	0.025	0.008	0.011	0.762%		
%RSD		98.420	277.700	494.100	94.750	594.100	1.080		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:02	93.104%	-0.249	27.760	26.620	0.000	56590.000	6224.000	6121.000
2	14:09:10	91.499%	-0.289	25.410	26.630	0.000	57720.000	6327.000	6409.000
3	14:09:17	91.255%	-0.288	25.630	26.650	0.000	57020.000	6418.000	6430.000
x		91.953%	-0.275	26.260	26.630	0.000	57110.000	6323.000	6320.000
σ		1.004%	0.023	1.300	0.013	0.000	571.800	97.320	172.900
%RSD		1.092	8.266	4.949	0.050	0.000	1.001	1.539	2.736
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:02	-1.191	73.100	0.000	2273.000	2393.000	2042.000	90.435%	-0.620
2	14:09:10	-0.598	70.760	0.000	2250.000	2229.000	2132.000	89.089%	-0.469
3	14:09:17	-0.296	70.730	0.000	2293.000	2354.000	2167.000	88.714%	-0.356
x		-0.695	71.530	0.000	2272.000	2325.000	2114.000	89.413%	-0.482
σ		0.455	1.362	0.000	21.420	85.700	64.320	0.905%	0.133
%RSD		65.500	1.904	0.000	0.943	3.686	3.043	1.012	27.510
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:02	0.353	0.122	155.700	1.201	8.393	0.024	-0.017	0.154
2	14:09:10	0.235	0.180	159.800	1.618	10.010	0.029	0.037	0.335
3	14:09:17	0.589	0.149	162.300	1.819	5.940	0.025	-0.067	0.061
x		0.392	0.150	159.300	1.546	8.115	0.026	-0.015	0.183
σ		0.180	0.029	3.334	0.315	2.050	0.002	0.052	0.139
%RSD		45.990	19.400	2.093	20.400	25.260	9.609	338.500	76.140
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:02	0.100	0.652	0.609	0.019	0.107	3.483	0.000	39.300
2	14:09:10	0.075	1.017	0.319	-0.007	0.007	4.539	0.000	40.230
3	14:09:17	0.037	0.661	0.387	-0.001	0.108	4.265	0.000	39.670
x		0.071	0.777	0.438	0.004	0.074	4.096	0.000	39.730
σ		0.032	0.208	0.151	0.014	0.058	0.548	0.000	0.471
%RSD		45.110	26.800	34.500	384.300	78.620	13.380	0.000	1.185
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:02	85.836%	0.224	0.174	76.980%	-0.017	-0.028	-0.000	-0.079
2	14:09:10	86.104%	0.173	0.337	78.299%	-0.017	-0.028	-0.000	-0.079
3	14:09:17	85.972%	0.282	0.238	78.401%	-0.022	-0.039	-0.000	-0.068
x		85.970%	0.226	0.250	77.893%	-0.019	-0.032	-0.000	-0.075
σ		0.134%	0.055	0.082	0.793%	0.003	0.006	0.000	0.006
%RSD		0.156	24.240	32.790	1.017	16.320	19.910	9.194	8.505
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:02	80.293%	-2.834	-0.451	-0.428	1.362	0.974	81.455%	81.297%
2	14:09:10	80.719%	-2.934	-0.466	-0.439	0.957	1.313	82.739%	81.258%
3	14:09:17	82.302%	-2.793	-0.415	-0.430	0.943	1.082	83.522%	81.939%
x		81.105%	-2.854	-0.444	-0.432	1.088	1.123	82.572%	81.498%
σ		1.059%	0.072	0.026	0.006	0.238	0.173	1.044%	0.383%
%RSD		1.305	2.533	5.846	1.322	21.890	15.400	1.264	0.470
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:09:02	-0.008	-0.008	-0.024	-0.019	-0.016	71.173%		
2	14:09:10	-0.008	-0.006	-0.046	-0.038	-0.025	72.534%		
3	14:09:17	-0.012	-0.008	-0.003	-0.013	-0.016	72.282%		
x		-0.010	-0.008	-0.025	-0.023	-0.019	71.997%		
σ		0.002	0.001	0.022	0.013	0.005	0.724%		
%RSD		26.150	13.310	86.830	54.170	27.150	1.006		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:07	81.875%	4.637	215.700	227.400	0.000	302500.000	38380.000	37800.000
2	14:14:15	82.349%	4.337	221.300	234.700	0.000	301600.000	37230.000	37460.000
3	14:14:23	85.206%	4.805	205.000	223.800	0.000	294000.000	37410.000	37810.000
x		83.143%	4.593	214.000	228.600	0.000	299300.000	37680.000	37690.000
σ		1.802%	0.237	8.275	5.586	0.000	4639.000	618.000	198.200
%RSD		2.168	5.159	3.867	2.443	0.000	1.550	1.640	0.526
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:07	182.100	1302.000	0.000	15260.000	15680.000	14610.000	83.582%	85.390
2	14:14:15	183.100	1316.000	0.000	15710.000	15970.000	14930.000	83.173%	90.850
3	14:14:23	187.100	1335.000	0.000	15890.000	16190.000	15300.000	81.463%	92.240
x		184.100	1318.000	0.000	15620.000	15950.000	14940.000	82.739%	89.490
σ		2.623	16.660	0.000	325.100	255.800	347.400	1.124%	3.622
%RSD		1.425	1.264	0.000	2.081	1.604	2.325	1.358	4.047
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:07	46.240	18.400	863.200	93.400	139.000	45.060	45.610	23.710
2	14:14:15	46.540	18.190	867.100	92.200	150.500	44.310	45.170	23.140
3	14:14:23	46.810	19.060	910.400	93.570	146.600	45.610	45.120	22.630
x		46.530	18.550	880.200	93.060	145.400	44.990	45.300	23.160
σ		0.284	0.454	26.160	0.745	5.883	0.652	0.270	0.538
%RSD		0.611	2.450	2.972	0.801	4.047	1.449	0.595	2.324
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:07	23.200	43.890	42.610	4.314	1.052	17.210	0.000	291.100
2	14:14:15	23.290	44.600	44.980	4.445	0.885	16.600	0.000	293.200
3	14:14:23	22.110	44.980	44.050	4.501	1.316	22.160	0.000	292.500
x		22.870	44.490	43.880	4.420	1.084	18.660	0.000	292.300
σ		0.658	0.553	1.197	0.096	0.217	3.049	0.000	1.067
%RSD		2.879	1.244	2.728	2.166	20.020	16.340	0.000	0.365
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:07	78.652%	96.940	97.880	69.418%	4.556	4.290	4.772	9.085
2	14:14:15	79.013%	95.170	97.600	69.818%	4.329	4.498	4.673	8.415
3	14:14:23	80.061%	95.840	97.580	70.188%	4.112	4.233	4.992	8.462
x		79.242%	95.980	97.690	69.808%	4.332	4.341	4.813	8.654
σ		0.732%	0.897	0.169	0.385%	0.222	0.139	0.164	0.374
%RSD		0.924	0.934	0.173	0.552	5.133	3.210	3.396	4.322
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:07	73.369%	175.500	46.760	46.410	182.400	195.100	76.909%	76.024%
2	14:14:15	74.036%	175.400	47.080	45.050	191.700	187.200	77.644%	75.739%
3	14:14:23	74.953%	178.000	46.330	46.650	175.700	185.200	76.538%	75.454%
x		74.119%	176.300	46.720	46.040	183.300	189.200	77.030%	75.739%
σ		0.795%	1.510	0.378	0.864	8.050	5.233	0.563%	0.285%
%RSD		1.073	0.857	0.808	1.876	4.392	2.766	0.731	0.376
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:14:07	4.360	4.475	1.971	2.071	2.001	64.762%		
2	14:14:15	4.762	4.591	2.229	1.864	1.930	64.945%		
3	14:14:23	4.626	4.526	1.852	1.952	1.858	65.409%		
x		4.583	4.531	2.017	1.962	1.930	65.039%		
σ		0.204	0.058	0.192	0.104	0.071	0.334%		
%RSD		4.457	1.282	9.539	5.294	3.704	0.513		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:19:13	84.681%	4.898	211.400	226.700	0.000	288900.000	35660.000	35940.000
2	14:19:21	82.206%	5.208	229.700	233.200	0.000	300300.000	37190.000	37080.000
3	14:19:29	82.849%	4.736	219.500	227.800	0.000	296000.000	37430.000	37060.000
x		83.245%	4.947	220.200	229.200	0.000	295100.000	36760.000	36700.000
σ		1.284%	0.240	9.204	3.456	0.000	5787.000	961.000	652.100
%RSD		1.542	4.853	4.180	1.508	0.000	1.961	2.614	1.777

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:19:13	172.100	1296.000	0.000	15520.000	15790.000	14720.000	82.819%	89.920
2	14:19:21	179.200	1345.000	0.000	15880.000	16280.000	14860.000	81.818%	84.930
3	14:19:29	186.000	1298.000	0.000	15740.000	16270.000	15060.000	81.400%	88.110
x		179.100	1313.000	0.000	15710.000	16110.000	14880.000	82.012%	87.650
σ		6.926	27.760	0.000	180.500	281.300	170.900	0.729%	2.524
%RSD		3.868	2.114	0.000	1.149	1.746	1.149	0.889	2.880

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:19:13	45.890	18.390	863.100	93.910	146.800	44.540	45.800	23.050
2	14:19:21	46.540	19.030	872.100	95.530	157.700	46.520	43.620	22.710
3	14:19:29	46.880	18.640	882.500	94.990	141.800	45.120	46.290	23.180
x		46.440	18.680	872.600	94.810	148.800	45.390	45.240	22.980
σ		0.503	0.321	9.697	0.823	8.152	1.017	1.424	0.239
%RSD		1.083	1.718	1.111	0.868	5.480	2.241	3.147	1.038

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:19:13	22.430	44.640	41.730	4.425	0.836	23.090	0.000	290.100
2	14:19:21	22.890	45.200	43.350	4.903	1.339	20.320	0.000	298.600
3	14:19:29	22.150	43.700	45.270	4.116	1.533	19.150	0.000	291.400
x		22.490	44.520	43.450	4.481	1.236	20.850	0.000	293.400
σ		0.372	0.761	1.774	0.396	0.360	2.024	0.000	4.574
%RSD		1.652	1.709	4.082	8.846	29.090	9.708	0.000	1.559

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:19:13	78.500%	95.130	99.430	69.500%	4.711	4.467	4.387	8.840
2	14:19:21	78.197%	96.900	99.210	70.938%	4.491	4.265	4.439	8.239
3	14:19:29	80.142%	97.750	98.750	71.533%	4.594	4.259	4.146	8.596
x		78.947%	96.590	99.130	70.657%	4.599	4.330	4.324	8.558
σ		1.046%	1.338	0.347	1.046%	0.110	0.118	0.156	0.303
%RSD		1.326	1.385	0.350	1.480	2.394	2.728	3.607	3.537

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:19:13	74.453%	183.100	45.090	44.390	185.300	183.500	77.680%	76.877%
2	14:19:21	74.687%	181.500	47.350	45.670	185.500	186.600	79.866%	78.039%
3	14:19:29	76.539%	178.800	46.030	45.700	177.600	189.500	77.815%	78.344%
x		75.226%	181.100	46.160	45.250	182.800	186.500	78.453%	77.753%
σ		1.143%	2.158	1.135	0.748	4.534	2.993	1.225%	0.774%
%RSD		1.519	1.192	2.459	1.654	2.480	1.605	1.561	0.996

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:19:13	4.646	4.609	1.832	2.147	1.904	66.943%
2	14:19:21	4.864	4.864	1.749	2.002	1.945	67.411%
3	14:19:29	4.470	4.702	1.685	1.879	1.845	67.889%
x		4.660	4.725	1.756	2.009	1.898	67.414%
σ		0.197	0.129	0.074	0.135	0.050	0.473%
%RSD		4.236	2.729	4.196	6.698	2.627	0.702

180-42966-D-4-A PDS@10 4/27/2015 2:25:08 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	14:24:16	82.165%	5.100	212.500	225.000	0.000	279100.000	35390.000	35170.000
2	14:24:24	82.794%	5.180	214.400	224.600	0.000	281100.000	35940.000	35920.000
3	14:24:32	82.334%	4.806	221.300	226.900	0.000	284000.000	35990.000	36410.000
x		82.431%	5.029	216.100	225.500	0.000	281400.000	35770.000	35830.000
σ		0.326%	0.197	4.621	1.207	0.000	2467.000	329.900	622.400
%RSD		0.395	3.920	2.139	0.535	0.000	0.877	0.922	1.737
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:16	187.300	1396.000	0.000	15010.000	15500.000	14250.000	83.836%	96.950
2	14:24:24	187.200	1374.000	0.000	15560.000	15840.000	14700.000	82.722%	101.600
3	14:24:32	199.300	1427.000	0.000	15660.000	16070.000	14920.000	81.864%	105.200
x		191.300	1399.000	0.000	15410.000	15800.000	14620.000	82.807%	101.300
σ		6.944	26.790	0.000	350.100	286.200	342.100	0.989%	4.153
%RSD		3.631	1.916	0.000	2.272	1.811	2.340	1.194	4.101
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:16	46.670	19.030	807.500	95.760	144.300	46.570	46.360	23.440
2	14:24:24	47.650	19.370	833.700	97.670	147.500	46.130	46.390	23.790
3	14:24:32	49.260	19.700	846.800	99.900	151.800	47.210	47.810	22.970
x		47.860	19.370	829.300	97.780	147.900	46.640	46.850	23.400
σ		1.310	0.335	19.990	2.068	3.786	0.545	0.831	0.409
%RSD		2.736	1.731	2.411	2.115	2.561	1.168	1.774	1.747
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:16	23.470	46.780	47.840	4.534	0.674	18.260	0.000	287.400
2	14:24:24	23.450	44.900	46.970	4.640	1.543	19.210	0.000	288.100
3	14:24:32	24.350	48.280	47.690	4.830	1.253	16.290	0.000	283.600
x		23.760	46.650	47.500	4.668	1.156	17.920	0.000	286.400
σ		0.509	1.695	0.465	0.150	0.443	1.487	0.000	2.403
%RSD		2.143	3.633	0.978	3.212	38.260	8.295	0.000	0.839
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:16	77.840%	111.100	111.500	70.002%	4.304	4.345	4.804	9.888
2	14:24:24	79.059%	108.800	111.900	70.145%	4.323	4.525	4.707	9.735
3	14:24:32	80.624%	107.800	113.200	71.443%	4.158	4.383	5.014	9.167
x		79.174%	109.200	112.200	70.530%	4.262	4.418	4.842	9.597
σ		1.395%	1.688	0.924	0.794%	0.090	0.095	0.157	0.380
%RSD		1.762	1.546	0.824	1.126	2.121	2.140	3.238	3.957
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:16	73.736%	207.900	54.380	51.670	197.600	194.600	77.311%	76.708%
2	14:24:24	76.004%	208.000	52.310	51.470	191.800	193.500	78.198%	77.267%
3	14:24:32	75.147%	206.600	53.810	51.460	194.100	194.100	79.053%	77.511%
x		74.962%	207.500	53.500	51.530	194.500	194.000	78.187%	77.162%
σ		1.145%	0.817	1.071	0.121	2.946	0.541	0.871%	0.412%
%RSD		1.527	0.394	2.002	0.236	1.515	0.279	1.114	0.533
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:24:16	4.972	4.763	1.853	2.138	2.025	67.243%		
2	14:24:24	4.781	4.723	1.935	1.958	1.933	67.377%		
3	14:24:32	4.805	5.031	2.116	1.997	1.960	68.055%		
x		4.852	4.839	1.968	2.031	1.973	67.558%		
σ		0.104	0.167	0.134	0.095	0.047	0.435%		
%RSD		2.143	3.459	6.823	4.661	2.392	0.644		

180-42966-D-6-A 4/27/2015 2:30:16 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:23	93.211%	-0.325	10.900	12.260	0.000	120.300	0.092	3.124
2	14:29:31	97.884%	-0.272	9.433	10.970	0.000	105.800	-0.236	1.468
3	14:29:39	95.148%	-0.265	10.350	11.480	0.000	107.000	-0.580	1.411
x		95.414%	-0.288	10.230	11.570	0.000	111.100	-0.242	2.001
σ		2.348%	0.033	0.743	0.650	0.000	8.067	0.336	0.973
%RSD		2.461	11.440	7.262	5.614	0.000	7.264	139.100	48.630
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:23	7.382	11.110	0.000	-56.210	54.260	78.150	81.674%	0.530
2	14:29:31	5.380	8.001	0.000	-50.170	27.810	72.780	81.223%	0.824
3	14:29:39	6.996	10.360	0.000	-47.660	23.740	76.020	80.687%	0.628
x		6.586	9.826	0.000	-51.350	35.270	75.650	81.195%	0.661
σ		1.062	1.624	0.000	4.394	16.570	2.703	0.494%	0.149
%RSD		16.130	16.530	0.000	8.558	46.980	3.573	0.608	22.600
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:23	0.064	3.649	0.551	23.080	26.700	0.018	0.081	0.713
2	14:29:31	-1.260	3.723	0.624	22.850	24.760	0.023	0.043	0.655
3	14:29:39	2.152	3.746	0.651	21.590	21.020	-0.000	-0.016	0.758
x		0.319	3.706	0.609	22.510	24.160	0.014	0.036	0.709
σ		1.720	0.051	0.051	0.806	2.886	0.012	0.049	0.051
%RSD		539.500	1.365	8.450	3.581	11.950	90.150	135.100	7.263
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:23	0.736	3.366	3.461	-0.044	0.126	3.607	0.000	0.073
2	14:29:31	0.943	3.235	3.510	-0.020	0.183	3.295	0.000	0.043
3	14:29:39	0.835	3.326	3.517	-0.122	0.068	5.566	0.000	0.107
x		0.838	3.309	3.496	-0.062	0.126	4.156	0.000	0.074
σ		0.103	0.067	0.030	0.053	0.057	1.231	0.000	0.032
%RSD		12.330	2.020	0.866	85.940	45.630	29.620	0.000	42.760
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:23	75.985%	0.632	0.674	71.974%	-0.004	-0.009	0.030	-0.030
2	14:29:31	75.900%	0.913	0.720	71.688%	-0.015	-0.027	-0.000	-0.030
3	14:29:39	77.421%	0.503	0.861	72.107%	-0.026	-0.033	0.030	-0.030
x		76.435%	0.683	0.751	71.923%	-0.015	-0.023	0.020	-0.030
σ		0.855%	0.210	0.098	0.214%	0.011	0.012	0.018	0.000
%RSD		1.118	30.740	12.980	0.298	71.640	53.460	87.260	0.201
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:23	74.292%	1.514	-0.334	-0.313	0.095	0.059	75.513%	74.397%
2	14:29:31	74.385%	0.373	-0.359	-0.347	0.283	0.029	76.738%	75.371%
3	14:29:39	74.149%	-0.259	-0.358	-0.336	0.141	0.029	77.233%	76.597%
x		74.275%	0.543	-0.350	-0.332	0.173	0.039	76.495%	75.455%
σ		0.119%	0.899	0.014	0.017	0.098	0.017	0.886%	1.103%
%RSD		0.160	165.600	4.051	5.156	56.550	44.520	1.158	1.461
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:29:23	0.011	0.029	0.013	0.048	0.022	66.800%		
2	14:29:31	0.042	0.023	0.052	0.015	0.028	67.833%		
3	14:29:39	0.024	0.015	0.062	0.096	0.062	68.860%		
x		0.026	0.022	0.042	0.053	0.037	67.831%		
σ		0.016	0.007	0.026	0.041	0.022	1.030%		
%RSD		61.460	32.710	60.840	77.130	58.800	1.518		

CCV 1533080 4/27/2015 2:35:22 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:34:29	88.720%	96.760	98.920	96.810	0.000	48010.000	45070.000	45720.000
2	14:34:37	89.114%	96.300	94.610	95.770	0.000	49480.000	46620.000	47130.000
3	14:34:45	90.024%	97.080	98.480	95.740	0.000	49510.000	46160.000	46990.000
x		89.286%	96.713%	97.337%	96.106%	0.000	97.995%	91.899%	93.227%
σ		0.668%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.749	0.406	2.436	0.638	0.000	1.751	1.731	1.661

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:34:29	484.200	4824.000	0.000	47470.000	46100.000	44200.000	84.781%	93.620
2	14:34:37	489.900	4873.000	0.000	48470.000	46980.000	45290.000	83.171%	96.970
3	14:34:45	493.600	4857.000	0.000	48430.000	47800.000	45770.000	83.393%	99.020
x		97.850%	97.025%	0.000	96.244%	93.921%	90.172%	83.782%	96.539%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.872%	n/a
%RSD		0.968	0.514	0.000	1.176	1.811	1.779	1.041	2.823

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:34:29	90.440	90.890	444.800	23340.000	23090.000	92.750	94.960	91.490
2	14:34:37	94.560	94.740	464.800	23860.000	23320.000	96.780	93.390	94.730
3	14:34:45	94.700	95.690	465.000	24270.000	23630.000	94.810	97.510	95.920
x		93.234%	93.772%	91.645%	95.299%	93.382%	94.781%	95.286%	94.045%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.594	2.711	2.535	1.966	1.177	2.127	2.181	2.435

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:34:29	89.700	90.900	88.800	95.360	94.410	94.530	0.000	95.350
2	14:34:37	94.280	95.110	90.330	95.530	96.560	96.040	0.000	95.140
3	14:34:45	90.950	92.240	92.890	96.070	101.400	96.930	0.000	96.680
x		91.642%	92.749%	90.672%	95.654%	97.451%	95.837%	0.000	95.725%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.579	2.316	2.280	0.387	3.666	1.266	0.000	0.869

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:34:29	81.039%	95.560	94.650	71.725%	93.460	95.880	94.960	96.260
2	14:34:37	80.631%	97.670	98.750	72.040%	95.170	95.670	93.690	98.160
3	14:34:45	81.260%	97.290	98.830	72.838%	95.120	92.140	95.080	94.680
x		80.977%	96.842%	97.409%	72.201%	94.587%	94.565%	94.578%	96.368%
σ		0.319%	n/a	n/a	0.574%	n/a	n/a	n/a	n/a
%RSD		0.394	1.162	2.451	0.794	1.028	2.226	0.812	1.804

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:34:29	73.737%	95.440	92.250	90.650	95.500	95.690	77.542%	76.802%
2	14:34:37	75.196%	93.600	96.310	93.790	96.540	97.240	78.102%	78.762%
3	14:34:45	77.166%	90.930	93.250	90.800	91.460	97.100	79.494%	78.759%
x		75.366%	93.324%	93.937%	91.747%	94.500%	96.679%	78.379%	78.108%
σ		1.721%	n/a	n/a	n/a	n/a	n/a	1.005%	1.131%
%RSD		2.284	2.431	2.252	1.928	2.838	0.888	1.282	1.448

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:34:29	102.300	100.000	99.990	98.590	100.000	64.429%
2	14:34:37	98.450	97.670	99.070	99.900	98.840	66.333%
3	14:34:45	100.200	99.500	100.600	100.700	100.700	66.062%
x		100.335%	99.066%	99.902%	99.723%	99.870%	65.608%
σ		n/a	n/a	n/a	n/a	n/a	1.030%
%RSD		1.932	1.253	0.789	1.063	0.956	1.570

CCB4 4/27/2015 2:44:15 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	14:43:22	96.314%	-0.068	0.707	0.005	0.000	62.180	7.224	9.153
2	14:43:29	97.409%	-0.188	0.258	0.045	0.000	66.990	13.110	7.416
3	14:43:37	94.476%	-0.285	0.427	-0.324	0.000	69.450	7.269	10.880
x		96.066%	-0.180	0.464	-0.091	0.000	66.210	9.200	9.151
σ		1.482%	0.109	0.226	0.203	0.000	3.699	3.383	1.734
%RSD		1.543	60.140	48.800	221.400	0.000	5.586	36.780	18.950
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:22	0.827	2.518	0.000	5.020	34.680	11.100	90.916%	-0.438
2	14:43:29	0.241	0.687	0.000	6.811	11.080	12.530	90.031%	-0.435
3	14:43:37	0.263	1.966	0.000	11.610	17.730	11.790	89.148%	-0.432
x		0.444	1.724	0.000	7.815	21.160	11.810	90.032%	-0.435
σ		0.332	0.940	0.000	3.410	12.170	0.714	0.884%	0.003
%RSD		74.820	54.510	0.000	43.630	57.500	6.049	0.982	0.666
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:22	-0.089	0.042	0.129	11.480	11.990	0.028	0.017	0.104
2	14:43:29	-0.206	0.032	0.126	11.160	9.026	0.007	-0.019	0.108
3	14:43:37	0.012	0.004	0.156	10.890	12.570	0.024	-0.051	-0.030
x		-0.094	0.026	0.137	11.180	11.190	0.020	-0.018	0.061
σ		0.109	0.020	0.016	0.297	1.900	0.011	0.034	0.079
%RSD		116.000	76.780	12.000	2.661	16.970	55.250	193.100	129.700
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:22	0.098	-0.165	-0.174	-0.082	0.056	1.335	0.000	0.027
2	14:43:29	0.032	-0.192	-0.177	-0.048	0.152	1.486	0.000	0.041
3	14:43:37	0.022	0.015	-0.205	-0.040	0.256	0.150	0.000	0.053
x		0.051	-0.114	-0.186	-0.057	0.155	0.990	0.000	0.040
σ		0.041	0.113	0.017	0.022	0.100	0.732	0.000	0.013
%RSD		80.960	99.130	9.259	39.450	64.610	73.900	0.000	32.240
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:22	86.562%	0.410	0.294	81.408%	0.002	-0.029	-0.000	-0.046
2	14:43:29	89.380%	0.128	0.184	81.561%	-0.018	-0.013	-0.000	-0.057
3	14:43:37	86.998%	0.148	0.349	81.758%	-0.023	0.017	-0.000	-0.047
x		87.647%	0.229	0.276	81.576%	-0.013	-0.008	-0.000	-0.050
σ		1.517%	0.157	0.084	0.176%	0.013	0.024	0.000	0.006
%RSD		1.730	68.730	30.450	0.215	100.700	288.800	32.570	12.750
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:22	81.973%	-2.260	-0.378	-0.180	0.043	0.024	83.690%	82.571%
2	14:43:29	83.635%	-2.526	-0.266	-0.264	0.042	0.023	84.654%	83.380%
3	14:43:37	84.876%	-2.512	-0.254	-0.286	0.000	-0.003	84.849%	83.649%
x		83.495%	-2.433	-0.299	-0.244	0.028	0.014	84.397%	83.200%
σ		1.457%	0.150	0.069	0.056	0.025	0.015	0.620%	0.561%
%RSD		1.745	6.150	22.910	22.990	86.610	107.400	0.735	0.674
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:43:22	0.052	0.081	-0.022	-0.009	-0.010	76.015%		
2	14:43:29	0.052	0.092	-0.032	-0.010	-0.021	77.100%		
3	14:43:37	0.068	0.065	-0.012	0.002	-0.016	76.596%		
x		0.057	0.079	-0.022	-0.006	-0.015	76.571%		
σ		0.009	0.013	0.010	0.007	0.005	0.543%		
%RSD		16.150	16.980	46.920	111.200	33.970	0.709		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:31	85.224%	-0.213	63.120	66.030	0.000	138400.000	15360.000	15460.000
2	14:48:39	88.697%	-0.110	56.430	64.840	0.000	140700.000	15390.000	15230.000
3	14:48:47	83.630%	-0.086	62.090	65.600	0.000	142700.000	15840.000	16330.000
x		85.850%	-0.137	60.550	65.490	0.000	140600.000	15530.000	15680.000
σ		2.591%	0.067	3.600	0.603	0.000	2191.000	265.700	581.300
%RSD		3.018	49.300	5.947	0.921	0.000	1.558	1.711	3.708

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:31	135.400	362.700	0.000	5177.000	6807.000	6269.000	83.337%	0.665
2	14:48:39	130.300	355.100	0.000	5274.000	6827.000	6306.000	82.504%	0.196
3	14:48:47	141.000	380.100	0.000	5233.000	6998.000	6525.000	81.795%	1.056
x		135.600	365.900	0.000	5228.000	6877.000	6367.000	82.545%	0.639
σ		5.318	12.820	0.000	48.720	105.200	138.200	0.771%	0.431
%RSD		3.923	3.503	0.000	0.932	1.530	2.171	0.935	67.460

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:31	1.134	4.671	26.010	868.000	887.000	0.161	0.317	2.092
2	14:48:39	0.723	4.981	26.730	876.800	888.400	0.153	0.432	1.630
3	14:48:47	1.012	4.735	27.520	885.000	900.900	0.177	0.285	2.139
x		0.956	4.796	26.750	876.600	892.100	0.164	0.345	1.954
σ		0.211	0.164	0.756	8.496	7.608	0.012	0.077	0.281
%RSD		22.080	3.414	2.825	0.969	0.853	7.487	22.360	14.390

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:31	1.841	21.380	22.540	0.246	-0.044	5.733	0.000	101.900
2	14:48:39	1.968	21.150	21.250	0.335	0.118	12.440	0.000	99.370
3	14:48:47	1.704	21.240	20.960	0.357	0.011	7.751	0.000	101.600
x		1.838	21.260	21.580	0.313	0.028	8.640	0.000	101.000
σ		0.132	0.112	0.838	0.059	0.082	3.439	0.000	1.393
%RSD		7.174	0.524	3.881	18.780	288.900	39.800	0.000	1.380

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:31	79.882%	0.103	0.116	71.743%	-0.015	-0.033	0.030	0.030
2	14:48:39	80.744%	-0.034	0.050	71.977%	-0.032	-0.039	0.090	0.006
3	14:48:47	79.975%	0.101	-0.077	72.316%	-0.032	-0.016	0.206	0.132
x		80.201%	0.057	0.030	72.012%	-0.026	-0.029	0.109	0.056
σ		0.473%	0.079	0.098	0.288%	0.010	0.012	0.089	0.067
%RSD		0.590	139.100	331.100	0.400	36.040	40.820	82.160	119.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:31	75.410%	-2.315	-0.400	-0.338	3.279	3.072	78.804%	77.375%
2	14:48:39	74.804%	-2.428	-0.320	-0.337	2.873	2.768	78.954%	77.455%
3	14:48:47	77.783%	-2.314	-0.341	-0.321	3.396	3.099	79.257%	77.453%
x		75.999%	-2.352	-0.354	-0.332	3.183	2.980	79.005%	77.428%
σ		1.575%	0.065	0.042	0.010	0.274	0.184	0.231%	0.046%
%RSD		2.072	2.781	11.800	2.888	8.610	6.167	0.292	0.059

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:31	0.019	0.037	3.039	2.689	2.900	68.736%
2	14:48:39	0.028	0.019	2.907	2.912	2.945	68.102%
3	14:48:47	0.050	0.024	3.495	3.071	3.125	69.006%
x		0.033	0.027	3.147	2.891	2.990	68.615%
σ		0.016	0.010	0.309	0.192	0.119	0.464%
%RSD		48.890	36.060	9.806	6.640	3.986	0.677

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:53:38	94.419%	-0.317	14.650	17.060	0.000	132.800	2.221	3.913
2	14:53:45	93.331%	-0.423	15.490	17.240	0.000	133.500	1.691	0.643
3	14:53:53	94.700%	-0.393	16.140	17.980	0.000	132.100	-0.106	3.335
x		94.150%	-0.378	15.430	17.430	0.000	132.800	1.269	2.630
σ		0.723%	0.055	0.745	0.490	0.000	0.726	1.220	1.745
%RSD		0.768	14.480	4.826	2.811	0.000	0.547	96.150	66.360
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:53:38	13.710	99.840	0.000	-60.330	27.380	64.560	81.747%	1.748
2	14:53:45	13.240	105.000	0.000	-55.290	40.210	74.030	80.044%	1.759
3	14:53:53	13.620	100.700	0.000	-60.710	42.600	70.560	79.934%	2.345
x		13.520	101.800	0.000	-58.780	36.730	69.720	80.575%	1.951
σ		0.248	2.770	0.000	3.023	8.183	4.790	1.017%	0.341
%RSD		1.832	2.720	0.000	5.144	22.280	6.871	1.262	17.490
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:53:38	0.751	2.660	0.230	8.601	11.020	0.018	0.370	0.498
2	14:53:45	-1.687	2.859	0.182	6.861	10.850	0.056	0.241	0.407
3	14:53:53	1.279	3.080	0.243	5.760	10.330	0.032	0.179	0.370
x		0.115	2.866	0.218	7.074	10.730	0.035	0.263	0.425
σ		1.582	0.210	0.032	1.433	0.359	0.019	0.098	0.066
%RSD		1382.000	7.324	14.850	20.250	3.349	53.940	37.010	15.450
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:53:38	0.574	4.941	4.716	-0.039	0.181	3.129	0.000	0.612
2	14:53:45	0.642	3.802	4.202	-0.043	0.183	-2.012	0.000	0.508
3	14:53:53	0.574	4.654	4.050	-0.087	0.123	1.485	0.000	0.580
x		0.597	4.466	4.323	-0.057	0.163	0.867	0.000	0.567
σ		0.039	0.593	0.349	0.027	0.034	2.625	0.000	0.054
%RSD		6.550	13.270	8.072	47.190	21.110	302.700	0.000	9.447
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:53:38	76.494%	-0.116	-0.064	71.548%	-0.032	-0.027	-0.000	-0.054
2	14:53:45	76.183%	-0.029	0.044	71.941%	-0.021	-0.009	-0.000	-0.042
3	14:53:53	78.423%	-0.049	-0.034	72.714%	-0.016	-0.027	-0.000	-0.054
x		77.033%	-0.065	-0.018	72.068%	-0.023	-0.021	-0.000	-0.050
σ		1.213%	0.045	0.056	0.593%	0.008	0.010	0.000	0.007
%RSD		1.575	70.300	313.000	0.823	36.420	48.740	37.770	14.010
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:53:38	72.864%	-2.028	-0.216	-0.188	0.907	0.676	76.430%	75.595%
2	14:53:45	74.172%	-1.873	-0.253	-0.214	1.373	1.168	76.013%	75.789%
3	14:53:53	74.773%	-2.175	-0.231	-0.250	1.216	0.979	77.461%	76.890%
x		73.937%	-2.025	-0.233	-0.217	1.165	0.941	76.635%	76.091%
σ		0.976%	0.151	0.018	0.031	0.238	0.248	0.745%	0.699%
%RSD		1.320	7.467	7.853	14.240	20.380	26.370	0.973	0.918
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:53:38	0.020	0.042	0.024	0.035	0.016	67.222%		
2	14:53:45	0.020	0.028	-0.017	-0.024	-0.001	68.128%		
3	14:53:53	0.010	0.005	-0.006	-0.012	0.001	69.333%		
x		0.017	0.025	0.000	-0.000	0.005	68.228%		
σ		0.006	0.019	0.021	0.031	0.009	1.059%		
%RSD		34.010	74.600	8530.000	7805.000	167.300	1.552		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:45	75.581%	-0.162	387.700	409.700	0.000	925600.000	106900.000	110500.000
2	14:58:53	75.122%	-0.065	397.800	414.400	0.000	939600.000	110300.000	113100.000
3	14:59:01	76.554%	-0.007	398.700	407.400	0.000	948000.000	110600.000	111400.000
x		75.752%	-0.078	394.700	410.500	0.000	937700.000	109200.000	111600.000
σ		0.731%	0.078	6.078	3.554	0.000	11330.000	2054.000	1323.000
%RSD		0.965	99.930	1.540	0.866	0.000	1.208	1.880	1.185
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:45	0.595	8.538	0.000	31460.000	32260.000	30680.000	81.417%	-0.159
2	14:58:53	1.161	6.150	0.000	31190.000	32340.000	31190.000	81.435%	0.289
3	14:59:01	0.569	7.093	0.000	31770.000	33480.000	31980.000	80.140%	0.430
x		0.775	7.261	0.000	31470.000	32700.000	31280.000	80.997%	0.187
σ		0.335	1.203	0.000	287.400	683.200	653.700	0.742%	0.308
%RSD		43.160	16.570	0.000	0.913	2.089	2.090	0.917	164.800
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:45	0.305	0.779	0.374	-0.623	100.500	0.041	0.039	0.533
2	14:58:53	0.643	0.748	0.422	-0.836	94.650	0.027	0.059	0.423
3	14:59:01	-0.143	0.849	0.393	-1.118	112.200	0.004	0.213	0.474
x		0.269	0.792	0.396	-0.859	102.500	0.024	0.104	0.477
σ		0.394	0.052	0.024	0.248	8.943	0.018	0.095	0.055
%RSD		146.900	6.553	6.017	28.920	8.728	76.710	91.780	11.560
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:45	0.307	0.554	0.751	0.049	0.230	49.150	0.000	614.900
2	14:58:53	0.295	0.502	0.781	0.062	0.232	44.800	0.000	629.900
3	14:59:01	0.364	0.693	0.534	0.093	0.011	43.590	0.000	623.800
x		0.322	0.583	0.689	0.068	0.157	45.850	0.000	622.800
σ		0.037	0.098	0.134	0.022	0.127	2.927	0.000	7.542
%RSD		11.430	16.860	19.510	32.740	80.800	6.385	0.000	1.211
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:45	79.471%	0.784	0.938	68.950%	-0.015	-0.026	-0.000	-0.066
2	14:58:53	78.737%	0.801	0.966	69.706%	-0.021	-0.015	-0.000	-0.054
3	14:59:01	81.082%	0.654	0.965	71.792%	-0.032	-0.027	-0.000	-0.054
x		79.763%	0.746	0.956	70.150%	-0.022	-0.023	-0.000	-0.058
σ		1.199%	0.080	0.016	1.472%	0.009	0.007	0.000	0.007
%RSD		1.504	10.740	1.638	2.099	39.180	30.410	84.660	11.770
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:45	73.434%	-2.791	-0.447	-0.467	0.614	0.727	77.419%	78.128%
2	14:58:53	74.894%	-2.865	-0.416	-0.435	0.551	0.705	80.660%	79.435%
3	14:59:01	74.930%	-2.812	-0.456	-0.425	0.736	0.395	80.189%	78.884%
x		74.420%	-2.823	-0.439	-0.442	0.634	0.609	79.423%	78.816%
σ		0.853%	0.038	0.021	0.022	0.094	0.186	1.751%	0.656%
%RSD		1.147	1.342	4.747	5.029	14.860	30.450	2.205	0.833
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:58:45	-0.007	-0.004	-0.016	0.003	-0.006	66.248%		
2	14:58:53	-0.012	0.004	-0.011	-0.017	-0.011	67.073%		
3	14:59:01	-0.007	-0.004	-0.010	0.009	-0.010	66.848%		
x		-0.009	-0.001	-0.012	-0.002	-0.009	66.723%		
σ		0.003	0.004	0.003	0.014	0.002	0.426%		
%RSD		29.790	296.100	24.890	775.600	27.450	0.639		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:03:53	78.844%	-0.163	379.900	406.900	0.000	941500.000	108800.000	111700.000
2	15:04:01	76.102%	-0.071	400.200	437.000	0.000	967000.000	113800.000	117000.000
3	15:04:09	77.146%	-0.103	404.800	422.000	0.000	960700.000	113300.000	113900.000
x		77.364%	-0.112	395.000	422.000	0.000	956400.000	112000.000	114200.000
σ		1.384%	0.047	13.280	15.050	0.000	13290.000	2736.000	2674.000
%RSD		1.789	41.710	3.363	3.566	0.000	1.389	2.443	2.342
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:03:53	2.751	12.520	0.000	32150.000	32770.000	30990.000	85.007%	0.090
2	15:04:01	2.770	12.230	0.000	33190.000	34500.000	32380.000	83.188%	0.308
3	15:04:09	2.262	9.637	0.000	33180.000	34720.000	32770.000	83.054%	0.549
x		2.595	11.460	0.000	32840.000	34000.000	32050.000	83.750%	0.316
σ		0.288	1.588	0.000	595.900	1066.000	934.600	1.091%	0.230
%RSD		11.100	13.850	0.000	1.815	3.135	2.917	1.302	72.740
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:03:53	-0.385	0.858	0.423	1.499	118.000	0.040	0.071	0.277
2	15:04:01	-0.022	0.927	0.436	1.408	100.100	0.022	-0.058	0.206
3	15:04:09	-0.179	0.897	0.483	1.396	103.000	0.004	0.166	0.137
x		-0.195	0.894	0.447	1.435	107.000	0.022	0.060	0.207
σ		0.182	0.034	0.032	0.056	9.628	0.018	0.113	0.070
%RSD		93.120	3.842	7.118	3.924	8.994	81.240	188.900	33.840
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:03:53	0.133	0.652	0.515	0.078	0.176	48.950	0.000	642.600
2	15:04:01	0.232	0.517	0.481	0.088	0.174	53.640	0.000	647.500
3	15:04:09	0.257	0.401	0.404	0.085	0.279	46.960	0.000	640.800
x		0.207	0.523	0.467	0.083	0.210	49.850	0.000	643.600
σ		0.066	0.126	0.057	0.005	0.060	3.428	0.000	3.497
%RSD		31.850	24.000	12.160	6.307	28.710	6.877	0.000	0.543
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:03:53	78.186%	0.655	0.949	68.580%	-0.014	-0.026	-0.000	-0.066
2	15:04:01	79.440%	1.089	0.756	69.706%	-0.020	-0.014	-0.000	-0.054
3	15:04:09	80.732%	0.787	0.880	69.812%	-0.032	-0.033	-0.000	-0.067
x		79.453%	0.844	0.861	69.366%	-0.022	-0.024	-0.000	-0.062
σ		1.273%	0.223	0.098	0.683%	0.009	0.009	0.000	0.007
%RSD		1.603	26.370	11.360	0.984	39.640	37.910	7.462	11.580
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:03:53	72.252%	-2.950	-0.487	-0.445	0.764	0.617	77.179%	75.908%
2	15:04:01	73.263%	-2.952	-0.471	-0.423	1.036	0.899	78.123%	76.210%
3	15:04:09	75.129%	-2.878	-0.480	-0.435	0.604	0.744	78.048%	77.469%
x		73.548%	-2.927	-0.479	-0.434	0.801	0.753	77.784%	76.529%
σ		1.460%	0.042	0.008	0.011	0.219	0.141	0.525%	0.828%
%RSD		1.985	1.440	1.689	2.488	27.280	18.720	0.675	1.082
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:03:53	-0.012	-0.006	-0.026	-0.009	-0.015	64.232%		
2	15:04:01	-0.003	0.000	-0.021	0.024	-0.007	65.214%		
3	15:04:09	-0.012	-0.002	-0.045	0.017	-0.014	65.315%		
x		-0.009	-0.003	-0.031	0.011	-0.012	64.920%		
σ		0.005	0.003	0.012	0.017	0.004	0.598%		
%RSD		61.530	117.700	40.660	163.100	36.940	0.921		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:01	95.249%	-0.255	2.206	2.353	0.000	381.100	15.920	17.610
2	15:09:09	93.252%	-0.271	2.316	1.537	0.000	375.900	18.950	16.850
3	15:09:17	94.770%	-0.254	1.673	2.037	0.000	364.900	19.240	16.280
x		94.424%	-0.260	2.065	1.976	0.000	374.000	18.040	16.910
σ		1.043%	0.010	0.344	0.412	0.000	8.282	1.835	0.668
%RSD		1.104	3.764	16.640	20.840	0.000	2.215	10.170	3.951
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:01	2.383	8.468	0.000	29.150	77.080	58.970	92.285%	-0.262
2	15:09:09	1.827	6.918	0.000	30.190	86.300	58.210	91.325%	-0.294
3	15:09:17	1.711	5.964	0.000	37.100	79.060	62.060	90.747%	-0.181
x		1.974	7.117	0.000	32.150	80.820	59.750	91.452%	-0.246
σ		0.359	1.264	0.000	4.322	4.854	2.040	0.777%	0.058
%RSD		18.200	17.760	0.000	13.450	6.006	3.414	0.850	23.630
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:01	0.198	0.473	0.211	7.042	7.914	0.003	-0.000	-0.011
2	15:09:09	-0.202	0.520	0.199	7.231	2.114	0.003	0.019	0.135
3	15:09:17	-0.090	0.395	0.228	7.594	7.285	-0.001	-0.069	0.120
x		-0.031	0.463	0.213	7.289	5.771	0.002	-0.017	0.081
σ		0.207	0.063	0.014	0.280	3.183	0.002	0.046	0.080
%RSD		661.000	13.640	6.805	3.846	55.150	120.500	274.300	98.540
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:01	0.177	0.575	0.577	-0.160	0.210	3.978	0.000	0.184
2	15:09:09	0.167	0.892	0.191	-0.139	0.213	2.487	0.000	0.196
3	15:09:17	0.126	0.808	0.710	-0.150	0.159	0.602	0.000	0.251
x		0.157	0.758	0.493	-0.150	0.194	2.356	0.000	0.211
σ		0.027	0.164	0.269	0.011	0.030	1.692	0.000	0.036
%RSD		17.110	21.650	54.680	7.262	15.670	71.830	0.000	17.080
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:01	84.220%	-0.107	-0.055	77.963%	-0.037	-0.028	-0.000	-0.067
2	15:09:09	83.575%	-0.091	-0.075	78.290%	0.003	-0.028	-0.000	-0.067
3	15:09:17	85.078%	-0.108	-0.086	78.532%	0.003	-0.034	-0.000	-0.067
x		84.291%	-0.102	-0.072	78.262%	-0.010	-0.030	-0.000	-0.067
σ		0.754%	0.010	0.016	0.285%	0.023	0.003	0.000	0.000
%RSD		0.895	9.349	21.670	0.364	224.000	10.630	30.330	0.128
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:01	79.606%	-2.831	-0.412	-0.376	0.222	-0.002	80.582%	80.155%
2	15:09:09	80.492%	-2.822	-0.316	-0.408	0.221	0.107	80.381%	79.269%
3	15:09:17	80.855%	-2.787	-0.421	-0.419	0.218	0.186	81.926%	80.939%
x		80.318%	-2.813	-0.383	-0.401	0.220	0.097	80.963%	80.121%
σ		0.643%	0.023	0.058	0.022	0.002	0.094	0.840%	0.836%
%RSD		0.800	0.826	15.240	5.483	0.819	97.260	1.037	1.043
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:09:01	-0.008	-0.012	0.002	0.029	0.010	71.726%		
2	15:09:09	-0.008	-0.003	0.041	0.017	0.010	71.555%		
3	15:09:17	-0.017	-0.008	0.019	-0.007	0.010	71.350%		
x		-0.011	-0.008	0.021	0.013	0.010	71.544%		
σ		0.005	0.005	0.019	0.019	0.000	0.188%		
%RSD		45.560	60.350	92.410	138.700	1.654	0.263		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:14:04	94.540%	-0.232	0.565	-0.052	0.000	330.000	13.550	13.200
2	15:14:12	91.750%	-0.267	0.671	0.438	0.000	335.800	12.950	14.470
3	15:14:20	93.266%	-0.336	0.755	0.763	0.000	319.100	17.450	15.640
x		93.185%	-0.278	0.663	0.383	0.000	328.300	14.650	14.440
σ		1.397%	0.053	0.095	0.410	0.000	8.495	2.445	1.219
%RSD		1.499	19.140	14.330	107.200	0.000	2.587	16.690	8.445

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:14:04	0.216	1.567	0.000	14.550	28.440	35.250	88.517%	-0.618
2	15:14:12	-1.071	1.078	0.000	22.820	21.300	38.820	86.908%	-0.578
3	15:14:20	-0.418	1.119	0.000	22.650	19.230	37.190	86.872%	-0.577
x		-0.424	1.255	0.000	20.010	22.990	37.090	87.432%	-0.591
σ		0.644	0.271	0.000	4.728	4.834	1.786	0.940%	0.023
%RSD		151.800	21.610	0.000	23.630	21.030	4.817	1.075	3.941

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:14:04	0.058	0.390	0.155	-0.690	0.365	0.004	0.005	0.225
2	15:14:12	-0.152	0.342	0.124	-0.726	-1.112	-0.001	0.007	0.193
3	15:14:20	-0.704	0.308	0.068	-0.904	-1.121	0.004	0.060	0.178
x		-0.266	0.347	0.116	-0.773	-0.623	0.002	0.024	0.199
σ		0.394	0.041	0.044	0.115	0.855	0.002	0.031	0.024
%RSD		147.800	11.830	38.090	14.860	137.300	111.600	128.500	12.170

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:14:04	0.106	0.599	0.467	-0.165	0.214	-0.397	0.000	0.110
2	15:14:12	0.308	0.711	1.143	-0.160	-0.044	3.572	0.000	0.168
3	15:14:20	0.239	0.940	0.633	-0.144	0.059	3.809	0.000	0.092
x		0.218	0.750	0.747	-0.156	0.077	2.328	0.000	0.123
σ		0.103	0.174	0.352	0.011	0.130	2.363	0.000	0.040
%RSD		47.320	23.190	47.130	7.101	169.700	101.500	0.000	32.640

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:14:04	83.571%	-0.171	-0.114	77.399%	-0.032	-0.034	-0.000	-0.056
2	15:14:12	83.987%	-0.092	-0.174	78.518%	-0.007	-0.034	-0.000	-0.067
3	15:14:20	85.012%	-0.187	-0.086	79.217%	-0.027	-0.039	-0.000	-0.079
x		84.190%	-0.150	-0.125	78.378%	-0.022	-0.035	-0.000	-0.067
σ		0.742%	0.051	0.045	0.917%	0.013	0.003	0.000	0.011
%RSD		0.881	34.000	36.030	1.170	60.250	9.040	50.960	16.940

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:14:04	79.612%	-2.843	-0.375	-0.417	0.133	0.244	80.666%	79.765%
2	15:14:12	80.189%	-2.870	-0.413	-0.387	0.132	0.079	81.197%	80.133%
3	15:14:20	81.448%	-2.948	-0.348	-0.389	0.174	0.078	81.461%	80.823%
x		80.416%	-2.887	-0.379	-0.398	0.147	0.134	81.108%	80.240%
σ		0.939%	0.054	0.033	0.017	0.024	0.096	0.405%	0.537%
%RSD		1.168	1.873	8.680	4.277	16.490	71.250	0.499	0.669

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:14:04	-0.008	-0.008	0.007	-0.008	-0.013	72.985%
2	15:14:12	-0.017	-0.008	-0.025	-0.020	-0.022	73.495%
3	15:14:20	-0.017	-0.012	-0.005	-0.020	-0.011	73.839%
x		-0.014	-0.009	-0.008	-0.016	-0.015	73.440%
σ		0.005	0.002	0.016	0.007	0.005	0.429%
%RSD		35.370	21.730	210.600	44.390	34.570	0.585

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	97.596%	-0.365	25.940	26.260	0.000	309.500	5.088	4.774
2	15:19:13	94.817%	-0.339	25.320	27.630	0.000	308.700	4.516	4.498
3	15:19:21	95.351%	-0.234	26.270	25.940	0.000	300.600	6.246	6.015
x		95.921%	-0.313	25.850	26.610	0.000	306.300	5.283	5.096
σ		1.475%	0.069	0.483	0.898	0.000	4.915	0.881	0.808
%RSD		1.538	22.190	1.869	3.373	0.000	1.605	16.680	15.860
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	14.930	132.900	0.000	-28.260	105.600	141.400	81.729%	1.220
2	15:19:13	14.760	134.400	0.000	-36.840	103.600	138.500	82.819%	1.235
3	15:19:21	17.840	131.800	0.000	-33.850	111.300	149.200	82.249%	1.733
x		15.840	133.000	0.000	-32.980	106.800	143.100	82.266%	1.396
σ		1.734	1.311	0.000	4.356	3.982	5.534	0.545%	0.292
%RSD		10.950	0.985	0.000	13.210	3.727	3.869	0.663	20.910
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	-0.229	7.815	12.890	642.200	622.600	0.358	0.483	0.728
2	15:19:13	0.738	7.655	12.950	638.700	599.300	0.424	0.364	0.858
3	15:19:21	0.550	7.682	13.310	640.500	626.800	0.383	1.146	0.983
x		0.353	7.717	13.050	640.500	616.200	0.388	0.664	0.856
σ		0.513	0.086	0.229	1.780	14.830	0.033	0.422	0.127
%RSD		145.400	1.114	1.756	0.278	2.407	8.570	63.440	14.880
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	1.101	4.513	3.575	-0.070	0.179	3.547	0.000	0.452
2	15:19:13	0.738	4.212	4.783	-0.099	0.068	3.274	0.000	0.484
3	15:19:21	0.834	4.864	4.637	-0.082	0.232	3.105	0.000	0.471
x		0.891	4.530	4.332	-0.084	0.160	3.308	0.000	0.469
σ		0.188	0.327	0.659	0.015	0.084	0.223	0.000	0.016
%RSD		21.090	7.208	15.220	17.590	52.490	6.744	0.000	3.379
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	77.495%	0.533	0.265	72.962%	-0.021	-0.021	-0.000	-0.079
2	15:19:13	77.107%	0.275	0.368	73.894%	-0.021	-0.033	-0.000	-0.067
3	15:19:21	78.318%	0.338	0.269	74.108%	0.000	-0.033	-0.000	-0.055
x		77.640%	0.382	0.301	73.654%	-0.014	-0.029	-0.000	-0.067
σ		0.618%	0.134	0.058	0.610%	0.012	0.007	0.000	0.012
%RSD		0.796	35.210	19.390	0.828	87.140	23.650	6.999	17.890
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	74.144%	-2.528	-0.383	-0.369	0.140	0.057	78.465%	75.562%
2	15:19:13	74.926%	-2.455	-0.416	-0.316	0.093	0.028	78.813%	77.159%
3	15:19:21	76.068%	-2.634	-0.385	-0.414	0.046	-0.029	78.591%	77.394%
x		75.046%	-2.539	-0.395	-0.366	0.093	0.019	78.623%	76.705%
σ		0.968%	0.090	0.018	0.049	0.047	0.044	0.176%	0.997%
%RSD		1.289	3.542	4.658	13.470	50.630	237.100	0.224	1.300
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:19:05	-0.003	-0.001	0.026	-0.006	0.002	70.149%		
2	15:19:13	0.001	0.001	0.019	-0.013	0.013	71.571%		
3	15:19:21	-0.008	-0.005	0.019	0.054	0.025	71.476%		
x		-0.004	-0.001	0.022	0.012	0.013	71.065%		
σ		0.004	0.003	0.004	0.037	0.011	0.795%		
%RSD		120.800	197.100	19.240	315.200	87.720	1.119		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:10	92.291%	-0.071	5.022	6.659	0.000	7040.000	3459.000	3445.000
2	15:24:18	91.590%	-0.289	5.805	6.270	0.000	7102.000	3544.000	3487.000
3	15:24:25	89.436%	-0.329	4.832	6.186	0.000	7101.000	3569.000	3509.000
x		91.106%	-0.230	5.220	6.372	0.000	7081.000	3524.000	3481.000
σ		1.488%	0.139	0.516	0.252	0.000	35.420	57.350	32.270
%RSD		1.633	60.420	9.880	3.960	0.000	0.500	1.627	0.927

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:10	7.671	14260.000	0.000	4602.000	28700.000	27190.000	81.206%	4.137
2	15:24:18	9.755	14230.000	0.000	4566.000	28540.000	27980.000	80.628%	4.790
3	15:24:25	8.875	14710.000	0.000	4717.000	29670.000	28310.000	80.242%	4.072
x		8.767	14400.000	0.000	4628.000	28970.000	27830.000	80.692%	4.333
σ		1.046	266.500	0.000	78.910	607.200	577.500	0.485%	0.397
%RSD		11.930	1.851	0.000	1.705	2.096	2.075	0.601	9.169

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:10	-1.082	2.993	49.260	1892.000	1926.000	0.069	0.313	0.689
2	15:24:18	-0.209	2.998	49.990	1930.000	1974.000	0.070	0.298	0.650
3	15:24:25	-0.736	3.279	51.330	1935.000	1962.000	0.130	0.180	0.770
x		-0.676	3.090	50.200	1919.000	1954.000	0.090	0.264	0.703
σ		0.440	0.164	1.051	23.470	25.060	0.035	0.073	0.061
%RSD		65.040	5.300	2.094	1.223	1.283	39.130	27.650	8.699

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:10	0.705	6.308	6.505	0.367	-0.044	0.666	0.000	124.700
2	15:24:18	0.901	6.594	5.662	0.224	0.126	1.002	0.000	128.900
3	15:24:25	0.825	7.049	6.771	0.326	0.125	1.790	0.000	127.000
x		0.810	6.650	6.313	0.306	0.069	1.153	0.000	126.800
σ		0.099	0.374	0.579	0.074	0.098	0.577	0.000	2.087
%RSD		12.220	5.618	9.176	24.190	141.100	50.030	0.000	1.646

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:10	76.917%	2.072	1.721	69.955%	-0.032	-0.038	-0.000	-0.041
2	15:24:18	76.175%	2.144	2.133	70.616%	-0.026	-0.009	0.031	-0.004
3	15:24:25	77.227%	2.304	1.918	70.419%	-0.032	-0.033	0.030	-0.054
x		76.773%	2.173	1.924	70.330%	-0.030	-0.027	0.020	-0.033
σ		0.540%	0.119	0.206	0.339%	0.003	0.016	0.018	0.026
%RSD		0.704	5.458	10.690	0.482	10.790	59.700	87.060	78.110

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:10	73.142%	-2.479	-0.398	-0.378	13.420	15.590	77.794%	75.977%
2	15:24:18	73.143%	-2.628	-0.430	-0.367	15.300	14.410	77.320%	77.428%
3	15:24:25	74.144%	-2.488	-0.326	-0.314	13.760	14.180	78.096%	78.167%
x		73.476%	-2.532	-0.385	-0.353	14.160	14.730	77.737%	77.190%
σ		0.578%	0.083	0.053	0.034	1.003	0.755	0.391%	1.114%
%RSD		0.787	3.289	13.830	9.755	7.085	5.127	0.503	1.443

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:10	-0.003	-0.008	0.078	0.045	0.033	69.313%
2	15:24:18	-0.012	-0.008	-0.007	0.032	0.024	69.897%
3	15:24:25	-0.004	-0.004	0.015	0.031	0.018	70.458%
x		-0.006	-0.007	0.029	0.036	0.025	69.889%
σ		0.005	0.002	0.044	0.008	0.008	0.572%
%RSD		80.490	30.640	154.300	22.050	30.460	0.819

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:29:16	89.673%	-0.262	5.771	8.088	0.000	3175.000	6964.000	7049.000
2	15:29:24	93.547%	-0.229	6.895	7.745	0.000	3156.000	6905.000	6928.000
3	15:29:32	92.193%	-0.323	4.744	7.624	0.000	3153.000	6825.000	6756.000
x		91.804%	-0.271	5.803	7.819	0.000	3161.000	6898.000	6911.000
σ		1.966%	0.048	1.076	0.240	0.000	11.860	69.860	147.100
%RSD		2.142	17.740	18.540	3.073	0.000	0.375	1.013	2.128

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:29:16	6.840	7373.000	0.000	2681.000	13560.000	12870.000	80.249%	1.919
2	15:29:24	7.148	7293.000	0.000	2654.000	13780.000	13150.000	80.631%	2.854
3	15:29:32	7.381	7100.000	0.000	2607.000	14420.000	13240.000	81.125%	3.815
x		7.123	7255.000	0.000	2647.000	13920.000	13080.000	80.668%	2.862
σ		0.271	140.300	0.000	37.370	444.000	193.400	0.439%	0.948
%RSD		3.808	1.934	0.000	1.412	3.189	1.478	0.544	33.120

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:29:16	-0.091	2.954	10420.000	19720.000	19320.000	500.500	9.904	0.160
2	15:29:24	0.092	3.032	10610.000	19960.000	19630.000	500.900	10.170	0.080
3	15:29:32	0.298	3.157	10550.000	19730.000	18840.000	495.500	9.833	0.286
x		0.100	3.048	10530.000	19800.000	19260.000	499.000	9.969	0.175
σ		0.195	0.102	97.960	132.600	395.900	3.033	0.178	0.104
%RSD		194.900	3.346	0.930	0.670	2.055	0.608	1.781	59.190

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:29:16	0.216	5.592	6.740	0.116	0.239	4.105	0.000	84.730
2	15:29:24	0.444	6.045	6.293	0.236	0.291	3.458	0.000	86.170
3	15:29:32	0.257	6.481	6.417	0.149	0.069	3.747	0.000	84.950
x		0.306	6.039	6.483	0.167	0.200	3.770	0.000	85.280
σ		0.122	0.444	0.231	0.062	0.116	0.324	0.000	0.779
%RSD		39.740	7.359	3.559	36.940	58.300	8.592	0.000	0.913

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:29:16	76.532%	-0.097	-0.029	70.369%	-0.021	-0.026	0.031	-0.017
2	15:29:24	77.677%	-0.048	-0.032	71.695%	0.018	-0.039	-0.000	-0.066
3	15:29:32	76.955%	0.006	-0.075	71.418%	-0.026	-0.027	-0.000	-0.066
x		77.055%	-0.046	-0.045	71.161%	-0.010	-0.031	0.010	-0.050
σ		0.579%	0.051	0.025	0.699%	0.024	0.007	0.018	0.029
%RSD		0.751	110.800	55.900	0.983	247.300	22.700	176.500	57.730

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:29:16	73.172%	-2.559	-0.299	-0.345	54.810	56.250	75.800%	75.731%
2	15:29:24	74.329%	-2.675	-0.230	-0.171	51.520	53.240	77.287%	77.660%
3	15:29:32	73.270%	-2.534	-0.186	-0.213	52.600	51.630	78.057%	76.949%
x		73.590%	-2.590	-0.238	-0.243	52.980	53.710	77.048%	76.780%
σ		0.641%	0.075	0.057	0.090	1.678	2.341	1.147%	0.976%
%RSD		0.872	2.904	23.940	37.250	3.166	4.359	1.489	1.271

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:29:16	0.015	0.044	0.748	0.669	0.691	68.075%
2	15:29:24	0.033	0.055	0.747	0.696	0.712	68.559%
3	15:29:32	0.046	0.030	0.796	0.695	0.725	69.246%
x		0.031	0.043	0.764	0.687	0.709	68.627%
σ		0.015	0.013	0.028	0.015	0.017	0.589%
%RSD		49.360	29.450	3.671	2.186	2.415	0.858

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:34:21	90.060%	-0.229	1.620	3.199	0.000	3335.000	3040.000	3104.000
2	15:34:28	90.834%	-0.231	1.727	2.993	0.000	3371.000	3154.000	3106.000
3	15:34:36	93.212%	-0.228	0.473	2.483	0.000	3311.000	3119.000	3067.000
x		91.369%	-0.229	1.273	2.892	0.000	3339.000	3104.000	3092.000
σ		1.642%	0.002	0.695	0.369	0.000	30.030	58.430	22.140
%RSD		1.798	0.829	54.610	12.760	0.000	0.900	1.882	0.716
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:34:21	8.843	7107.000	0.000	2188.000	8333.000	8042.000	81.659%	2.849
2	15:34:28	10.510	7154.000	0.000	2173.000	8626.000	8275.000	81.068%	2.302
3	15:34:36	8.794	7099.000	0.000	2219.000	8748.000	8354.000	80.449%	2.160
x		9.381	7120.000	0.000	2193.000	8569.000	8224.000	81.059%	2.437
σ		0.975	29.780	0.000	23.860	213.200	162.400	0.605%	0.364
%RSD		10.390	0.418	0.000	1.088	2.488	1.975	0.747	14.940
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:34:21	-1.670	2.966	2012.000	7062.000	6843.000	22.390	2.520	0.455
2	15:34:28	-0.409	3.127	2048.000	7031.000	6999.000	22.790	2.145	0.428
3	15:34:36	-0.649	3.232	2092.000	7267.000	7025.000	22.450	2.174	0.528
x		-0.910	3.108	2051.000	7120.000	6955.000	22.540	2.279	0.470
σ		0.669	0.134	39.830	128.400	98.530	0.215	0.209	0.052
%RSD		73.610	4.300	1.943	1.803	1.417	0.954	9.146	11.010
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:34:21	0.597	10.330	10.840	0.239	0.178	1.978	0.000	118.500
2	15:34:28	0.591	10.940	9.899	0.364	0.229	1.311	0.000	116.000
3	15:34:36	0.565	10.380	9.100	0.244	0.175	3.539	0.000	117.200
x		0.584	10.550	9.947	0.283	0.194	2.276	0.000	117.200
σ		0.017	0.337	0.872	0.071	0.030	1.144	0.000	1.260
%RSD		2.919	3.190	8.763	25.120	15.680	50.250	0.000	1.075
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:34:21	77.914%	-0.133	-0.096	70.336%	-0.015	-0.038	0.062	0.045
2	15:34:28	79.917%	-0.135	-0.119	71.752%	-0.021	-0.039	0.091	-0.079
3	15:34:36	80.111%	-0.051	-0.088	72.678%	-0.026	-0.033	0.030	-0.006
x		79.314%	-0.106	-0.101	71.589%	-0.021	-0.037	0.061	-0.013
σ		1.216%	0.048	0.016	1.179%	0.006	0.003	0.031	0.062
%RSD		1.534	44.990	16.020	1.648	27.800	8.977	50.500	467.800
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:34:21	73.481%	-2.522	-0.243	-0.323	86.600	88.870	77.299%	77.112%
2	15:34:28	73.939%	-2.687	-0.415	-0.401	91.170	87.660	77.710%	77.962%
3	15:34:36	75.161%	-2.681	-0.344	-0.283	90.540	88.710	77.970%	78.499%
x		74.194%	-2.630	-0.334	-0.336	89.440	88.410	77.660%	77.858%
σ		0.869%	0.093	0.086	0.060	2.479	0.656	0.339%	0.699%
%RSD		1.171	3.545	25.790	17.870	2.772	0.742	0.436	0.898
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:34:21	0.001	0.011	0.364	0.341	0.360	68.188%		
2	15:34:28	0.001	0.015	0.423	0.433	0.398	68.739%		
3	15:34:36	0.005	0.018	0.563	0.287	0.389	70.165%		
x		0.003	0.015	0.450	0.354	0.382	69.031%		
σ		0.002	0.003	0.102	0.074	0.020	1.020%		
%RSD		86.590	23.430	22.670	20.950	5.201	1.478		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:27	86.364%	94.800	87.220	91.600	0.000	46830.000	44530.000	45130.000
2	15:39:34	84.676%	97.750	90.190	95.180	0.000	48910.000	45860.000	46180.000
3	15:39:42	86.622%	95.920	92.220	93.100	0.000	47800.000	45580.000	45730.000
x		85.887%	96.159%	89.880%	93.295%	0.000	95.692%	90.647%	91.359%
σ		1.057%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.231	1.551	2.799	1.928	0.000	2.174	1.556	1.152
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:27	452.300	4726.000	0.000	46790.000	45920.000	43660.000	83.375%	88.720
2	15:39:34	455.800	4748.000	0.000	47720.000	46010.000	44660.000	83.038%	97.330
3	15:39:42	459.600	4837.000	0.000	48180.000	47370.000	45600.000	81.382%	93.720
x		91.177%	95.409%	0.000	95.128%	92.869%	89.275%	82.598%	93.256%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.067%	n/a
%RSD		0.798	1.239	0.000	1.481	1.754	2.172	1.291	4.638
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:27	89.950	90.400	444.200	23390.000	22450.000	90.240	89.730	90.990
2	15:39:34	90.680	92.050	448.700	23450.000	22900.000	93.060	93.440	94.440
3	15:39:42	93.830	95.350	459.900	23520.000	23010.000	92.250	97.360	92.840
x		91.484%	92.599%	90.193%	93.808%	91.147%	91.850%	93.509%	92.757%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.255	2.721	1.794	0.295	1.320	1.579	4.083	1.860
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:27	88.650	88.300	92.150	92.010	89.560	93.820	0.000	91.470
2	15:39:34	93.890	93.320	93.600	93.440	99.870	95.830	0.000	93.250
3	15:39:42	92.290	91.970	93.210	93.480	94.780	93.260	0.000	90.490
x		91.614%	91.197%	92.987%	92.976%	94.739%	94.305%	0.000	91.738%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.932	2.847	0.808	0.899	5.441	1.430	0.000	1.523
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:27	81.078%	90.800	94.380	72.840%	92.240	93.770	95.250	95.110
2	15:39:34	79.265%	93.370	92.090	74.062%	93.160	94.000	91.940	96.530
3	15:39:42	82.321%	90.560	93.550	74.856%	94.020	93.570	93.650	98.020
x		80.888%	91.575%	93.343%	73.919%	93.140%	93.781%	93.613%	96.553%
σ		1.537%	n/a	n/a	1.015%	n/a	n/a	n/a	n/a
%RSD		1.900	1.701	1.242	1.374	0.958	0.226	1.771	1.503
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:27	73.144%	91.590	94.910	92.430	89.010	92.650	79.467%	79.554%
2	15:39:34	72.448%	94.090	95.780	93.620	92.670	95.170	81.227%	79.230%
3	15:39:42	74.016%	91.410	93.870	91.760	94.410	94.890	80.576%	81.324%
x		73.203%	92.364%	94.854%	92.604%	92.028%	94.236%	80.423%	80.036%
σ		0.786%	n/a	n/a	n/a	n/a	n/a	0.890%	1.127%
%RSD		1.074	1.620	1.009	1.016	2.993	1.462	1.107	1.408
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:39:27	98.220	96.140	97.270	96.790	97.320	68.670%		
2	15:39:34	97.420	97.850	97.300	98.470	97.430	68.982%		
3	15:39:42	97.270	98.160	97.940	97.390	98.080	69.708%		
x		97.634%	97.383%	97.501%	97.548%	97.609%	69.120%		
σ		n/a	n/a	n/a	n/a	n/a	0.533%		
%RSD		0.523	1.120	0.391	0.871	0.420	0.770		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:18	94.695%	-0.200	-0.559	-0.623	0.000	65.880	4.693	10.920
2	15:48:26	94.142%	-0.252	0.228	-0.953	0.000	68.970	1.532	5.523
3	15:48:34	94.953%	-0.094	-0.565	-0.587	0.000	68.420	0.672	4.677
x		94.596%	-0.182	-0.298	-0.721	0.000	67.760	2.299	7.041
σ		0.415%	0.080	0.456	0.202	0.000	1.649	2.117	3.389
%RSD		0.438	44.200	152.900	28.020	0.000	2.434	92.090	48.130

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:18	0.546	4.407	0.000	31.300	21.290	15.690	86.923%	-0.272
2	15:48:26	0.531	2.812	0.000	26.760	16.520	14.290	87.810%	-0.314
3	15:48:34	0.643	3.556	0.000	42.390	2.023	13.050	87.703%	-0.465
x		0.574	3.591	0.000	33.480	13.280	14.350	87.479%	-0.350
σ		0.061	0.798	0.000	8.039	10.040	1.317	0.484%	0.102
%RSD		10.640	22.230	0.000	24.010	75.570	9.183	0.553	29.010

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:18	-0.044	0.030	0.190	9.031	6.503	0.025	-0.083	0.030
2	15:48:26	0.054	0.069	0.145	8.507	6.777	0.008	0.040	0.097
3	15:48:34	-0.208	0.026	0.178	7.995	5.965	-0.001	-0.103	0.067
x		-0.066	0.042	0.171	8.511	6.415	0.011	-0.049	0.065
σ		0.133	0.024	0.023	0.518	0.413	0.013	0.077	0.034
%RSD		201.500	57.640	13.560	6.082	6.440	122.600	159.200	51.900

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:18	0.186	0.103	0.066	-0.128	0.161	2.281	0.000	0.054
2	15:48:26	0.091	-0.108	-0.136	-0.118	0.109	0.685	0.000	0.022
3	15:48:34	0.062	0.068	-0.140	-0.108	0.206	-0.391	0.000	0.037
x		0.113	0.021	-0.070	-0.118	0.158	0.858	0.000	0.038
σ		0.065	0.113	0.118	0.010	0.049	1.345	0.000	0.016
%RSD		57.380	538.200	168.300	8.233	30.660	156.600	0.000	42.890

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:18	85.028%	0.172	0.099	79.649%	0.007	-0.023	0.027	-0.068
2	15:48:26	85.766%	0.185	0.242	80.242%	0.002	-0.023	-0.000	-0.057
3	15:48:34	87.814%	0.178	0.112	81.015%	-0.008	-0.029	-0.000	-0.079
x		86.202%	0.179	0.151	80.302%	0.000	-0.025	0.009	-0.068
σ		1.443%	0.006	0.079	0.685%	0.008	0.003	0.016	0.011
%RSD		1.674	3.495	52.530	0.853	1699.000	12.800	175.600	16.220

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:18	82.007%	-2.864	-0.275	-0.219	0.043	0.078	82.058%	81.214%
2	15:48:26	82.722%	-2.831	-0.299	-0.241	0.043	0.077	82.661%	81.696%
3	15:48:34	84.115%	-2.765	-0.237	-0.216	0.170	-0.003	83.012%	82.494%
x		82.948%	-2.820	-0.271	-0.225	0.085	0.050	82.577%	81.801%
σ		1.072%	0.050	0.031	0.014	0.073	0.046	0.483%	0.646%
%RSD		1.292	1.790	11.490	6.190	85.730	91.820	0.584	0.790

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:18	0.083	0.069	-0.047	-0.032	-0.026	74.732%
2	15:48:26	0.071	0.057	-0.047	-0.003	-0.024	74.300%
3	15:48:34	0.058	0.046	-0.042	-0.038	-0.039	74.660%
x		0.070	0.057	-0.045	-0.024	-0.030	74.564%
σ		0.012	0.011	0.003	0.019	0.008	0.231%
%RSD		17.710	19.960	6.607	78.120	26.240	0.310

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:24	94.315%	-0.263	20.420	22.230	0.000	5431.000	1919.000	1898.000
2	15:53:32	94.829%	-0.200	17.500	22.260	0.000	5562.000	1940.000	1951.000
3	15:53:40	92.105%	-0.334	22.060	22.990	0.000	5513.000	1946.000	1978.000
x		93.750%	-0.266	20.000	22.490	0.000	5502.000	1935.000	1942.000
σ		1.447%	0.067	2.307	0.433	0.000	66.120	14.050	40.860
%RSD		1.544	25.180	11.540	1.924	0.000	1.202	0.726	2.104
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:24	75.110	3125.000	0.000	825.700	6847.000	6228.000	79.775%	1.810
2	15:53:32	71.510	3119.000	0.000	839.700	6655.000	6281.000	78.918%	2.048
3	15:53:40	73.780	3137.000	0.000	790.500	6795.000	6217.000	80.666%	2.976
x		73.460	3127.000	0.000	818.600	6766.000	6242.000	79.786%	2.278
σ		1.821	8.934	0.000	25.340	99.200	34.050	0.874%	0.616
%RSD		2.478	0.286	0.000	3.095	1.466	0.545	1.095	27.050
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:24	0.077	2.164	402.900	25.910	42.400	1.003	0.356	0.931
2	15:53:32	1.133	2.250	408.300	24.680	42.950	1.004	0.474	0.960
3	15:53:40	0.152	2.266	403.100	21.720	40.010	1.112	0.275	1.031
x		0.454	2.226	404.700	24.100	41.780	1.040	0.368	0.974
σ		0.590	0.055	3.044	2.154	1.566	0.063	0.100	0.052
%RSD		129.900	2.455	0.752	8.937	3.747	6.034	27.120	5.325
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:24	1.114	9.467	8.637	0.137	0.180	3.735	0.000	59.270
2	15:53:32	0.924	9.524	8.873	0.146	0.067	4.082	0.000	58.740
3	15:53:40	1.022	9.115	9.629	0.089	0.180	4.478	0.000	59.730
x		1.020	9.369	9.046	0.124	0.142	4.098	0.000	59.250
σ		0.096	0.221	0.519	0.030	0.065	0.372	0.000	0.494
%RSD		9.361	2.364	5.731	24.360	45.810	9.075	0.000	0.833
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:24	77.821%	0.075	0.068	70.394%	-0.009	-0.033	0.184	0.069
2	15:53:32	79.203%	0.086	0.040	72.412%	-0.026	-0.015	0.030	0.019
3	15:53:40	77.545%	0.020	-0.001	72.479%	-0.021	-0.021	0.150	-0.006
x		78.190%	0.060	0.036	71.762%	-0.019	-0.023	0.121	0.027
σ		0.888%	0.035	0.035	1.185%	0.009	0.009	0.081	0.038
%RSD		1.136	57.990	97.340	1.652	45.810	38.550	66.600	139.700
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:24	74.009%	-2.152	-0.148	-0.104	166.200	173.600	77.014%	75.883%
2	15:53:32	74.226%	-2.208	-0.213	-0.127	173.900	174.500	77.566%	78.006%
3	15:53:40	75.068%	-2.390	-0.304	-0.240	163.800	176.000	78.621%	77.837%
x		74.435%	-2.250	-0.222	-0.157	167.900	174.700	77.734%	77.242%
σ		0.559%	0.125	0.079	0.073	5.272	1.199	0.817%	1.180%
%RSD		0.752	5.540	35.480	46.270	3.139	0.686	1.050	1.528
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	15:53:24	0.108	0.092	-0.029	0.070	0.004	69.113%		
2	15:53:32	0.049	0.068	-0.024	-0.006	-0.013	70.174%		
3	15:53:40	0.062	0.080	-0.024	-0.013	-0.004	70.906%		
x		0.073	0.080	-0.026	0.017	-0.004	70.064%		
σ		0.031	0.012	0.003	0.046	0.009	0.901%		
%RSD		42.650	14.970	10.910	268.700	194.000	1.286		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:58:29	91.594%	-0.134	0.822	1.768	0.000	8482.000	737.500	740.400
2	15:58:37	95.564%	-0.139	0.181	1.260	0.000	8455.000	756.600	741.900
3	15:58:45	92.031%	-0.147	0.517	2.084	0.000	8422.000	742.600	759.900
x		93.063%	-0.140	0.507	1.704	0.000	8453.000	745.600	747.400
σ		2.177%	0.006	0.320	0.416	0.000	30.200	9.853	10.880
%RSD		2.339	4.603	63.250	24.380	0.000	0.357	1.322	1.456

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:58:29	127.100	3585.000	0.000	1121.000	461.300	480.800	81.250%	6.710
2	15:58:37	125.200	3476.000	0.000	1141.000	413.600	509.900	81.350%	6.660
3	15:58:45	130.800	3607.000	0.000	1159.000	512.200	510.400	81.031%	6.115
x		127.700	3556.000	0.000	1140.000	462.400	500.400	81.210%	6.495
σ		2.817	70.130	0.000	19.230	49.330	16.920	0.163%	0.330
%RSD		2.206	1.972	0.000	1.686	10.670	3.382	0.201	5.079

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:58:29	-0.149	3.550	18.950	155.300	158.700	0.395	0.136	0.273
2	15:58:37	-1.719	3.751	19.360	155.400	132.900	0.447	-0.038	0.441
3	15:58:45	0.889	3.854	19.880	158.600	144.700	0.407	0.154	0.173
x		-0.326	3.719	19.400	156.400	145.400	0.416	0.084	0.296
σ		1.313	0.155	0.465	1.881	12.910	0.027	0.106	0.135
%RSD		402.700	4.162	2.399	1.203	8.875	6.549	126.000	45.780

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:58:29	0.639	3.565	3.059	-0.018	0.287	7.468	0.000	9.927
2	15:58:37	0.235	3.083	3.674	-0.026	0.174	1.495	0.000	9.416
3	15:58:45	0.477	3.062	2.603	-0.026	0.120	4.021	0.000	9.899
x		0.450	3.237	3.112	-0.024	0.194	4.328	0.000	9.748
σ		0.203	0.285	0.537	0.005	0.086	2.998	0.000	0.287
%RSD		45.130	8.794	17.260	19.220	44.160	69.280	0.000	2.947

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:58:29	78.663%	-0.186	-0.099	73.284%	-0.010	-0.033	0.090	-0.030
2	15:58:37	80.115%	-0.052	-0.089	73.945%	0.011	-0.039	0.060	0.018
3	15:58:45	80.119%	-0.036	-0.079	74.394%	-0.027	-0.010	0.059	0.005
x		79.632%	-0.091	-0.089	73.875%	-0.009	-0.027	0.070	-0.002
σ		0.839%	0.082	0.010	0.558%	0.019	0.015	0.018	0.025
%RSD		1.054	89.870	10.830	0.756	219.100	55.720	25.210	1074.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:58:29	75.063%	-2.641	-0.106	-0.154	55.010	55.000	79.425%	77.408%
2	15:58:37	75.111%	-2.747	-0.249	-0.241	57.500	55.010	79.362%	77.890%
3	15:58:45	75.438%	-2.657	-0.116	-0.167	51.850	56.730	80.744%	79.081%
x		75.204%	-2.682	-0.157	-0.187	54.790	55.580	79.844%	78.126%
σ		0.204%	0.057	0.080	0.047	2.829	0.998	0.781%	0.861%
%RSD		0.271	2.121	51.010	24.980	5.164	1.796	0.978	1.102

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:58:29	0.009	0.008	0.355	0.292	0.318	71.768%
2	15:58:37	-0.004	0.006	0.312	0.251	0.298	72.722%
3	15:58:45	0.013	0.013	0.313	0.306	0.294	72.584%
x		0.006	0.009	0.327	0.283	0.303	72.358%
σ		0.009	0.004	0.025	0.028	0.013	0.515%
%RSD		144.300	40.280	7.533	10.020	4.267	0.712

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:03:35	89.846%	-0.364	1.410	2.559	0.000	7760.000	3393.000	3401.000
2	16:03:42	86.672%	-0.335	0.501	2.793	0.000	7794.000	3483.000	3453.000
3	16:03:50	90.870%	-0.265	1.143	2.006	0.000	7629.000	3377.000	3406.000
x		89.129%	-0.321	1.018	2.453	0.000	7728.000	3418.000	3420.000
σ		2.189%	0.051	0.467	0.404	0.000	87.390	57.420	28.680
%RSD		2.456	15.810	45.910	16.470	0.000	1.131	1.680	0.839
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:03:35	6.359	9833.000	0.000	7380.000	33140.000	30670.000	79.695%	3.021
2	16:03:42	6.765	9878.000	0.000	7305.000	33230.000	31290.000	79.323%	3.122
3	16:03:50	6.266	9881.000	0.000	7498.000	33750.000	32220.000	77.548%	2.953
x		6.463	9864.000	0.000	7394.000	33370.000	31390.000	78.855%	3.032
σ		0.265	27.000	0.000	97.110	327.600	777.100	1.147%	0.085
%RSD		4.102	0.274	0.000	1.313	0.982	2.475	1.455	2.803
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:03:35	1.572	2.339	181.000	107.100	213.300	0.047	0.283	0.131
2	16:03:42	-0.257	2.460	182.200	108.100	187.600	0.085	0.047	0.156
3	16:03:50	-0.246	2.660	188.700	112.400	209.400	0.087	0.112	0.154
x		0.356	2.486	184.000	109.200	203.500	0.073	0.147	0.147
σ		1.053	0.162	4.164	2.857	13.870	0.022	0.122	0.014
%RSD		295.600	6.518	2.263	2.616	6.817	30.840	82.830	9.270
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:03:35	0.190	2.375	3.897	0.226	0.070	-2.185	0.000	117.200
2	16:03:42	0.191	3.338	2.834	0.269	0.128	3.142	0.000	119.500
3	16:03:50	0.271	3.167	2.926	0.258	0.072	2.678	0.000	120.300
x		0.217	2.960	3.219	0.251	0.090	1.212	0.000	119.000
σ		0.047	0.514	0.589	0.022	0.032	2.951	0.000	1.587
%RSD		21.590	17.350	18.290	8.823	36.100	243.500	0.000	1.334
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:03:35	75.896%	0.997	1.002	69.799%	-0.037	-0.038	0.000	-0.053
2	16:03:42	75.857%	1.466	1.280	68.910%	-0.026	-0.038	-0.000	-0.079
3	16:03:50	74.945%	1.038	1.013	70.208%	-0.015	-0.038	0.062	-0.066
x		75.566%	1.167	1.098	69.639%	-0.026	-0.038	0.021	-0.066
σ		0.538%	0.260	0.158	0.664%	0.011	0.000	0.036	0.013
%RSD		0.712	22.250	14.340	0.953	43.030	0.104	173.600	19.060
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:03:35	72.022%	-2.565	-0.454	-0.422	48.410	49.020	76.798%	75.498%
2	16:03:42	73.330%	-2.710	-0.390	-0.489	46.940	49.830	77.988%	77.405%
3	16:03:50	73.431%	-2.603	-0.430	-0.401	46.770	50.300	77.955%	77.134%
x		72.928%	-2.626	-0.425	-0.437	47.380	49.720	77.581%	76.679%
σ		0.786%	0.075	0.033	0.046	0.901	0.648	0.678%	1.032%
%RSD		1.078	2.866	7.672	10.570	1.901	1.303	0.874	1.346
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:03:35	-0.003	-0.002	2.524	2.483	2.568	67.449%		
2	16:03:42	0.001	-0.000	2.382	2.489	2.452	68.455%		
3	16:03:50	0.010	-0.001	2.305	2.606	2.514	69.437%		
x		0.003	-0.001	2.404	2.526	2.511	68.447%		
σ		0.007	0.001	0.111	0.069	0.058	0.994%		
%RSD		235.700	90.540	4.610	2.749	2.326	1.452		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:00	91.276%	-0.211	151.700	164.200	0.000	27440.000	9189.000	9043.000
2	16:17:08	94.457%	-0.274	157.800	165.000	0.000	27190.000	9033.000	9063.000
3	16:17:16	93.559%	-0.196	163.000	169.200	0.000	26960.000	9045.000	9196.000
x		93.097%	-0.227	157.500	166.200	0.000	27200.000	9089.000	9101.000
σ		1.640%	0.042	5.650	2.670	0.000	240.400	86.840	83.330
%RSD		1.762	18.310	3.587	1.607	0.000	0.884	0.955	0.916

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:00	1.593	1676.000	0.000	6039.000	37810.000	35740.000	84.470%	2.455
2	16:17:08	1.207	1752.000	0.000	6258.000	39510.000	37460.000	82.865%	2.957
3	16:17:16	2.094	1768.000	0.000	6375.000	39700.000	38200.000	81.952%	2.391
x		1.631	1732.000	0.000	6224.000	39010.000	37140.000	83.096%	2.601
σ		0.445	49.000	0.000	170.600	1042.000	1261.000	1.275%	0.310
%RSD		27.260	2.829	0.000	2.740	2.671	3.396	1.534	11.930

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:00	0.839	2.168	6642.000	8.210	138.200	7.686	0.960	0.972
2	16:17:08	-0.594	2.237	6941.000	7.822	125.900	7.953	1.293	1.038
3	16:17:16	1.068	2.172	7089.000	8.264	120.900	7.577	0.614	1.152
x		0.438	2.192	6891.000	8.099	128.400	7.739	0.956	1.054
σ		0.901	0.039	227.900	0.242	8.899	0.193	0.339	0.091
%RSD		205.900	1.762	3.308	2.981	6.932	2.497	35.480	8.674

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:00	1.138	2.829	2.348	0.347	0.123	8.083	0.000	214.900
2	16:17:08	1.328	3.314	1.366	0.381	0.177	7.545	0.000	213.700
3	16:17:16	1.381	2.412	1.868	0.319	0.067	8.606	0.000	216.700
x		1.282	2.852	1.861	0.349	0.122	8.078	0.000	215.100
σ		0.128	0.452	0.491	0.031	0.055	0.530	0.000	1.504
%RSD		9.958	15.830	26.400	8.783	44.900	6.567	0.000	0.699

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:00	77.231%	0.645	0.640	71.503%	-0.021	-0.021	0.243	0.043
2	16:17:08	78.182%	0.620	0.570	71.849%	-0.021	-0.015	0.213	0.068
3	16:17:16	78.034%	0.668	0.639	72.648%	-0.010	-0.033	0.179	0.077
x		77.816%	0.644	0.616	72.000%	-0.017	-0.023	0.212	0.063
σ		0.512%	0.024	0.041	0.587%	0.006	0.009	0.032	0.018
%RSD		0.658	3.726	6.574	0.816	35.490	39.670	14.990	28.170

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:00	74.560%	-2.505	-0.431	-0.391	106.300	110.600	78.165%	77.441%
2	16:17:08	74.190%	-2.795	-0.431	-0.435	115.200	111.100	79.836%	80.507%
3	16:17:16	75.634%	-2.762	-0.393	-0.403	108.300	113.100	79.359%	79.671%
x		74.795%	-2.687	-0.418	-0.410	109.900	111.600	79.120%	79.206%
σ		0.750%	0.159	0.022	0.023	4.670	1.354	0.860%	1.585%
%RSD		1.003	5.922	5.322	5.495	4.248	1.213	1.087	2.001

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:00	-0.008	-0.001	1.871	1.721	1.655	70.626%
2	16:17:08	-0.008	-0.001	1.470	1.557	1.554	71.474%
3	16:17:16	-0.017	-0.008	1.608	1.457	1.600	71.663%
x		-0.011	-0.003	1.649	1.578	1.603	71.255%
σ		0.005	0.004	0.204	0.134	0.051	0.552%
%RSD		46.160	129.000	12.350	8.455	3.153	0.775

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:02	94.174%	-0.198	-0.897	-0.817	0.000	33.970	1.186	1.640
2	16:31:09	93.683%	-0.316	-0.039	-0.706	0.000	37.480	1.872	0.425
3	16:31:17	91.860%	-0.246	-0.341	-0.620	0.000	35.080	0.072	0.163
x		93.239%	-0.253	-0.426	-0.714	0.000	35.510	1.044	0.743
σ		1.219%	0.059	0.435	0.099	0.000	1.792	0.909	0.788
%RSD		1.308	23.320	102.300	13.830	0.000	5.046	87.050	106.200
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:02	0.771	5.309	0.000	-0.977	18.340	9.438	91.361%	-0.585
2	16:31:09	0.443	3.174	0.000	6.830	29.280	5.407	90.095%	-0.657
3	16:31:17	0.746	1.707	0.000	11.890	11.180	5.729	89.856%	-0.545
x		0.653	3.396	0.000	5.915	19.600	6.858	90.438%	-0.596
σ		0.182	1.811	0.000	6.483	9.114	2.240	0.809%	0.056
%RSD		27.920	53.320	0.000	109.600	46.510	32.660	0.894	9.455
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:02	0.117	0.005	0.078	-0.365	0.957	-0.001	-0.070	0.110
2	16:31:09	-0.148	0.014	0.034	-0.516	-0.123	-0.005	0.069	0.009
3	16:31:17	-0.094	0.014	0.140	-0.606	-1.225	-0.001	0.017	0.002
x		-0.042	0.011	0.084	-0.496	-0.130	-0.002	0.005	0.040
σ		0.140	0.005	0.053	0.122	1.091	0.002	0.070	0.061
%RSD		335.600	45.320	63.140	24.530	837.200	109.400	1303.000	150.400
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:02	0.163	-0.013	0.278	-0.166	0.157	0.004	0.000	0.006
2	16:31:09	0.098	0.239	0.244	-0.182	-0.044	2.927	0.000	0.016
3	16:31:17	0.072	0.112	0.211	-0.172	0.055	0.827	0.000	0.006
x		0.111	0.113	0.244	-0.173	0.056	1.253	0.000	0.009
σ		0.047	0.126	0.034	0.008	0.100	1.507	0.000	0.006
%RSD		42.020	111.700	13.770	4.643	178.500	120.300	0.000	63.850
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:02	86.228%	-0.111	-0.090	82.646%	-0.018	-0.029	-0.000	-0.057
2	16:31:09	87.810%	-0.098	-0.082	84.106%	-0.033	-0.039	-0.000	-0.079
3	16:31:17	88.206%	-0.083	-0.120	84.197%	-0.014	-0.014	-0.000	-0.079
x		87.415%	-0.097	-0.097	83.649%	-0.021	-0.027	-0.000	-0.072
σ		1.046%	0.014	0.020	0.870%	0.010	0.013	0.000	0.012
%RSD		1.197	14.400	20.370	1.041	46.110	46.690	21.790	17.230
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:02	85.011%	-2.758	-0.474	-0.489	0.000	-0.029	85.017%	84.389%
2	16:31:09	85.372%	-2.946	-0.467	-0.489	0.000	-0.004	86.277%	85.481%
3	16:31:17	84.652%	-2.944	-0.474	-0.451	0.000	-0.004	86.923%	86.513%
x		85.012%	-2.883	-0.472	-0.477	0.000	-0.012	86.072%	85.461%
σ		0.360%	0.108	0.004	0.022	0.000	0.015	0.969%	1.062%
%RSD		0.424	3.745	0.846	4.676	0.000	120.600	1.126	1.243
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:31:02	0.036	0.047	-0.039	-0.012	-0.015	82.372%		
2	16:31:09	0.044	0.055	-0.029	-0.018	-0.025	81.870%		
3	16:31:17	0.029	0.039	-0.044	-0.018	-0.032	82.482%		
x		0.036	0.047	-0.037	-0.016	-0.024	82.241%		
σ		0.008	0.008	0.007	0.003	0.009	0.326%		
%RSD		21.410	17.400	19.770	19.100	36.290	0.397		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:36:08	97.405%	-0.209	-0.353	-0.872	0.000	26.130	-1.561	0.102
2	16:36:15	95.573%	-0.288	-0.303	-0.717	0.000	29.690	0.929	0.325
3	16:36:23	94.379%	-0.231	-0.551	-0.549	0.000	28.950	0.165	0.055
x		95.786%	-0.242	-0.402	-0.713	0.000	28.250	-0.156	0.161
σ		1.524%	0.041	0.131	0.162	0.000	1.877	1.276	0.144
%RSD		1.592	16.790	32.490	22.670	0.000	6.643	818.100	89.700
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:36:08	-0.453	4.085	0.000	4.813	17.970	9.416	91.944%	-0.622
2	16:36:15	-0.441	1.856	0.000	7.623	4.299	8.602	91.471%	-0.440
3	16:36:23	-0.067	1.377	0.000	11.420	4.507	9.575	91.039%	-0.548
x		-0.320	2.439	0.000	7.953	8.925	9.198	91.485%	-0.537
σ		0.220	1.445	0.000	3.317	7.832	0.522	0.452%	0.092
%RSD		68.610	59.260	0.000	41.710	87.760	5.673	0.494	17.070
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:36:08	-0.081	-0.000	0.072	-0.945	-1.623	-0.001	0.067	0.095
2	16:36:15	-0.064	-0.013	0.054	-1.127	-0.911	-0.005	-0.139	0.019
3	16:36:23	-0.111	-0.003	0.057	-1.177	-1.616	-0.005	0.050	0.061
x		-0.086	-0.006	0.061	-1.083	-1.383	-0.004	-0.008	0.058
σ		0.024	0.007	0.010	0.122	0.409	0.002	0.115	0.038
%RSD		27.790	126.300	16.200	11.260	29.560	66.350	1499.000	65.620
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:36:08	-0.031	0.086	0.468	-0.187	0.205	-1.064	0.000	0.001
2	16:36:15	0.056	0.204	0.392	-0.167	0.248	1.246	0.000	0.006
3	16:36:23	0.058	0.511	0.176	-0.172	0.154	0.202	0.000	0.042
x		0.028	0.267	0.345	-0.175	0.202	0.128	0.000	0.016
σ		0.051	0.220	0.151	0.011	0.047	1.157	0.000	0.023
%RSD		183.600	82.170	43.870	6.072	23.430	902.900	0.000	140.000
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:36:08	86.562%	-0.127	-0.147	83.208%	-0.018	-0.034	-0.000	-0.068
2	16:36:15	89.387%	-0.098	-0.129	82.865%	-0.037	-0.024	-0.000	-0.068
3	16:36:23	87.985%	-0.187	-0.138	83.266%	-0.033	-0.034	-0.000	-0.079
x		87.978%	-0.137	-0.138	83.113%	-0.029	-0.031	-0.000	-0.072
σ		1.413%	0.046	0.009	0.217%	0.010	0.006	0.000	0.006
%RSD		1.606	33.270	6.644	0.261	33.990	19.160	45.780	8.671
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:36:08	83.764%	-2.977	-0.481	-0.470	0.000	-0.029	84.206%	81.884%
2	16:36:15	85.107%	-2.758	-0.474	-0.451	0.000	-0.004	85.563%	85.551%
3	16:36:23	84.816%	-3.073	-0.481	-0.431	0.000	0.022	85.521%	84.198%
x		84.562%	-2.936	-0.479	-0.451	0.000	-0.004	85.097%	83.878%
σ		0.706%	0.161	0.004	0.019	0.000	0.026	0.771%	1.854%
%RSD		0.835	5.488	0.836	4.259	0.000	725.700	0.906	2.211
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:36:08	-0.013	0.005	-0.023	-0.022	-0.031	79.736%		
2	16:36:15	0.003	0.001	-0.033	-0.017	-0.019	79.704%		
3	16:36:23	0.007	0.001	-0.004	-0.012	-0.025	80.486%		
x		-0.001	0.002	-0.020	-0.017	-0.025	79.975%		
σ		0.010	0.002	0.015	0.005	0.006	0.442%		
%RSD		892.000	83.200	72.190	31.460	23.780	0.553		

LCS 180-139163/2-A 4/27/2015 4:42:08 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	16:41:16	89.377%	45.090	915.900	932.200	0.000	42340.000	39350.000	40180.000
2	16:41:24	86.853%	46.630	950.500	969.800	0.000	43350.000	40530.000	40990.000
3	16:41:31	87.487%	47.530	961.900	975.600	0.000	42330.000	40510.000	40960.000
x		87.906%	46.420	942.800	959.200	0.000	42680.000	40130.000	40710.000
σ		1.313%	1.231	23.960	23.560	0.000	586.000	676.400	459.600
%RSD		1.494	2.651	2.541	2.456	0.000	1.373	1.685	1.129

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:16	1724.000	8617.000	0.000	44030.000	43410.000	40800.000	78.414%	877.900
2	16:41:24	1751.000	8631.000	0.000	43730.000	42750.000	41340.000	78.620%	884.900
3	16:41:31	1703.000	8788.000	0.000	44110.000	44630.000	41910.000	78.732%	912.500
x		1726.000	8678.000	0.000	43960.000	43590.000	41350.000	78.589%	891.800
σ		24.040	94.810	0.000	203.500	954.200	554.800	0.161%	18.280
%RSD		1.393	1.092	0.000	0.463	2.189	1.342	0.206	2.050

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:16	457.500	184.500	425.600	920.000	1083.000	464.500	464.900	233.600
2	16:41:24	452.200	185.300	428.900	916.500	1061.000	453.000	455.800	228.700
3	16:41:31	457.200	186.700	435.600	919.800	1043.000	453.800	464.000	231.200
x		455.600	185.500	430.000	918.800	1062.000	457.100	461.500	231.200
σ		2.996	1.118	5.119	1.943	19.930	6.434	5.005	2.415
%RSD		0.658	0.603	1.190	0.211	1.876	1.407	1.084	1.045

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:16	235.600	458.800	454.800	37.890	8.852	9.506	0.000	946.700
2	16:41:24	236.400	457.200	455.100	38.730	9.734	9.750	0.000	940.700
3	16:41:31	230.600	456.200	466.800	38.340	8.849	11.320	0.000	946.000
x		234.200	457.400	458.900	38.320	9.145	10.190	0.000	944.500
σ		3.132	1.305	6.845	0.421	0.510	0.986	0.000	3.280
%RSD		1.337	0.285	1.492	1.098	5.578	9.668	0.000	0.347

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:16	74.197%	981.200	999.500	68.739%	47.740	48.130	49.210	91.260
2	16:41:24	76.366%	965.400	996.400	69.596%	47.750	47.530	47.840	88.040
3	16:41:31	76.695%	980.800	999.900	70.061%	47.790	48.380	49.920	90.530
x		75.753%	975.800	998.600	69.466%	47.760	48.010	48.990	89.940
σ		1.358%	9.006	1.960	0.671%	0.027	0.440	1.056	1.691
%RSD		1.792	0.923	0.196	0.966	0.057	0.917	2.155	1.880

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:16	70.207%	1881.000	476.700	465.400	1821.000	1857.000	76.460%	76.484%
2	16:41:24	71.660%	1891.000	473.200	463.000	1843.000	1865.000	78.450%	78.131%
3	16:41:31	72.371%	1896.000	468.300	460.900	1815.000	1860.000	79.668%	78.278%
x		71.412%	1889.000	472.700	463.100	1827.000	1860.000	78.192%	77.631%
σ		1.103%	7.515	4.182	2.268	14.580	3.997	1.619%	0.996%
%RSD		1.545	0.398	0.885	0.490	0.798	0.215	2.071	1.283

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:16	50.000	49.100	20.130	20.090	20.070	68.348%
2	16:41:24	49.700	49.850	20.200	21.280	20.490	69.637%
3	16:41:31	50.070	49.660	20.290	20.540	20.030	70.891%
x		49.920	49.530	20.200	20.630	20.200	69.625%
σ		0.198	0.393	0.080	0.604	0.251	1.272%
%RSD		0.396	0.793	0.397	2.927	1.243	1.826

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:22	90.027%	-0.296	9.410	11.240	0.000	2481.000	2861.000	2880.000
2	16:46:30	91.065%	-0.299	10.360	10.480	0.000	2504.000	2843.000	2964.000
3	16:46:38	92.617%	-0.368	9.565	10.700	0.000	2504.000	2905.000	2899.000
x		91.236%	-0.321	9.778	10.810	0.000	2496.000	2870.000	2914.000
σ		1.304%	0.041	0.509	0.393	0.000	13.820	31.690	44.020
%RSD		1.429	12.660	5.207	3.633	0.000	0.554	1.104	1.510
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:22	45.440	2322.000	0.000	965.200	44580.000	42330.000	83.140%	3.065
2	16:46:30	47.860	2382.000	0.000	985.700	45480.000	43700.000	81.897%	2.839
3	16:46:38	43.080	2408.000	0.000	990.500	45400.000	44020.000	81.976%	3.646
x		45.460	2370.000	0.000	980.500	45150.000	43350.000	82.337%	3.183
σ		2.390	44.120	0.000	13.430	500.900	897.900	0.696%	0.416
%RSD		5.257	1.861	0.000	1.370	1.109	2.071	0.845	13.080
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:22	0.775	2.568	6.254	69.740	207.400	0.140	1.482	0.710
2	16:46:30	0.878	2.716	6.197	71.270	207.800	0.123	1.071	0.548
3	16:46:38	0.647	2.499	6.144	71.430	218.300	0.114	1.205	0.578
x		0.767	2.595	6.198	70.810	211.100	0.126	1.253	0.612
σ		0.116	0.111	0.055	0.932	6.176	0.013	0.210	0.086
%RSD		15.070	4.265	0.893	1.316	2.925	10.710	16.720	14.000
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:22	0.832	3.763	3.557	0.330	0.067	4.151	0.000	178.700
2	16:46:30	0.877	3.409	4.003	0.369	0.012	4.289	0.000	179.000
3	16:46:38	0.692	4.108	3.192	0.369	0.397	4.290	0.000	177.000
x		0.800	3.760	3.584	0.356	0.159	4.244	0.000	178.300
σ		0.096	0.350	0.406	0.023	0.208	0.080	0.000	1.062
%RSD		12.050	9.295	11.330	6.343	131.500	1.882	0.000	0.596
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:22	77.836%	2.942	2.950	72.629%	-0.032	-0.033	-0.000	0.006
2	16:46:30	78.679%	2.686	2.288	73.586%	-0.016	-0.010	-0.000	-0.019
3	16:46:38	78.613%	2.167	1.849	74.532%	-0.037	-0.016	-0.000	-0.043
x		78.376%	2.598	2.363	73.582%	-0.028	-0.020	-0.000	-0.019
σ		0.468%	0.395	0.554	0.952%	0.011	0.012	0.000	0.025
%RSD		0.598	15.210	23.460	1.293	39.430	60.440	40.570	131.200
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:22	75.150%	-0.090	-0.360	-0.360	13.310	13.930	79.623%	79.225%
2	16:46:30	75.865%	-0.586	-0.354	-0.382	14.770	13.250	79.419%	79.601%
3	16:46:38	76.937%	-0.983	-0.395	-0.384	11.400	13.880	81.203%	79.848%
x		75.984%	-0.553	-0.370	-0.375	13.160	13.690	80.081%	79.558%
σ		0.899%	0.447	0.022	0.013	1.689	0.375	0.977%	0.314%
%RSD		1.184	80.860	5.941	3.582	12.830	2.738	1.220	0.394
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:46:22	0.051	0.054	0.054	0.069	0.073	73.623%		
2	16:46:30	0.033	0.039	0.058	0.109	0.085	74.660%		
3	16:46:38	0.025	0.027	0.157	0.067	0.096	74.701%		
x		0.036	0.040	0.089	0.082	0.085	74.328%		
σ		0.013	0.014	0.058	0.023	0.012	0.611%		
%RSD		36.360	34.170	65.240	28.470	13.950	0.822		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:26	91.098%	-0.332	0.770	1.801	0.000	566.400	594.700	624.400
2	16:51:34	92.314%	-0.269	1.151	0.830	0.000	521.000	560.300	585.400
3	16:51:42	90.304%	-0.275	2.047	1.726	0.000	535.500	590.900	594.000
x		91.239%	-0.292	1.323	1.452	0.000	541.000	582.000	601.300
σ		1.012%	0.035	0.656	0.540	0.000	23.180	18.890	20.440
%RSD		1.110	12.030	49.600	37.180	0.000	4.284	3.246	3.400

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:26	10.310	464.100	0.000	142.700	8897.000	8162.000	86.260%	0.271
2	16:51:34	8.033	463.300	0.000	138.800	8696.000	8305.000	85.675%	0.045
3	16:51:42	9.342	465.500	0.000	144.000	8827.000	8406.000	84.879%	-0.104
x		9.229	464.300	0.000	141.900	8807.000	8291.000	85.605%	0.071
σ		1.144	1.110	0.000	2.705	102.300	122.300	0.693%	0.189
%RSD		12.390	0.239	0.000	1.907	1.161	1.475	0.810	267.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:26	-0.594	0.684	1.281	13.120	40.090	0.039	0.285	0.186
2	16:51:34	0.397	0.654	1.235	13.580	42.850	0.026	0.382	0.132
3	16:51:42	-0.542	0.694	1.310	13.980	43.410	0.039	0.272	0.082
x		-0.246	0.677	1.275	13.560	42.120	0.035	0.313	0.133
σ		0.558	0.021	0.038	0.432	1.774	0.008	0.060	0.052
%RSD		226.400	3.123	2.979	3.184	4.211	21.810	19.180	39.200

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:26	0.208	0.652	0.833	-0.131	0.116	2.441	0.000	33.930
2	16:51:34	0.059	0.527	0.754	-0.091	0.225	3.045	0.000	35.540
3	16:51:42	0.170	0.445	0.694	-0.108	-0.044	0.730	0.000	35.020
x		0.146	0.541	0.760	-0.110	0.099	2.072	0.000	34.830
σ		0.077	0.104	0.070	0.020	0.135	1.201	0.000	0.822
%RSD		52.840	19.190	9.153	18.310	136.400	57.950	0.000	2.359

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:26	81.264%	0.207	0.461	75.949%	-0.027	-0.005	-0.000	-0.079
2	16:51:34	80.096%	0.242	0.268	76.089%	-0.017	-0.039	-0.000	-0.067
3	16:51:42	80.965%	0.191	0.369	76.066%	-0.022	-0.044	-0.000	-0.032
x		80.775%	0.213	0.366	76.035%	-0.022	-0.030	-0.000	-0.059
σ		0.607%	0.027	0.096	0.075%	0.005	0.021	0.000	0.024
%RSD		0.752	12.440	26.340	0.099	23.920	71.630	56.190	41.030

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:26	77.882%	-2.405	-0.457	-0.353	2.960	2.873	80.834%	79.180%
2	16:51:34	78.224%	-2.510	-0.465	-0.448	2.578	2.956	82.004%	80.723%
3	16:51:42	77.715%	-2.505	-0.465	-0.479	3.139	2.679	81.089%	79.917%
x		77.940%	-2.473	-0.462	-0.427	2.892	2.836	81.309%	79.940%
σ		0.259%	0.059	0.004	0.065	0.286	0.143	0.615%	0.772%
%RSD		0.333	2.399	0.969	15.330	9.896	5.024	0.757	0.965

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:26	0.004	0.011	-0.016	-0.009	-0.010	74.993%
2	16:51:34	0.004	0.009	-0.001	-0.009	0.001	76.004%
3	16:51:42	-0.000	-0.002	0.004	0.031	0.006	75.967%
x		0.003	0.006	-0.004	0.004	-0.001	75.655%
σ		0.002	0.007	0.010	0.023	0.008	0.574%
%RSD		96.990	109.500	247.600	543.600	1047.000	0.758

CCV 1533080 4/27/2015 4:57:22 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:31	84.496%	96.010	96.110	95.740	0.000	47390.000	45220.000	46540.000
2	16:56:38	84.902%	96.190	93.060	96.070	0.000	48250.000	46280.000	45790.000
3	16:56:46	83.223%	98.190	98.580	97.080	0.000	48790.000	46980.000	47210.000
x		84.207%	96.796%	95.914%	96.296%	0.000	96.293%	92.324%	93.027%
σ		0.876%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.040	1.251	2.880	0.723	0.000	1.471	1.924	1.526

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:31	468.500	4670.000	0.000	46620.000	45270.000	43140.000	82.557%	86.820
2	16:56:38	462.100	4825.000	0.000	47980.000	47270.000	44950.000	80.804%	93.120
3	16:56:46	480.000	4866.000	0.000	48540.000	48630.000	46210.000	79.123%	94.530
x		94.043%	95.742%	0.000	95.427%	94.116%	89.529%	80.828%	91.492%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.717%	n/a
%RSD		1.921	2.165	0.000	2.072	3.593	3.446	2.125	4.487

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:31	89.070	90.400	435.300	23210.000	22650.000	91.900	93.570	91.730
2	16:56:38	92.470	92.420	452.500	23300.000	22550.000	91.160	92.860	91.790
3	16:56:46	96.740	95.300	467.700	23960.000	23440.000	94.130	94.450	94.770
x		92.760%	92.706%	90.367%	93.961%	91.516%	92.396%	93.626%	92.765%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		4.141	2.659	3.589	1.728	2.123	1.672	0.853	1.875

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:31	90.150	90.210	85.120	92.550	92.170	83.800	0.000	92.050
2	16:56:38	91.140	92.890	89.900	93.510	91.280	85.600	0.000	91.740
3	16:56:46	91.770	96.050	90.270	93.320	93.260	91.500	0.000	91.680
x		91.020%	93.048%	88.428%	93.128%	92.239%	86.967%	0.000	91.823%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.902	3.141	3.249	0.546	1.074	4.635	0.000	0.220

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:31	79.673%	90.390	93.310	73.111%	95.000	95.190	93.880	98.730
2	16:56:38	80.635%	94.310	93.140	73.609%	93.030	93.970	94.560	97.420
3	16:56:46	81.179%	92.670	96.010	74.403%	93.030	93.270	95.840	97.200
x		80.496%	92.457%	94.151%	73.708%	93.688%	94.144%	94.761%	97.782%
σ		0.763%	n/a	n/a	0.652%	n/a	n/a	n/a	n/a
%RSD		0.948	2.130	1.711	0.884	1.212	1.035	1.049	0.849

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:31	72.464%	91.410	95.280	93.410	95.100	94.220	78.978%	79.660%
2	16:56:38	73.069%	94.720	96.080	93.700	100.300	95.070	81.557%	81.166%
3	16:56:46	74.452%	93.140	95.280	95.150	89.190	91.380	81.281%	81.244%
x		73.328%	93.091%	95.545%	94.083%	94.852%	93.557%	80.605%	80.690%
σ		1.019%	n/a	n/a	n/a	n/a	n/a	1.416%	0.893%
%RSD		1.389	1.779	0.481	0.991	5.840	2.066	1.757	1.107

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:31	96.340	94.140	96.590	96.420	96.430	71.198%
2	16:56:38	94.940	94.360	96.070	97.020	96.400	72.658%
3	16:56:46	95.490	95.090	96.280	96.630	95.940	73.406%
x		95.591%	94.531%	96.312%	96.690%	96.257%	72.421%
σ		n/a	n/a	n/a	n/a	n/a	1.123%
%RSD		0.736	0.526	0.270	0.317	0.286	1.551

CCB6 4/27/2015 5:06:15 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	17:05:24	93.869%	-0.251	-1.031	-0.222	0.000	37.720	4.955	7.301
2	17:05:31	94.771%	-0.211	-0.351	-0.474	0.000	36.450	2.642	5.009
3	17:05:39	94.556%	-0.210	0.145	-0.404	0.000	37.320	8.048	5.378
x		94.399%	-0.224	-0.413	-0.366	0.000	37.160	5.215	5.896
σ		0.471%	0.023	0.590	0.130	0.000	0.646	2.713	1.231
%RSD		0.499	10.470	143.100	35.460	0.000	1.739	52.010	20.870

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:24	0.747	5.937	0.000	3.839	12.950	13.430	90.303%	-0.436
2	17:05:31	0.287	3.063	0.000	-3.603	12.940	12.050	90.327%	-0.510
3	17:05:39	0.529	2.162	0.000	4.737	5.158	11.870	89.717%	-0.545
x		0.521	3.721	0.000	1.657	10.350	12.450	90.115%	-0.497
σ		0.230	1.972	0.000	4.578	4.496	0.853	0.345%	0.056
%RSD		44.130	52.990	0.000	276.200	43.440	6.851	0.383	11.200

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:24	-0.063	-0.005	0.154	9.379	9.868	0.024	-0.017	0.119
2	17:05:31	-0.027	0.021	0.182	9.133	6.521	0.024	0.139	0.050
3	17:05:39	0.010	0.011	0.211	8.272	10.130	-0.001	0.050	-0.006
x		-0.027	0.009	0.183	8.928	8.838	0.016	0.057	0.054
σ		0.037	0.013	0.028	0.581	2.011	0.014	0.078	0.063
%RSD		136.900	143.400	15.600	6.512	22.750	91.100	136.000	115.800

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:24	0.022	0.066	0.087	-0.040	0.207	0.557	0.000	0.032
2	17:05:31	0.086	-0.113	-0.131	-0.114	0.006	0.011	0.000	0.069
3	17:05:39	0.045	0.058	-0.019	-0.054	0.199	-0.062	0.000	0.026
x		0.051	0.003	-0.021	-0.069	0.138	0.169	0.000	0.042
σ		0.032	0.101	0.109	0.039	0.114	0.338	0.000	0.023
%RSD		63.860	3134.000	521.000	56.770	82.650	200.300	0.000	54.850

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:24	86.224%	0.042	0.195	82.460%	-0.023	-0.019	-0.000	0.008
2	17:05:31	86.772%	0.311	0.200	83.751%	-0.009	-0.034	0.026	-0.068
3	17:05:39	90.212%	0.196	0.332	84.250%	-0.028	-0.024	0.026	-0.047
x		87.736%	0.183	0.242	83.487%	-0.020	-0.026	0.017	-0.036
σ		2.161%	0.135	0.077	0.923%	0.010	0.008	0.015	0.039
%RSD		2.463	73.920	31.910	1.106	49.840	30.910	87.510	110.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:24	83.564%	-2.787	-0.316	-0.352	0.042	0.101	85.068%	82.859%
2	17:05:31	84.669%	-2.721	-0.311	-0.218	0.000	0.074	84.489%	84.495%
3	17:05:39	86.039%	-2.763	-0.279	-0.308	0.000	-0.004	86.091%	85.468%
x		84.757%	-2.757	-0.302	-0.293	0.014	0.057	85.216%	84.274%
σ		1.240%	0.033	0.020	0.069	0.024	0.054	0.812%	1.318%
%RSD		1.463	1.211	6.677	23.410	173.200	95.200	0.952	1.564

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:24	0.072	0.087	-0.029	-0.001	-0.025	80.786%
2	17:05:31	0.052	0.083	-0.034	-0.001	-0.010	81.713%
3	17:05:39	0.056	0.065	-0.053	-0.034	-0.033	81.747%
x		0.060	0.079	-0.039	-0.012	-0.023	81.415%
σ		0.011	0.012	0.013	0.019	0.012	0.545%
%RSD		17.930	14.970	33.240	156.600	52.230	0.670

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:10:30	87.637%	45.120	910.600	943.800	0.000	44370.000	42130.000	42590.000
2	17:10:38	87.941%	45.500	931.000	946.600	0.000	42080.000	41110.000	41920.000
3	17:10:46	85.814%	47.130	979.200	996.300	0.000	43980.000	41860.000	42110.000
x		87.131%	45.920	940.300	962.200	0.000	43480.000	41700.000	42200.000
σ		1.151%	1.067	35.230	29.550	0.000	1223.000	527.000	344.100
%RSD		1.321	2.323	3.746	3.071	0.000	2.813	1.264	0.815
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:10:30	1886.000	10820.000	0.000	41240.000	87350.000	90160.000	76.227%	907.600
2	17:10:38	1851.000	11020.000	0.000	42720.000	87640.000	91060.000	77.155%	930.500
3	17:10:46	1866.000	11360.000	0.000	42860.000	88910.000	93510.000	76.156%	941.200
x		1868.000	11070.000	0.000	42270.000	87960.000	91580.000	76.513%	926.400
σ		17.180	272.900	0.000	895.900	831.100	1735.000	0.557%	17.150
%RSD		0.920	2.466	0.000	2.119	0.945	1.894	0.729	1.851
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:10:30	472.000	193.800	436.300	1027.000	1269.000	467.300	468.200	234.200
2	17:10:38	475.100	187.600	442.800	993.200	1247.000	457.200	460.500	237.200
3	17:10:46	477.700	193.400	452.300	1021.000	1257.000	474.500	474.800	233.600
x		474.900	191.600	443.800	1014.000	1257.000	466.300	467.800	235.000
σ		2.812	3.490	8.065	18.040	11.350	8.644	7.181	1.920
%RSD		0.592	1.821	1.817	1.779	0.902	1.854	1.535	0.817
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:10:30	233.700	464.600	469.800	38.930	9.265	7.574	0.000	1118.000
2	17:10:38	232.800	464.100	460.300	39.580	8.851	14.740	0.000	1121.000
3	17:10:46	236.100	465.800	463.500	39.410	10.810	12.000	0.000	1142.000
x		234.200	464.800	464.500	39.310	9.642	11.440	0.000	1127.000
σ		1.732	0.863	4.823	0.339	1.032	3.614	0.000	13.030
%RSD		0.740	0.186	1.038	0.861	10.710	31.600	0.000	1.156
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:10:30	75.430%	993.700	1016.000	67.951%	48.270	47.800	48.970	92.610
2	17:10:38	75.881%	998.700	1012.000	68.336%	46.760	48.180	49.390	88.660
3	17:10:46	75.601%	1003.000	1026.000	68.464%	46.480	47.850	47.750	91.820
x		75.637%	998.400	1018.000	68.250%	47.170	47.940	48.700	91.030
σ		0.227%	4.514	7.312	0.267%	0.963	0.204	0.853	2.091
%RSD		0.300	0.452	0.718	0.391	2.042	0.426	1.752	2.297
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:10:30	70.100%	1938.000	479.900	473.400	1847.000	1864.000	76.816%	75.733%
2	17:10:38	71.696%	1903.000	481.700	469.700	1863.000	1877.000	77.095%	77.184%
3	17:10:46	71.258%	1924.000	488.400	468.600	1854.000	1867.000	78.168%	77.356%
x		71.018%	1922.000	483.400	470.600	1855.000	1869.000	77.360%	76.758%
σ		0.825%	17.430	4.491	2.524	8.221	6.742	0.714%	0.891%
%RSD		1.161	0.907	0.929	0.536	0.443	0.361	0.923	1.161
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:10:30	49.460	49.620	20.060	20.950	20.270	67.677%		
2	17:10:38	50.000	49.530	20.390	21.330	20.520	68.542%		
3	17:10:46	49.250	49.460	20.830	20.910	20.560	69.140%		
x		49.570	49.540	20.430	21.060	20.450	68.453%		
σ		0.385	0.076	0.391	0.234	0.159	0.736%		
%RSD		0.777	0.154	1.913	1.108	0.777	1.075		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:38	82.522%	48.410	975.400	1003.000	0.000	47060.000	44920.000	46090.000
2	17:15:46	85.522%	47.710	949.300	973.600	0.000	47150.000	45920.000	46280.000
3	17:15:53	87.764%	46.840	928.100	980.600	0.000	46310.000	44730.000	44940.000
x		85.269%	47.650	951.000	985.900	0.000	46840.000	45190.000	45770.000
σ		2.630%	0.787	23.710	15.520	0.000	458.800	636.500	727.300
%RSD		3.085	1.651	2.494	1.575	0.000	0.979	1.409	1.589
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:38	1755.000	11140.000	0.000	45720.000	90140.000	93500.000	80.821%	890.900
2	17:15:46	1759.000	11140.000	0.000	46470.000	91800.000	97460.000	79.047%	925.200
3	17:15:53	1761.000	10960.000	0.000	46810.000	93050.000	96360.000	79.744%	917.700
x		1758.000	11080.000	0.000	46330.000	91660.000	95770.000	79.871%	911.300
σ		3.356	103.100	0.000	558.100	1457.000	2044.000	0.894%	18.030
%RSD		0.191	0.930	0.000	1.205	1.590	2.134	1.119	1.979
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:38	441.300	180.200	425.400	946.700	1255.000	441.400	451.500	224.300
2	17:15:46	455.600	182.300	437.200	963.100	1215.000	445.900	453.400	229.900
3	17:15:53	452.400	182.300	441.200	967.300	1191.000	441.300	454.600	224.200
x		449.800	181.600	434.600	959.000	1221.000	442.900	453.200	226.100
σ		7.503	1.205	8.187	10.910	32.370	2.610	1.536	3.229
%RSD		1.668	0.663	1.884	1.138	2.652	0.589	0.339	1.428
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:38	226.800	432.200	438.100	39.200	8.966	10.600	0.000	1131.000
2	17:15:46	226.800	445.900	448.600	37.440	10.130	13.120	0.000	1128.000
3	17:15:53	227.200	439.800	433.300	37.520	10.220	12.440	0.000	1112.000
x		226.900	439.300	440.000	38.050	9.770	12.060	0.000	1124.000
σ		0.243	6.867	7.783	0.993	0.698	1.307	0.000	10.170
%RSD		0.107	1.563	1.769	2.609	7.145	10.840	0.000	0.905
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:38	74.767%	1006.000	1018.000	68.363%	47.190	45.780	47.470	89.750
2	17:15:46	75.737%	992.500	1023.000	69.466%	47.830	47.390	45.960	89.140
3	17:15:53	77.390%	989.000	1016.000	69.965%	45.880	46.860	46.950	88.330
x		75.965%	996.000	1019.000	69.265%	46.970	46.680	46.790	89.070
σ		1.326%	9.175	3.819	0.820%	0.997	0.823	0.765	0.714
%RSD		1.746	0.921	0.375	1.184	2.122	1.763	1.634	0.801
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:38	72.097%	1901.000	470.600	466.800	1844.000	1862.000	77.449%	78.195%
2	17:15:46	72.227%	1905.000	478.300	470.400	1813.000	1880.000	78.774%	78.303%
3	17:15:53	73.106%	1888.000	473.200	463.800	1812.000	1851.000	79.362%	78.884%
x		72.477%	1898.000	474.100	467.000	1823.000	1864.000	78.528%	78.460%
σ		0.549%	8.863	3.919	3.323	18.100	14.230	0.980%	0.371%
%RSD		0.757	0.467	0.827	0.712	0.993	0.763	1.248	0.473
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:15:38	48.810	49.180	20.500	20.570	20.530	69.924%		
2	17:15:46	49.590	49.230	20.070	19.970	20.130	70.556%		
3	17:15:53	49.390	50.150	21.140	20.670	20.540	70.769%		
x		49.260	49.520	20.570	20.400	20.400	70.416%		
σ		0.408	0.544	0.537	0.383	0.232	0.439%		
%RSD		0.827	1.099	2.613	1.879	1.135	0.624		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:46	85.316%	48.050	987.700	1014.000	0.000	53550.000	50230.000	50270.000
2	17:20:53	84.203%	48.620	1015.000	1029.000	0.000	52410.000	49550.000	49750.000
3	17:21:01	86.837%	47.980	973.800	1007.000	0.000	50100.000	47640.000	48550.000
x		85.452%	48.220	992.300	1017.000	0.000	52020.000	49140.000	49520.000
σ		1.322%	0.350	21.200	11.160	0.000	1756.000	1343.000	883.500
%RSD		1.548	0.727	2.136	1.098	0.000	3.376	2.733	1.784

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:46	1878.000	12170.000	0.000	49250.000	91750.000	96300.000	79.561%	996.000
2	17:20:53	1820.000	12340.000	0.000	50310.000	96020.000	98840.000	78.712%	1028.000
3	17:21:01	1806.000	12040.000	0.000	49550.000	93930.000	99330.000	79.304%	1050.000
x		1835.000	12180.000	0.000	49710.000	93900.000	98160.000	79.193%	1025.000
σ		38.210	146.600	0.000	543.500	2132.000	1627.000	0.435%	27.040
%RSD		2.083	1.203	0.000	1.094	2.271	1.657	0.550	2.639

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:46	474.300	190.100	440.900	1003.000	1289.000	474.300	473.000	239.800
2	17:20:53	459.600	185.800	454.500	991.200	1265.000	460.500	461.000	232.300
3	17:21:01	462.500	184.900	455.900	976.900	1288.000	462.200	462.600	232.800
x		465.500	186.900	450.400	990.400	1281.000	465.700	465.500	235.000
σ		7.778	2.774	8.319	13.190	13.770	7.513	6.536	4.181
%RSD		1.671	1.484	1.847	1.332	1.075	1.613	1.404	1.780

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:46	237.300	467.600	466.400	38.340	9.972	10.220	0.000	1142.000
2	17:20:53	226.000	461.900	449.700	38.400	9.246	11.200	0.000	1120.000
3	17:21:01	233.200	455.900	461.500	39.510	10.400	12.170	0.000	1124.000
x		232.200	461.800	459.200	38.750	9.873	11.200	0.000	1129.000
σ		5.746	5.869	8.546	0.660	0.584	0.972	0.000	11.500
%RSD		2.475	1.271	1.861	1.704	5.916	8.680	0.000	1.019

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:46	74.833%	1136.000	1144.000	68.640%	44.290	44.180	49.170	96.560
2	17:20:53	76.699%	1128.000	1148.000	68.281%	45.550	44.230	49.480	96.160
3	17:21:01	75.749%	1126.000	1152.000	68.565%	45.240	45.020	50.230	97.100
x		75.760%	1130.000	1148.000	68.495%	45.030	44.480	49.630	96.600
σ		0.933%	5.111	3.909	0.189%	0.657	0.474	0.544	0.468
%RSD		1.232	0.452	0.341	0.277	1.460	1.066	1.095	0.484

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:46	70.276%	2178.000	539.900	534.000	1893.000	1933.000	76.124%	74.961%
2	17:20:53	70.831%	2190.000	548.400	528.300	1904.000	1933.000	78.420%	78.261%
3	17:21:01	71.610%	2163.000	539.800	528.700	1878.000	1919.000	78.621%	78.161%
x		70.906%	2177.000	542.700	530.300	1892.000	1928.000	77.722%	77.128%
σ		0.670%	13.800	4.916	3.147	12.620	7.980	1.387%	1.877%
%RSD		0.945	0.634	0.906	0.593	0.667	0.414	1.785	2.434

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:46	51.990	50.880	21.030	20.750	20.450	66.920%
2	17:20:53	50.720	51.430	20.210	20.860	20.530	69.559%
3	17:21:01	51.220	49.900	21.160	20.430	20.990	70.215%
x		51.310	50.740	20.800	20.680	20.660	68.898%
σ		0.638	0.774	0.514	0.226	0.293	1.744%
%RSD		1.244	1.525	2.472	1.093	1.420	2.531

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:54	89.786%	-0.285	11.210	12.970	0.000	2310.000	2737.000	2696.000
2	17:26:01	89.428%	-0.272	12.080	13.540	0.000	2325.000	2681.000	2735.000
3	17:26:09	88.610%	-0.202	13.560	12.920	0.000	2377.000	2652.000	2703.000
x		89.275%	-0.253	12.290	13.140	0.000	2337.000	2690.000	2712.000
σ		0.603%	0.045	1.189	0.343	0.000	35.180	43.200	20.680
%RSD		0.675	17.730	9.681	2.611	0.000	1.505	1.606	0.763
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:54	2.863	2419.000	0.000	854.600	39750.000	38460.000	81.687%	2.035
2	17:26:01	3.695	2420.000	0.000	877.400	41190.000	39760.000	79.734%	2.686
3	17:26:09	3.653	2420.000	0.000	867.800	42000.000	40170.000	79.817%	2.058
x		3.404	2420.000	0.000	866.600	40980.000	39460.000	80.413%	2.259
σ		0.469	0.596	0.000	11.430	1140.000	890.400	1.104%	0.369
%RSD		13.770	0.025	0.000	1.319	2.782	2.256	1.373	16.350
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:54	0.512	3.012	3.255	14.350	129.300	0.097	0.920	0.412
2	17:26:01	0.485	3.212	3.280	15.480	146.500	0.093	1.006	0.468
3	17:26:09	1.171	3.265	3.396	14.530	133.600	0.093	0.948	0.514
x		0.723	3.163	3.310	14.790	136.500	0.095	0.958	0.465
σ		0.388	0.134	0.075	0.607	8.934	0.002	0.044	0.051
%RSD		53.730	4.227	2.276	4.107	6.547	2.378	4.548	11.020
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:54	0.844	1.728	1.985	0.419	0.242	3.116	0.000	160.300
2	17:26:01	0.727	1.812	1.598	0.394	0.576	2.257	0.000	160.000
3	17:26:09	0.524	1.642	1.198	0.413	0.069	3.008	0.000	164.000
x		0.698	1.727	1.593	0.409	0.296	2.794	0.000	161.400
σ		0.162	0.085	0.393	0.013	0.258	0.468	0.000	2.255
%RSD		23.180	4.899	24.690	3.160	87.040	16.740	0.000	1.397
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:54	74.914%	3.528	3.331	69.834%	-0.026	-0.026	0.031	-0.003
2	17:26:01	76.940%	2.518	2.469	70.409%	-0.021	-0.027	-0.000	0.007
3	17:26:09	76.637%	2.151	2.375	70.822%	-0.015	-0.039	-0.000	-0.006
x		76.164%	2.732	2.725	70.355%	-0.021	-0.030	0.010	-0.001
σ		1.093%	0.713	0.527	0.496%	0.005	0.007	0.018	0.007
%RSD		1.435	26.100	19.330	0.705	26.410	22.920	175.300	1269.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:54	72.466%	0.988	0.920	0.909	12.150	11.860	77.875%	77.790%
2	17:26:01	73.910%	0.228	0.717	0.346	11.560	13.030	78.372%	76.760%
3	17:26:09	74.706%	-0.494	0.305	0.458	13.010	12.970	78.591%	77.934%
x		73.694%	0.241	0.647	0.571	12.240	12.620	78.279%	77.495%
σ		1.135%	0.741	0.313	0.298	0.730	0.658	0.367%	0.640%
%RSD		1.541	307.900	48.410	52.190	5.959	5.217	0.469	0.826
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:25:54	0.143	0.150	0.014	-0.007	-0.006	71.668%		
2	17:26:01	0.107	0.075	0.002	0.023	0.013	72.722%		
3	17:26:09	0.082	0.066	0.008	0.041	0.020	72.217%		
x		0.111	0.097	0.008	0.019	0.009	72.202%		
σ		0.031	0.047	0.006	0.024	0.013	0.527%		
%RSD		27.740	47.900	76.730	128.400	150.900	0.730		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:00	86.745%	-0.323	8.581	10.550	0.000	3324.000	3135.000	3208.000
2	17:31:07	85.918%	-0.310	8.846	10.120	0.000	3368.000	3214.000	3192.000
3	17:31:15	87.328%	-0.151	7.368	9.361	0.000	3337.000	3205.000	3186.000
x		86.664%	-0.261	8.265	10.010	0.000	3343.000	3184.000	3195.000
σ		0.708%	0.096	0.788	0.602	0.000	22.790	43.500	11.600
%RSD		0.817	36.780	9.534	6.014	0.000	0.682	1.366	0.363

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:00	87.820	2548.000	0.000	1022.000	50610.000	48710.000	81.844%	2.598
2	17:31:07	93.340	2660.000	0.000	1058.000	53040.000	51000.000	79.600%	3.234
3	17:31:15	91.680	2611.000	0.000	1066.000	53710.000	51940.000	79.633%	2.899
x		90.950	2606.000	0.000	1048.000	52450.000	50550.000	80.359%	2.910
σ		2.829	55.950	0.000	23.190	1630.000	1665.000	1.286%	0.318
%RSD		3.110	2.147	0.000	2.212	3.107	3.294	1.601	10.940

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:00	0.381	2.852	10.060	116.400	277.500	0.148	0.472	0.757
2	17:31:07	0.004	3.077	10.060	119.900	270.100	0.118	0.302	0.750
3	17:31:15	0.491	3.096	10.150	119.300	274.100	0.155	0.537	0.832
x		0.292	3.009	10.090	118.500	273.900	0.140	0.437	0.780
σ		0.255	0.136	0.052	1.902	3.707	0.020	0.121	0.046
%RSD		87.480	4.508	0.518	1.604	1.353	14.220	27.710	5.839

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:00	0.975	2.100	2.155	0.557	0.128	2.480	0.000	205.000
2	17:31:07	0.733	2.116	1.699	0.447	0.127	3.738	0.000	206.100
3	17:31:15	0.833	1.848	1.604	0.557	0.126	1.878	0.000	203.200
x		0.847	2.021	1.819	0.520	0.127	2.699	0.000	204.800
σ		0.122	0.150	0.294	0.063	0.001	0.949	0.000	1.476
%RSD		14.340	7.431	16.180	12.180	0.717	35.160	0.000	0.721

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:00	74.790%	0.790	0.759	70.294%	-0.026	-0.038	-0.000	-0.054
2	17:31:07	75.989%	0.655	0.769	70.976%	-0.032	-0.044	-0.000	-0.054
3	17:31:15	76.498%	0.547	0.581	71.021%	-0.026	-0.021	-0.000	-0.066
x		75.759%	0.664	0.703	70.764%	-0.028	-0.035	-0.000	-0.058
σ		0.877%	0.122	0.106	0.407%	0.003	0.012	0.000	0.007
%RSD		1.157	18.360	15.040	0.575	11.550	35.710	36.930	12.370

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:00	73.105%	-1.912	-0.112	-0.124	16.490	14.970	78.855%	77.397%
2	17:31:07	73.878%	-2.018	-0.107	-0.028	17.750	16.840	78.381%	79.529%
3	17:31:15	74.000%	-2.073	-0.254	-0.226	14.630	15.800	79.110%	79.939%
x		73.661%	-2.001	-0.158	-0.126	16.290	15.870	78.782%	78.955%
σ		0.485%	0.082	0.083	0.099	1.568	0.935	0.370%	1.365%
%RSD		0.659	4.090	52.610	78.860	9.627	5.889	0.469	1.729

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:00	0.005	0.015	0.136	0.173	0.172	72.687%
2	17:31:07	-0.017	0.009	0.212	0.134	0.156	73.709%
3	17:31:15	0.004	0.016	0.184	0.192	0.152	74.277%
x		-0.003	0.014	0.177	0.166	0.160	73.558%
σ		0.012	0.004	0.039	0.029	0.011	0.806%
%RSD		470.200	27.040	21.760	17.630	6.691	1.096

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:36:07	84.412%	-0.270	9.056	8.722	0.000	3081.000	2867.000	2960.000
2	17:36:15	87.065%	-0.301	8.007	9.137	0.000	3057.000	2838.000	2860.000
3	17:36:23	86.841%	-0.335	6.893	8.873	0.000	3110.000	3023.000	2977.000
x		86.106%	-0.302	7.985	8.910	0.000	3083.000	2910.000	2932.000
σ		1.471%	0.033	1.082	0.210	0.000	26.350	99.540	63.180
%RSD		1.709	10.770	13.550	2.360	0.000	0.855	3.421	2.155
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:36:07	5.822	2383.000	0.000	875.100	45010.000	44180.000	81.003%	1.484
2	17:36:15	5.600	2409.000	0.000	890.100	47230.000	44840.000	80.714%	0.957
3	17:36:23	5.735	2493.000	0.000	928.400	47830.000	46250.000	78.927%	2.174
x		5.719	2428.000	0.000	897.900	46690.000	45090.000	80.215%	1.538
σ		0.112	57.050	0.000	27.470	1486.000	1060.000	1.125%	0.610
%RSD		1.956	2.349	0.000	3.060	3.183	2.351	1.402	39.670
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:36:07	0.957	2.557	0.618	8.165	154.700	0.056	0.337	0.620
2	17:36:15	0.350	2.783	0.742	7.963	155.300	0.107	0.433	0.701
3	17:36:23	2.316	2.779	0.743	7.727	153.300	0.071	0.699	0.612
x		1.208	2.706	0.701	7.951	154.400	0.078	0.490	0.644
σ		1.007	0.129	0.072	0.219	1.036	0.026	0.188	0.049
%RSD		83.350	4.775	10.250	2.753	0.671	33.750	38.310	7.591
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:36:07	0.889	2.188	1.470	0.292	0.013	4.501	0.000	182.200
2	17:36:15	0.564	2.002	2.417	0.435	0.238	2.068	0.000	179.600
3	17:36:23	0.749	2.521	2.412	0.392	0.070	2.069	0.000	181.700
x		0.734	2.237	2.099	0.373	0.107	2.879	0.000	181.200
σ		0.163	0.263	0.545	0.073	0.117	1.405	0.000	1.368
%RSD		22.220	11.770	25.980	19.720	109.100	48.780	0.000	0.755
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:36:07	75.465%	0.468	0.358	70.238%	-0.015	-0.033	-0.000	-0.066
2	17:36:15	76.657%	0.235	0.410	70.385%	-0.037	-0.039	0.061	-0.054
3	17:36:23	76.583%	0.304	0.244	70.608%	-0.037	-0.027	-0.000	-0.005
x		76.235%	0.336	0.337	70.410%	-0.030	-0.033	0.020	-0.042
σ		0.668%	0.120	0.085	0.186%	0.013	0.006	0.035	0.032
%RSD		0.876	35.750	25.100	0.265	43.340	18.230	174.100	76.800
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:36:07	73.558%	-2.523	-0.228	-0.181	13.660	14.330	78.405%	78.098%
2	17:36:15	74.922%	-2.323	-0.176	-0.153	15.060	13.410	78.858%	79.178%
3	17:36:23	74.480%	-2.358	-0.263	-0.206	14.590	12.710	78.909%	79.083%
x		74.320%	-2.402	-0.222	-0.180	14.440	13.480	78.724%	78.786%
σ		0.696%	0.107	0.044	0.026	0.714	0.815	0.277%	0.598%
%RSD		0.936	4.449	19.590	14.720	4.944	6.040	0.352	0.759
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:36:07	-0.012	0.006	0.109	0.113	0.119	72.551%		
2	17:36:15	0.000	0.015	0.138	0.122	0.120	73.991%		
3	17:36:23	0.000	0.006	0.117	0.193	0.132	73.999%		
x		-0.004	0.009	0.121	0.143	0.124	73.514%		
σ		0.007	0.005	0.015	0.044	0.008	0.834%		
%RSD		177.700	56.360	12.150	30.650	6.099	1.135		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:16	69.396%	-0.145	221.000	231.800	0.000	12650.000	7390.000	7403.000
2	17:41:23	68.327%	-0.095	231.000	239.100	0.000	12790.000	7474.000	7437.000
3	17:41:31	67.530%	-0.180	224.100	238.400	0.000	13280.000	7617.000	7646.000
x		68.418%	-0.140	225.400	236.400	0.000	12910.000	7494.000	7495.000
σ		0.936%	0.043	5.121	3.983	0.000	334.100	114.800	131.600
%RSD		1.368	30.530	2.272	1.685	0.000	2.589	1.532	1.756
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:16	151.700	2914.000	0.000	20270.000	570000.000	577000.000	77.037%	8.454
2	17:41:23	149.600	2919.000	0.000	20800.000	592500.000	592400.000	75.315%	8.267
3	17:41:31	147.300	2861.000	0.000	20690.000	590100.000	596700.000	75.287%	9.285
x		149.500	2898.000	0.000	20590.000	584200.000	588700.000	75.880%	8.669
σ		2.229	32.150	0.000	278.700	12360.000	10350.000	1.003%	0.542
%RSD		1.490	1.110	0.000	1.354	2.115	1.758	1.321	6.252
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:16	0.506	2.233	150.200	493.300	2254.000	1.093	5.074	36.300
2	17:41:23	0.244	2.334	157.800	500.400	2171.000	1.167	4.919	36.290
3	17:41:31	0.585	2.288	158.300	501.500	2135.000	1.164	4.412	35.580
x		0.445	2.285	155.500	498.400	2187.000	1.141	4.802	36.060
σ		0.179	0.051	4.581	4.442	60.950	0.042	0.347	0.417
%RSD		40.150	2.213	2.947	0.891	2.787	3.667	7.215	1.156
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:16	36.150	491.200	502.200	3.883	0.323	161.400	0.000	9409.000
2	17:41:23	36.050	495.800	490.200	3.394	0.193	158.200	0.000	9079.000
3	17:41:31	37.500	486.000	492.300	3.743	0.257	159.400	0.000	9215.000
x		36.570	491.000	494.900	3.674	0.257	159.700	0.000	9234.000
σ		0.812	4.902	6.382	0.252	0.065	1.629	0.000	166.200
%RSD		2.219	0.998	1.290	6.857	25.110	1.020	0.000	1.800
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:16	70.047%	0.416	0.159	62.967%	0.006	-0.005	-0.000	-0.038
2	17:41:23	73.401%	0.229	0.272	63.413%	0.031	0.002	-0.000	-0.011
3	17:41:31	72.055%	0.535	0.309	63.705%	-0.013	-0.012	0.067	0.016
x		71.834%	0.393	0.247	63.362%	0.008	-0.005	0.022	-0.011
σ		1.688%	0.154	0.078	0.372%	0.022	0.007	0.039	0.027
%RSD		2.350	39.210	31.600	0.587	269.700	135.700	173.800	241.900
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:16	66.776%	-2.697	-0.353	-0.296	24.680	24.510	72.759%	73.055%
2	17:41:23	67.316%	-2.320	-0.336	-0.142	25.080	22.870	73.802%	73.329%
3	17:41:31	67.494%	-2.540	-0.248	-0.214	26.170	24.080	73.014%	72.947%
x		67.195%	-2.519	-0.313	-0.217	25.310	23.820	73.191%	73.110%
σ		0.374%	0.189	0.056	0.077	0.773	0.850	0.544%	0.197%
%RSD		0.556	7.521	17.990	35.570	3.052	3.570	0.743	0.269
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:41:16	0.002	0.018	3.505	2.969	3.138	64.531%		
2	17:41:23	0.002	0.006	3.164	3.029	3.219	65.112%		
3	17:41:31	0.011	0.016	3.441	2.886	3.150	65.801%		
x		0.005	0.014	3.370	2.961	3.169	65.148%		
σ		0.005	0.006	0.181	0.072	0.044	0.636%		
%RSD		97.850	48.020	5.374	2.427	1.385	0.976		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:46:23	80.743%	-0.372	8.864	9.651	0.000	3217.000	3119.000	3157.000
2	17:46:31	84.261%	-0.306	8.842	9.994	0.000	3195.000	3201.000	3161.000
3	17:46:39	84.665%	-0.271	7.458	9.721	0.000	3194.000	3060.000	3139.000
x		83.223%	-0.316	8.388	9.789	0.000	3202.000	3127.000	3152.000
σ		2.157%	0.051	0.806	0.181	0.000	12.940	70.710	11.950
%RSD		2.592	16.270	9.604	1.849	0.000	0.404	2.261	0.379
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:46:23	0.814	2468.000	0.000	1013.000	48810.000	47370.000	78.981%	2.003
2	17:46:31	1.545	2455.000	0.000	1036.000	51970.000	49590.000	77.002%	1.772
3	17:46:39	2.017	2416.000	0.000	997.900	51320.000	49940.000	77.411%	1.329
x		1.459	2446.000	0.000	1016.000	50700.000	48960.000	77.798%	1.701
σ		0.606	27.090	0.000	19.390	1664.000	1395.000	1.045%	0.342
%RSD		41.550	1.107	0.000	1.909	3.282	2.849	1.343	20.130
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:46:23	-0.029	1.893	0.998	1.545	165.300	0.048	0.472	2.354
2	17:46:31	0.036	2.240	1.099	1.617	151.600	0.068	0.420	2.215
3	17:46:39	0.145	2.277	1.149	1.610	156.800	0.101	0.356	2.448
x		0.051	2.137	1.082	1.591	157.900	0.072	0.416	2.339
σ		0.088	0.212	0.077	0.040	6.954	0.027	0.058	0.117
%RSD		173.800	9.930	7.129	2.507	4.404	37.430	13.990	5.019
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:46:23	2.521	165.800	168.700	0.440	0.074	7.900	0.000	232.100
2	17:46:31	2.576	175.900	167.100	0.300	0.132	7.553	0.000	234.100
3	17:46:39	2.487	172.100	172.900	0.377	0.015	7.651	0.000	237.800
x		2.528	171.300	169.600	0.372	0.073	7.701	0.000	234.700
σ		0.045	5.104	3.023	0.070	0.059	0.179	0.000	2.890
%RSD		1.784	2.980	1.783	18.900	79.890	2.320	0.000	1.231
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:46:23	73.332%	0.198	0.285	67.907%	-0.032	-0.038	0.000	-0.079
2	17:46:31	73.991%	0.213	0.202	68.406%	-0.032	-0.044	-0.000	-0.066
3	17:46:39	74.371%	0.100	0.183	70.234%	-0.037	-0.032	-0.000	-0.041
x		73.898%	0.170	0.224	68.849%	-0.033	-0.038	-0.000	-0.062
σ		0.526%	0.061	0.054	1.225%	0.003	0.006	0.000	0.019
%RSD		0.712	35.990	24.200	1.780	9.984	15.640	94.720	30.570
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:46:23	70.201%	-2.649	-0.097	-0.178	11.320	10.600	76.130%	76.669%
2	17:46:31	71.511%	-2.685	-0.046	-0.161	10.260	10.470	77.464%	76.910%
3	17:46:39	73.101%	-2.668	-0.145	-0.179	10.020	10.190	78.642%	77.284%
x		71.604%	-2.667	-0.096	-0.173	10.530	10.420	77.412%	76.954%
σ		1.452%	0.018	0.050	0.010	0.695	0.210	1.257%	0.310%
%RSD		2.028	0.691	51.770	5.823	6.594	2.017	1.624	0.402
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:46:23	0.001	-0.001	0.019	0.036	0.009	71.603%		
2	17:46:31	-0.008	-0.003	0.043	0.045	0.023	74.234%		
3	17:46:39	-0.008	-0.005	0.029	0.035	0.029	71.947%		
x		-0.005	-0.003	0.030	0.039	0.020	72.595%		
σ		0.005	0.002	0.012	0.005	0.011	1.430%		
%RSD		97.620	65.400	38.850	13.600	52.410	1.971		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:51:31	82.583%	-0.277	6.839	9.079	0.000	3224.000	2997.000	2984.000
2	17:51:39	82.508%	-0.363	6.206	7.676	0.000	3340.000	3051.000	3043.000
3	17:51:46	84.843%	-0.355	8.216	9.063	0.000	3228.000	2952.000	2997.000
x		83.311%	-0.332	7.087	8.606	0.000	3264.000	3000.000	3008.000
σ		1.327%	0.047	1.028	0.806	0.000	65.680	49.290	31.190
%RSD		1.593	14.290	14.500	9.362	0.000	2.012	1.643	1.037
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:51:31	54.810	2365.000	0.000	975.800	46840.000	44820.000	79.435%	1.528
2	17:51:39	58.360	2370.000	0.000	1008.000	48260.000	46300.000	77.273%	2.408
3	17:51:46	54.930	2402.000	0.000	993.500	47940.000	46530.000	78.466%	2.656
x		56.030	2379.000	0.000	992.300	47680.000	45890.000	78.391%	2.197
σ		2.012	19.900	0.000	15.950	748.100	931.800	1.083%	0.593
%RSD		3.591	0.837	0.000	1.608	1.569	2.031	1.381	26.990
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:51:31	-0.124	2.290	3.189	67.280	231.500	0.100	0.726	27.170
2	17:51:39	0.878	2.557	3.397	70.050	209.000	0.174	0.702	27.720
3	17:51:46	0.741	2.357	3.386	68.460	200.800	0.149	0.696	27.530
x		0.498	2.401	3.324	68.600	213.800	0.141	0.708	27.470
σ		0.543	0.139	0.117	1.388	15.870	0.038	0.016	0.281
%RSD		108.900	5.792	3.512	2.024	7.426	26.920	2.233	1.021
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:51:31	28.580	12.570	12.050	0.380	0.247	3.362	0.000	192.700
2	17:51:39	27.880	12.850	12.980	0.305	0.073	5.860	0.000	195.200
3	17:51:46	27.930	13.070	12.750	0.411	0.015	6.077	0.000	195.200
x		28.130	12.830	12.590	0.365	0.112	5.100	0.000	194.400
σ		0.390	0.249	0.487	0.054	0.121	1.509	0.000	1.465
%RSD		1.386	1.938	3.869	14.810	107.800	29.580	0.000	0.754
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:51:31	74.038%	0.049	0.120	69.212%	-0.037	-0.038	0.031	-0.016
2	17:51:39	73.975%	0.013	0.042	69.132%	-0.037	-0.032	-0.000	-0.016
3	17:51:46	73.347%	0.103	-0.026	69.982%	-0.026	-0.038	-0.000	-0.041
x		73.787%	0.055	0.045	69.442%	-0.034	-0.036	0.010	-0.024
σ		0.382%	0.045	0.073	0.469%	0.007	0.004	0.018	0.014
%RSD		0.518	82.060	162.000	0.676	19.450	9.651	175.900	58.610
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:51:31	72.774%	-2.665	-0.405	-0.366	15.120	14.690	76.037%	77.214%
2	17:51:39	72.661%	-2.584	-0.422	-0.389	14.810	13.530	77.599%	76.929%
3	17:51:46	72.153%	-2.703	-0.388	-0.377	15.100	15.240	77.683%	76.636%
x		72.529%	-2.651	-0.405	-0.378	15.010	14.490	77.106%	76.926%
σ		0.331%	0.061	0.017	0.011	0.174	0.874	0.927%	0.289%
%RSD		0.456	2.303	4.136	2.995	1.159	6.033	1.202	0.376
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:51:31	0.005	0.003	0.239	0.332	0.305	72.332%		
2	17:51:39	-0.004	-0.001	0.332	0.411	0.353	73.162%		
3	17:51:46	-0.012	-0.003	0.328	0.342	0.313	73.887%		
x		-0.004	-0.000	0.300	0.362	0.324	73.127%		
σ		0.009	0.003	0.053	0.043	0.026	0.778%		
%RSD		223.200	580.200	17.550	12.000	7.943	1.064		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:42	84.517%	-0.342	8.572	8.842	0.000	3218.000	2945.000	3047.000
2	17:56:50	84.635%	-0.223	7.227	9.113	0.000	3285.000	2997.000	3028.000
3	17:56:57	85.800%	-0.392	7.937	8.478	0.000	3211.000	3030.000	3047.000
x		84.984%	-0.319	7.912	8.811	0.000	3238.000	2991.000	3041.000
σ		0.709%	0.087	0.673	0.319	0.000	41.370	42.760	11.190
%RSD		0.834	27.250	8.502	3.619	0.000	1.278	1.430	0.368
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:42	5.025	2455.000	0.000	963.500	46940.000	45250.000	79.146%	1.200
2	17:56:50	3.536	2447.000	0.000	971.100	48420.000	46390.000	77.809%	1.703
3	17:56:57	4.721	2424.000	0.000	983.200	49540.000	47530.000	76.891%	1.905
x		4.427	2442.000	0.000	972.600	48300.000	46390.000	77.948%	1.603
σ		0.787	15.720	0.000	9.947	1304.000	1135.000	1.134%	0.363
%RSD		17.770	0.644	0.000	1.023	2.700	2.448	1.455	22.640
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:42	1.357	2.425	1.059	13.180	174.000	0.178	0.396	22.280
2	17:56:50	-0.176	2.335	1.122	13.520	161.700	0.149	0.315	21.160
3	17:56:57	-0.073	2.430	1.110	13.330	167.200	0.228	0.358	21.480
x		0.370	2.397	1.097	13.340	167.600	0.185	0.356	21.640
σ		0.857	0.054	0.034	0.172	6.149	0.040	0.040	0.577
%RSD		231.800	2.250	3.080	1.289	3.669	21.480	11.350	2.666
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:42	21.370	9.321	8.807	0.413	0.195	4.364	0.000	197.000
2	17:56:50	22.430	9.408	10.530	0.311	0.190	4.599	0.000	193.000
3	17:56:57	21.720	11.280	10.990	0.323	0.248	4.626	0.000	192.100
x		21.840	10.000	10.110	0.349	0.211	4.529	0.000	194.000
σ		0.542	1.109	1.152	0.055	0.032	0.144	0.000	2.602
%RSD		2.482	11.090	11.390	15.900	15.300	3.185	0.000	1.341
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:42	71.644%	-0.000	0.058	68.373%	-0.026	-0.038	-0.000	-0.066
2	17:56:50	73.836%	0.178	0.135	68.147%	-0.032	-0.038	-0.000	-0.066
3	17:56:57	74.243%	0.030	0.108	69.370%	-0.032	-0.014	0.031	-0.054
x		73.241%	0.069	0.100	68.630%	-0.030	-0.030	0.010	-0.062
σ		1.398%	0.095	0.039	0.651%	0.003	0.014	0.018	0.007
%RSD		1.909	137.300	39.150	0.948	11.320	46.180	174.900	11.590
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:42	71.196%	-2.697	-0.185	-0.147	14.150	15.100	75.381%	75.526%
2	17:56:50	72.148%	-2.853	-0.206	-0.129	13.790	14.890	76.166%	77.189%
3	17:56:57	72.406%	-2.663	-0.174	-0.153	11.860	13.960	76.687%	77.727%
x		71.916%	-2.738	-0.188	-0.143	13.270	14.650	76.078%	76.814%
σ		0.637%	0.101	0.016	0.012	1.234	0.606	0.658%	1.147%
%RSD		0.886	3.705	8.584	8.740	9.300	4.140	0.865	1.494
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:56:42	-0.012	-0.006	0.036	0.043	0.027	70.921%		
2	17:56:50	-0.017	-0.001	0.046	0.048	0.042	71.670%		
3	17:56:57	-0.004	-0.008	0.041	0.017	0.017	71.607%		
x		-0.011	-0.005	0.041	0.036	0.028	71.399%		
σ		0.007	0.004	0.005	0.016	0.013	0.415%		
%RSD		60.650	73.610	11.900	45.230	44.710	0.582		

CCV 1533080 4/27/2015 6:02:41 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	18:01:48	79.455%	96.130	93.560	99.000	0.000	46160.000	44300.000	44590.000
2	18:01:56	79.713%	96.620	90.930	96.020	0.000	48370.000	45240.000	46260.000
3	18:02:04	80.697%	94.690	94.780	94.290	0.000	48300.000	46460.000	45550.000
x		79.955%	95.815%	93.091%	96.436%	0.000	95.229%	90.668%	90.928%
σ		0.656%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.820	1.045	2.117	2.466	0.000	2.638	2.383	1.846
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:01:48	438.900	4663.000	0.000	46410.000	46430.000	44430.000	77.092%	93.110
2	18:01:56	462.700	4696.000	0.000	46860.000	47000.000	45560.000	75.509%	94.550
3	18:02:04	450.800	4667.000	0.000	47620.000	47590.000	45680.000	74.734%	96.210
x		90.156%	93.504%	0.000	93.929%	94.012%	90.444%	75.778%	94.626%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.202%	n/a
%RSD		2.633	0.381	0.000	1.301	1.238	1.532	1.586	1.637
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:01:48	89.140	91.970	444.300	23070.000	22740.000	89.670	91.330	92.940
2	18:01:56	93.090	93.720	455.900	23460.000	22980.000	93.040	93.320	93.660
3	18:02:04	92.890	94.230	458.500	23810.000	23240.000	92.010	96.150	92.560
x		91.707%	93.309%	90.580%	93.777%	91.947%	91.574%	93.600%	93.052%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.424	1.271	1.663	1.586	1.077	1.887	2.591	0.597
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:01:48	90.290	90.510	87.570	94.190	100.000	93.420	0.000	93.140
2	18:01:56	92.420	93.060	91.850	94.420	90.010	94.740	0.000	92.930
3	18:02:04	91.710	92.440	92.780	94.050	98.330	100.800	0.000	91.020
x		91.476%	92.002%	90.730%	94.221%	96.128%	96.307%	0.000	92.365%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.185	1.447	3.062	0.200	5.582	4.063	0.000	1.263
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:01:48	74.806%	92.760	94.610	69.637%	91.990	94.050	94.800	99.150
2	18:01:56	76.346%	94.050	92.700	70.209%	94.410	96.430	98.450	97.970
3	18:02:04	76.866%	95.450	95.620	70.364%	94.470	95.480	94.830	98.690
x		76.006%	94.085%	94.309%	70.070%	93.625%	95.319%	96.030%	98.605%
σ		1.072%	n/a	n/a	0.383%	n/a	n/a	n/a	n/a
%RSD		1.410	1.429	1.574	0.547	1.509	1.252	2.184	0.607
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:01:48	68.798%	92.920	95.070	95.460	93.560	95.850	77.119%	76.985%
2	18:01:56	69.403%	94.560	94.560	94.800	91.060	92.020	78.165%	77.527%
3	18:02:04	71.049%	92.840	92.350	92.280	92.400	93.310	79.377%	78.951%
x		69.750%	93.437%	93.995%	94.179%	92.339%	93.725%	78.220%	77.821%
σ		1.165%	n/a	n/a	n/a	n/a	n/a	1.130%	1.015%
%RSD		1.670	1.038	1.537	1.784	1.359	2.076	1.444	1.305
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:01:48	97.790	96.610	98.100	97.870	97.300	69.576%		
2	18:01:56	96.710	96.420	99.350	98.770	98.060	70.925%		
3	18:02:04	97.110	97.150	98.000	99.470	97.880	71.279%		
x		97.203%	96.727%	98.480%	98.701%	97.742%	70.593%		
σ		n/a	n/a	n/a	n/a	n/a	0.899%		
%RSD		0.562	0.392	0.764	0.812	0.407	1.273		

CCB7 4/27/2015 6:11:35 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:42	89.934%	-0.296	-0.874	0.068	0.000	46.690	8.988	4.766
2	18:10:49	87.639%	-0.302	0.312	-0.180	0.000	53.030	4.597	7.685
3	18:10:57	89.921%	-0.240	0.009	-0.557	0.000	43.820	5.137	5.848
x		89.165%	-0.279	-0.184	-0.223	0.000	47.850	6.241	6.100
σ		1.321%	0.034	0.616	0.315	0.000	4.713	2.394	1.476
%RSD		1.482	12.310	334.200	140.900	0.000	9.850	38.370	24.190
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:42	-0.013	2.461	0.000	-19.110	20.470	15.580	85.074%	-0.457
2	18:10:49	-0.313	0.933	0.000	-10.960	3.695	19.160	84.317%	-0.612
3	18:10:57	0.247	1.379	0.000	-14.260	8.149	15.240	84.096%	-0.296
x		-0.026	1.591	0.000	-14.780	10.770	16.660	84.495%	-0.455
σ		0.280	0.786	0.000	4.102	8.690	2.171	0.513%	0.158
%RSD		1065.000	49.380	0.000	27.760	80.680	13.030	0.607	34.760
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:42	-0.046	0.035	0.225	10.240	11.580	0.008	0.069	0.075
2	18:10:49	-0.146	0.094	0.209	9.345	12.720	0.008	0.031	0.073
3	18:10:57	-0.193	0.112	0.225	9.151	6.484	0.008	-0.061	0.046
x		-0.128	0.080	0.220	9.580	10.260	0.008	0.013	0.065
σ		0.075	0.040	0.009	0.583	3.318	0.000	0.067	0.016
%RSD		58.170	50.040	4.051	6.086	32.340	0.453	513.600	25.470
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:42	0.088	0.149	-0.018	-0.029	0.118	0.005	0.000	0.069
2	18:10:49	0.154	-0.071	-0.058	-0.054	0.114	2.727	0.000	0.050
3	18:10:57	0.032	0.012	-0.055	-0.036	0.063	0.739	0.000	0.040
x		0.091	0.030	-0.044	-0.040	0.098	1.157	0.000	0.053
σ		0.061	0.112	0.022	0.013	0.031	1.408	0.000	0.015
%RSD		67.000	370.300	50.190	32.880	31.430	121.700	0.000	27.870
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:42	80.138%	0.174	0.172	77.381%	-0.027	0.011	-0.000	-0.056
2	18:10:49	82.724%	0.085	0.154	78.544%	-0.017	-0.023	0.028	-0.022
3	18:10:57	81.812%	0.166	0.164	78.885%	-0.022	-0.023	0.028	-0.067
x		81.558%	0.142	0.163	78.270%	-0.022	-0.012	0.019	-0.048
σ		1.312%	0.049	0.009	0.789%	0.005	0.019	0.016	0.024
%RSD		1.608	34.810	5.375	1.008	22.510	165.700	87.010	48.650
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:42	78.740%	-2.752	-0.351	-0.178	0.089	0.053	81.137%	79.108%
2	18:10:49	80.034%	-2.882	-0.346	-0.265	0.000	0.052	82.088%	80.180%
3	18:10:57	79.501%	-2.744	-0.277	-0.284	0.000	-0.002	82.001%	81.011%
x		79.425%	-2.793	-0.324	-0.242	0.030	0.034	81.742%	80.100%
σ		0.651%	0.078	0.041	0.056	0.051	0.032	0.526%	0.954%
%RSD		0.819	2.783	12.730	23.220	173.200	91.970	0.643	1.191
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:10:42	0.031	0.049	-0.048	-0.016	-0.022	78.497%		
2	18:10:49	0.055	0.077	-0.003	0.006	-0.026	78.428%		
3	18:10:57	0.070	0.061	-0.038	-0.033	-0.026	79.348%		
x		0.052	0.062	-0.029	-0.014	-0.025	78.758%		
σ		0.020	0.014	0.024	0.020	0.002	0.512%		
%RSD		37.590	22.950	80.210	137.400	8.787	0.650		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:47	84.171%	0.007	6.261	8.125	0.000	3221.000	3328.000	3411.000
2	18:15:55	84.812%	-0.068	5.802	7.708	0.000	3282.000	3467.000	3561.000
3	18:16:03	82.764%	0.053	6.577	8.597	0.000	3339.000	3490.000	3566.000
x		83.916%	-0.003	6.213	8.143	0.000	3281.000	3429.000	3512.000
σ		1.047%	0.061	0.390	0.445	0.000	58.840	87.540	88.060
%RSD		1.248	2301.000	6.276	5.461	0.000	1.794	2.553	2.507
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:47	603.000	2805.000	0.000	1058.000	65120.000	63790.000	75.945%	3.731
2	18:15:55	612.800	2892.000	0.000	1094.000	67920.000	66600.000	74.434%	4.669
3	18:16:03	626.900	2944.000	0.000	1095.000	68470.000	67330.000	74.905%	4.015
x		614.200	2881.000	0.000	1082.000	67170.000	65910.000	75.094%	4.138
σ		12.040	70.420	0.000	20.950	1794.000	1870.000	0.773%	0.481
%RSD		1.961	2.445	0.000	1.935	2.671	2.838	1.030	11.630
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:47	1.036	2.811	360.300	1373.000	1546.000	1.277	1.672	653.500
2	18:15:55	1.382	3.075	372.800	1416.000	1584.000	1.505	1.866	666.500
3	18:16:03	-1.166	3.085	378.700	1430.000	1618.000	1.353	1.806	665.200
x		0.417	2.990	370.600	1406.000	1582.000	1.378	1.781	661.700
σ		1.382	0.156	9.370	29.870	35.790	0.116	0.099	7.148
%RSD		331.100	5.209	2.528	2.124	2.262	8.440	5.566	1.080
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:47	652.000	58.750	58.220	0.742	0.190	1.263	0.000	219.000
2	18:15:55	664.500	56.950	60.570	0.823	0.360	3.339	0.000	213.700
3	18:16:03	662.100	59.540	60.450	1.028	0.131	4.090	0.000	218.100
x		659.600	58.420	59.750	0.864	0.227	2.898	0.000	216.900
σ		6.620	1.326	1.324	0.147	0.119	1.464	0.000	2.806
%RSD		1.004	2.271	2.215	17.030	52.310	50.530	0.000	1.294
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:47	74.499%	0.107	0.173	66.832%	0.004	-0.019	-0.000	-0.014
2	18:15:55	76.428%	-0.023	0.044	67.101%	0.021	-0.038	-0.000	-0.053
3	18:16:03	75.275%	0.012	-0.059	68.398%	0.009	-0.032	-0.000	-0.053
x		75.401%	0.032	0.053	67.444%	0.011	-0.030	-0.000	-0.040
σ		0.970%	0.067	0.116	0.837%	0.009	0.010	0.000	0.023
%RSD		1.287	211.600	220.800	1.241	78.470	32.240	6.894	56.430
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:47	70.268%	-2.325	0.210	0.354	31.300	31.130	74.883%	74.430%
2	18:15:55	71.644%	-2.437	0.221	0.168	32.060	31.640	76.022%	75.670%
3	18:16:03	70.901%	-2.403	0.059	-0.044	33.350	29.660	76.630%	76.304%
x		70.938%	-2.388	0.163	0.159	32.240	30.810	75.845%	75.468%
σ		0.689%	0.058	0.090	0.199	1.035	1.027	0.887%	0.953%
%RSD		0.971	2.407	55.360	125.000	3.210	3.332	1.169	1.263
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:15:47	0.051	0.074	15.080	14.700	14.740	68.907%		
2	18:15:55	0.036	0.048	15.510	13.760	14.520	70.358%		
3	18:16:03	0.045	0.055	15.280	14.270	14.670	70.473%		
x		0.044	0.059	15.290	14.240	14.640	69.913%		
σ		0.007	0.013	0.212	0.472	0.110	0.873%		
%RSD		16.680	22.750	1.386	3.314	0.754	1.249		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:52	82.738%	-0.327	5.621	8.584	0.000	3008.000	2787.000	2865.000
2	18:21:00	82.878%	-0.315	6.245	8.023	0.000	3100.000	2895.000	2959.000
3	18:21:08	82.297%	-0.276	7.033	8.968	0.000	3110.000	2942.000	2985.000
x		82.638%	-0.306	6.300	8.525	0.000	3073.000	2875.000	2936.000
σ		0.304%	0.026	0.708	0.475	0.000	56.180	79.370	63.580
%RSD		0.367	8.582	11.230	5.577	0.000	1.828	2.761	2.165

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:52	3.522	2464.000	0.000	861.500	43170.000	41720.000	76.871%	2.338
2	18:21:00	2.897	2468.000	0.000	877.700	43950.000	42820.000	76.197%	1.754
3	18:21:08	3.840	2528.000	0.000	885.400	45780.000	43770.000	75.475%	3.363
x		3.420	2487.000	0.000	874.900	44300.000	42770.000	76.181%	2.485
σ		0.480	35.830	0.000	12.180	1341.000	1030.000	0.698%	0.814
%RSD		14.030	1.441	0.000	1.393	3.027	2.408	0.916	32.760

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:52	-3.103	2.697	2.839	8.773	147.500	0.088	0.447	24.160
2	18:21:00	0.104	2.776	3.003	7.217	134.400	0.108	0.570	24.740
3	18:21:08	1.437	2.999	3.139	7.496	129.900	0.143	0.817	23.700
x		-0.521	2.824	2.993	7.829	137.200	0.113	0.611	24.200
σ		2.334	0.156	0.150	0.829	9.120	0.027	0.188	0.522
%RSD		448.300	5.537	5.016	10.590	6.645	24.240	30.780	2.157

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:52	24.690	13.750	13.150	0.330	0.196	1.348	0.000	185.800
2	18:21:00	24.570	12.920	13.650	0.597	0.311	1.452	0.000	183.300
3	18:21:08	24.310	13.420	13.750	0.473	0.132	0.522	0.000	180.500
x		24.520	13.360	13.520	0.466	0.213	1.107	0.000	183.200
σ		0.197	0.420	0.322	0.134	0.091	0.510	0.000	2.659
%RSD		0.803	3.146	2.381	28.660	42.560	46.040	0.000	1.451

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:52	71.733%	0.127	0.113	68.937%	-0.014	-0.032	-0.000	-0.079
2	18:21:00	73.273%	0.033	-0.036	69.037%	-0.026	-0.032	-0.000	-0.079
3	18:21:08	74.453%	0.173	0.186	69.361%	-0.020	-0.038	0.031	-0.066
x		73.153%	0.111	0.088	69.112%	-0.020	-0.034	0.010	-0.074
σ		1.364%	0.072	0.113	0.222%	0.006	0.004	0.018	0.007
%RSD		1.864	64.580	129.100	0.321	28.660	10.370	175.100	9.727

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:52	70.953%	-2.821	-0.327	-0.295	14.910	12.910	75.950%	75.656%
2	18:21:00	72.548%	-2.691	-0.290	-0.355	13.550	12.840	76.918%	76.763%
3	18:21:08	72.409%	-2.773	-0.364	-0.333	14.050	14.050	77.931%	76.785%
x		71.970%	-2.762	-0.327	-0.328	14.170	13.270	76.933%	76.401%
σ		0.884%	0.065	0.037	0.030	0.689	0.681	0.991%	0.646%
%RSD		1.228	2.363	11.330	9.246	4.864	5.134	1.288	0.845

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:52	0.018	0.003	0.105	0.072	0.091	72.049%
2	18:21:00	-0.004	0.015	0.102	0.040	0.087	73.537%
3	18:21:08	-0.004	0.015	0.043	0.069	0.067	73.747%
x		0.003	0.011	0.084	0.060	0.082	73.111%
σ		0.013	0.007	0.035	0.018	0.013	0.926%
%RSD		382.500	65.000	41.750	29.660	15.630	1.266

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:58	80.087%	-0.320	7.060	7.911	0.000	3364.000	3363.000	3362.000
2	18:26:06	81.578%	-0.299	8.013	8.519	0.000	3297.000	3334.000	3254.000
3	18:26:14	81.588%	-0.336	5.742	7.598	0.000	3379.000	3344.000	3278.000
x		81.085%	-0.319	6.938	8.010	0.000	3347.000	3347.000	3298.000
σ		0.864%	0.019	1.141	0.468	0.000	44.080	14.740	57.180
%RSD		1.065	5.871	16.440	5.844	0.000	1.317	0.440	1.734
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:58	90.610	2449.000	0.000	969.700	52370.000	51580.000	76.626%	2.651
2	18:26:06	86.860	2401.000	0.000	996.100	54330.000	52240.000	76.893%	3.373
3	18:26:14	91.630	2476.000	0.000	1032.000	55610.000	53810.000	75.401%	4.997
x		89.700	2442.000	0.000	999.400	54100.000	52540.000	76.307%	3.674
σ		2.508	38.070	0.000	31.550	1631.000	1145.000	0.796%	1.201
%RSD		2.796	1.559	0.000	3.157	3.015	2.179	1.043	32.700
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:58	1.297	2.962	4.829	88.350	261.600	0.079	0.327	0.572
2	18:26:06	0.865	2.998	5.058	85.760	254.900	0.073	0.404	0.643
3	18:26:14	-0.194	3.094	5.141	89.870	271.100	0.138	0.016	0.734
x		0.656	3.018	5.009	87.990	262.600	0.097	0.249	0.650
σ		0.767	0.068	0.162	2.079	8.155	0.036	0.206	0.081
%RSD		116.900	2.268	3.229	2.363	3.106	36.910	82.650	12.540
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:58	0.718	1.246	1.622	0.511	0.198	3.686	0.000	213.800
2	18:26:06	0.875	2.217	1.991	0.562	0.194	4.017	0.000	212.200
3	18:26:14	0.739	1.706	1.935	0.513	0.133	2.235	0.000	211.000
x		0.777	1.723	1.849	0.528	0.175	3.312	0.000	212.300
σ		0.086	0.486	0.199	0.029	0.037	0.948	0.000	1.399
%RSD		11.010	28.180	10.750	5.458	20.970	28.620	0.000	0.659
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:58	70.989%	-0.054	0.060	67.955%	-0.037	-0.026	-0.000	-0.040
2	18:26:06	72.618%	0.017	0.023	68.027%	-0.020	-0.026	-0.000	-0.066
3	18:26:14	74.123%	0.158	0.054	68.560%	-0.014	-0.032	-0.000	-0.066
x		72.577%	0.040	0.046	68.181%	-0.024	-0.028	-0.000	-0.057
σ		1.567%	0.108	0.020	0.330%	0.012	0.004	0.000	0.015
%RSD		2.160	268.200	43.150	0.485	50.330	12.990	62.390	26.090
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:58	70.456%	-2.720	-0.428	-0.409	14.850	13.760	75.099%	74.051%
2	18:26:06	70.884%	-2.639	-0.378	-0.329	14.970	15.220	75.357%	75.263%
3	18:26:14	71.045%	-2.780	-0.428	-0.341	13.690	14.740	77.086%	76.658%
x		70.795%	-2.713	-0.411	-0.360	14.500	14.570	75.847%	75.324%
σ		0.304%	0.071	0.029	0.043	0.704	0.747	1.081%	1.305%
%RSD		0.430	2.604	7.092	11.930	4.853	5.127	1.425	1.732
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:25:58	0.010	0.008	0.097	0.037	0.065	71.143%		
2	18:26:06	0.001	0.010	0.046	0.060	0.067	71.563%		
3	18:26:14	-0.004	-0.006	0.041	0.061	0.058	71.452%		
x		0.002	0.004	0.061	0.053	0.063	71.386%		
σ		0.007	0.009	0.031	0.014	0.005	0.218%		
%RSD		303.900	223.400	49.880	26.360	7.628	0.305		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:06	82.363%	-0.043	6.865	8.415	0.000	3136.000	3070.000	3073.000
2	18:31:14	86.432%	-0.264	6.939	8.051	0.000	3130.000	3123.000	3090.000
3	18:31:22	79.944%	-0.231	7.492	9.520	0.000	3263.000	3150.000	3140.000
x		82.913%	-0.179	7.099	8.662	0.000	3176.000	3114.000	3101.000
σ		3.279%	0.119	0.343	0.765	0.000	75.050	40.900	35.060
%RSD		3.955	66.580	4.830	8.835	0.000	2.363	1.313	1.131
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:06	6.246	2288.000	0.000	933.800	48290.000	47010.000	77.151%	1.508
2	18:31:14	6.058	2254.000	0.000	946.200	50060.000	48370.000	76.264%	2.449
3	18:31:22	7.001	2338.000	0.000	975.400	51010.000	48970.000	75.466%	2.483
x		6.435	2293.000	0.000	951.800	49780.000	48120.000	76.294%	2.147
σ		0.499	42.110	0.000	21.340	1384.000	1003.000	0.843%	0.553
%RSD		7.754	1.836	0.000	2.242	2.780	2.085	1.105	25.760
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:06	-0.319	3.182	1.271	7.252	162.200	0.997	1.476	1.069
2	18:31:14	1.112	3.609	1.298	7.342	161.200	0.974	1.611	1.100
3	18:31:22	0.617	3.478	1.385	7.280	134.400	1.158	1.454	0.975
x		0.470	3.423	1.318	7.291	152.600	1.043	1.514	1.048
σ		0.727	0.219	0.060	0.046	15.790	0.101	0.085	0.065
%RSD		154.600	6.392	4.534	0.628	10.350	9.633	5.616	6.225
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:06	1.082	2.962	2.346	0.552	0.197	5.184	0.000	203.700
2	18:31:14	0.980	2.733	2.563	0.483	0.077	1.477	0.000	204.100
3	18:31:22	1.030	2.438	2.986	0.679	0.077	4.304	0.000	204.100
x		1.031	2.711	2.632	0.572	0.117	3.655	0.000	204.000
σ		0.051	0.263	0.326	0.099	0.069	1.937	0.000	0.248
%RSD		4.979	9.695	12.370	17.380	59.440	52.990	0.000	0.122
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:06	71.284%	0.003	0.040	66.280%	-0.002	-0.019	0.032	-0.053
2	18:31:14	71.512%	-0.035	0.084	67.020%	-0.031	-0.000	0.130	0.131
3	18:31:22	71.842%	0.020	-0.020	66.690%	-0.002	-0.032	0.064	-0.001
x		71.546%	-0.004	0.035	66.663%	-0.012	-0.017	0.076	0.026
σ		0.281%	0.028	0.052	0.371%	0.017	0.016	0.050	0.095
%RSD		0.392	720.500	149.700	0.556	145.300	92.950	65.990	367.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:06	69.895%	-2.829	-0.171	-0.106	15.700	15.770	74.008%	74.211%
2	18:31:14	69.251%	-2.941	0.012	-0.162	15.230	14.100	74.679%	73.993%
3	18:31:22	70.308%	-2.789	-0.079	-0.074	14.220	14.570	74.599%	74.601%
x		69.818%	-2.853	-0.079	-0.114	15.050	14.820	74.429%	74.269%
σ		0.533%	0.079	0.092	0.045	0.758	0.862	0.366%	0.308%
%RSD		0.763	2.753	115.500	39.310	5.035	5.818	0.492	0.415
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:31:06	0.164	0.110	0.017	-0.024	-0.008	68.592%		
2	18:31:14	0.170	0.108	0.027	-0.018	0.009	69.949%		
3	18:31:22	0.072	0.089	-0.029	0.006	0.000	70.228%		
x		0.135	0.102	0.005	-0.012	0.000	69.590%		
σ		0.055	0.012	0.030	0.016	0.008	0.875%		
%RSD		40.700	11.460	625.100	134.600	1991.000	1.258		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:36:12	81.229%	-0.261	5.780	8.006	0.000	2976.000	3153.000	3178.000
2	18:36:20	79.825%	-0.358	7.176	8.746	0.000	3033.000	3170.000	3175.000
3	18:36:28	80.599%	-0.359	6.340	8.674	0.000	3029.000	3156.000	3196.000
x		80.551%	-0.326	6.432	8.475	0.000	3013.000	3160.000	3183.000
σ		0.703%	0.057	0.703	0.408	0.000	31.960	9.180	11.200
%RSD		0.873	17.340	10.920	4.815	0.000	1.061	0.291	0.352
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:36:12	79.800	2542.000	0.000	958.600	49850.000	47910.000	76.256%	2.493
2	18:36:20	81.610	2616.000	0.000	980.200	51440.000	49630.000	74.065%	3.530
3	18:36:28	80.110	2579.000	0.000	1004.000	52890.000	50470.000	73.439%	1.803
x		80.510	2579.000	0.000	981.000	51390.000	49340.000	74.587%	2.609
σ		0.969	37.140	0.000	22.820	1525.000	1306.000	1.479%	0.870
%RSD		1.203	1.440	0.000	2.327	2.967	2.647	1.984	33.340
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:36:12	1.167	2.939	2.921	78.970	231.000	0.119	0.560	0.577
2	18:36:20	0.407	3.091	3.212	79.760	238.200	0.141	0.565	0.703
3	18:36:28	-0.953	3.059	2.977	81.470	236.100	0.081	0.467	0.629
x		0.207	3.030	3.037	80.070	235.100	0.114	0.530	0.636
σ		1.074	0.080	0.155	1.278	3.673	0.030	0.055	0.063
%RSD		518.700	2.655	5.094	1.596	1.562	26.450	10.430	9.893
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:36:12	0.771	0.584	0.761	0.498	0.078	2.622	0.000	197.500
2	18:36:20	0.677	1.286	1.668	0.406	0.136	3.565	0.000	194.900
3	18:36:28	0.733	1.149	1.123	0.509	0.138	0.769	0.000	193.900
x		0.727	1.006	1.184	0.471	0.118	2.319	0.000	195.400
σ		0.047	0.372	0.456	0.056	0.034	1.422	0.000	1.845
%RSD		6.491	37.010	38.550	11.980	28.830	61.340	0.000	0.944
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:36:12	70.271%	-0.071	0.017	66.526%	-0.014	-0.044	-0.000	-0.079
2	18:36:20	72.695%	-0.074	0.001	67.452%	-0.014	-0.044	-0.000	-0.079
3	18:36:28	71.741%	0.056	-0.113	67.336%	-0.014	-0.032	-0.000	-0.079
x		71.569%	-0.029	-0.032	67.105%	-0.014	-0.040	-0.000	-0.079
σ		1.221%	0.074	0.071	0.505%	0.000	0.007	0.000	0.000
%RSD		1.706	253.000	224.900	0.752	1.295	17.960	74.080	0.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:36:12	69.209%	-2.898	-0.435	-0.408	16.320	16.160	75.183%	74.189%
2	18:36:20	70.261%	-2.916	-0.394	-0.443	15.220	14.890	76.127%	74.817%
3	18:36:28	69.972%	-2.746	-0.419	-0.420	15.840	14.950	76.139%	76.365%
x		69.814%	-2.853	-0.416	-0.424	15.800	15.330	75.816%	75.124%
σ		0.543%	0.094	0.021	0.018	0.554	0.718	0.549%	1.120%
%RSD		0.778	3.277	5.026	4.282	3.505	4.683	0.724	1.490
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:36:12	-0.004	-0.004	0.064	0.043	0.063	71.095%		
2	18:36:20	-0.012	-0.004	0.036	0.055	0.069	71.220%		
3	18:36:28	0.005	-0.001	0.030	0.084	0.052	71.783%		
x		-0.004	-0.003	0.043	0.061	0.061	71.366%		
σ		0.009	0.002	0.018	0.021	0.009	0.367%		
%RSD		238.100	62.560	41.830	35.380	13.930	0.514		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:17	79.859%	-0.345	6.426	7.206	0.000	2904.000	3001.000	3053.000
2	18:41:24	80.097%	-0.422	6.646	6.884	0.000	2844.000	2994.000	3072.000
3	18:41:32	79.210%	-0.421	7.255	6.899	0.000	2897.000	3022.000	3112.000
x		79.722%	-0.396	6.776	6.996	0.000	2882.000	3006.000	3079.000
σ		0.459%	0.044	0.429	0.182	0.000	32.710	14.710	30.030
%RSD		0.576	11.070	6.332	2.595	0.000	1.135	0.489	0.976
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:17	3.433	2391.000	0.000	910.200	47200.000	45210.000	76.026%	2.284
2	18:41:24	4.835	2405.000	0.000	907.500	48430.000	46310.000	75.422%	2.661
3	18:41:32	4.808	2484.000	0.000	956.900	50480.000	47550.000	73.694%	2.966
x		4.359	2427.000	0.000	924.900	48700.000	46360.000	75.047%	2.637
σ		0.801	49.980	0.000	27.800	1662.000	1168.000	1.210%	0.341
%RSD		18.390	2.060	0.000	3.006	3.412	2.519	1.613	12.940
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:17	0.365	4.860	0.673	23.740	165.700	0.050	0.372	0.512
2	18:41:24	0.163	4.788	0.660	22.800	182.900	0.040	0.268	0.503
3	18:41:32	0.015	4.977	0.702	23.720	152.000	0.066	0.319	0.489
x		0.181	4.875	0.678	23.420	166.900	0.052	0.320	0.501
σ		0.176	0.095	0.022	0.534	15.490	0.013	0.052	0.011
%RSD		96.900	1.958	3.174	2.280	9.279	25.400	16.250	2.271
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:17	0.536	1.686	1.974	0.490	-0.044	4.070	0.000	189.500
2	18:41:24	0.427	1.834	2.072	0.473	0.138	3.680	0.000	189.500
3	18:41:32	0.814	2.269	2.502	0.468	0.200	0.761	0.000	189.800
x		0.592	1.930	2.183	0.477	0.098	2.837	0.000	189.600
σ		0.200	0.303	0.281	0.012	0.127	1.808	0.000	0.214
%RSD		33.690	15.720	12.860	2.461	129.000	63.740	0.000	0.113
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:17	70.609%	-0.071	0.017	66.612%	-0.026	-0.038	0.032	-0.079
2	18:41:24	71.485%	-0.128	-0.032	67.165%	-0.008	-0.026	-0.000	-0.053
3	18:41:32	71.128%	-0.035	0.107	67.446%	-0.014	-0.026	-0.000	-0.066
x		71.074%	-0.078	0.031	67.074%	-0.016	-0.030	0.011	-0.066
σ		0.441%	0.047	0.070	0.424%	0.009	0.007	0.019	0.013
%RSD		0.620	59.900	230.400	0.633	56.480	24.180	175.600	19.820
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:17	69.931%	-2.929	-0.171	-0.188	13.030	13.730	74.614%	74.181%
2	18:41:24	69.765%	-2.928	-0.145	-0.094	14.460	11.800	74.182%	74.704%
3	18:41:32	70.279%	-2.944	-0.300	-0.178	15.560	14.750	75.000%	74.322%
x		69.992%	-2.933	-0.205	-0.153	14.350	13.430	74.599%	74.402%
σ		0.262%	0.009	0.083	0.052	1.272	1.496	0.409%	0.271%
%RSD		0.375	0.305	40.530	33.720	8.864	11.140	0.549	0.364
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:41:17	-0.008	0.001	1.643	1.239	1.409	70.690%		
2	18:41:24	-0.012	-0.008	1.450	1.227	1.342	71.720%		
3	18:41:32	-0.008	-0.006	1.608	1.252	1.378	71.731%		
x		-0.009	-0.004	1.567	1.239	1.376	71.380%		
σ		0.003	0.005	0.103	0.012	0.034	0.598%		
%RSD		27.070	110.200	6.548	0.990	2.443	0.838		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:23	78.069%	-0.329	7.573	7.414	0.000	3028.000	3123.000	3109.000
2	18:46:30	78.787%	-0.253	8.317	7.893	0.000	3032.000	3109.000	3145.000
3	18:46:38	78.499%	-0.265	5.325	7.313	0.000	3050.000	3181.000	3143.000
x		78.452%	-0.282	7.071	7.540	0.000	3037.000	3138.000	3132.000
σ		0.361%	0.041	1.558	0.310	0.000	11.930	37.970	20.120
%RSD		0.460	14.380	22.030	4.109	0.000	0.393	1.210	0.642
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:23	92.880	2539.000	0.000	936.400	49900.000	47500.000	74.732%	2.559
2	18:46:30	99.640	2637.000	0.000	955.500	51700.000	49330.000	73.428%	3.115
3	18:46:38	96.990	2608.000	0.000	951.700	51350.000	49760.000	73.426%	1.758
x		96.500	2595.000	0.000	947.900	50980.000	48860.000	73.862%	2.477
σ		3.407	50.600	0.000	10.090	958.400	1200.000	0.754%	0.682
%RSD		3.531	1.950	0.000	1.065	1.880	2.455	1.020	27.540
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:23	-0.150	2.961	4.387	110.500	248.800	0.116	0.293	0.524
2	18:46:30	1.102	3.252	4.508	111.000	279.400	0.097	0.365	0.528
3	18:46:38	0.833	3.356	4.728	110.500	253.900	0.107	0.301	0.511
x		0.595	3.190	4.541	110.700	260.700	0.107	0.320	0.521
σ		0.659	0.205	0.173	0.275	16.380	0.009	0.039	0.009
%RSD		110.700	6.426	3.809	0.248	6.283	8.652	12.360	1.705
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:23	0.665	2.096	2.140	0.394	0.139	4.025	0.000	192.600
2	18:46:30	0.630	1.697	1.915	0.494	0.265	4.262	0.000	196.400
3	18:46:38	0.726	2.572	1.634	0.390	0.018	2.212	0.000	196.000
x		0.674	2.122	1.896	0.426	0.140	3.500	0.000	195.000
σ		0.048	0.438	0.254	0.059	0.123	1.122	0.000	2.099
%RSD		7.166	20.660	13.380	13.770	87.780	32.050	0.000	1.076
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:23	71.179%	-0.052	-0.052	65.062%	-0.025	-0.025	-0.000	-0.026
2	18:46:30	70.202%	-0.070	-0.052	65.748%	-0.007	-0.032	-0.000	-0.079
3	18:46:38	70.209%	-0.088	-0.063	64.961%	-0.019	-0.019	-0.000	-0.066
x		70.530%	-0.070	-0.056	65.257%	-0.017	-0.025	-0.000	-0.057
σ		0.562%	0.018	0.006	0.428%	0.009	0.006	0.000	0.028
%RSD		0.797	26.300	11.370	0.657	52.550	25.430	2.501	48.850
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:23	68.523%	-2.823	-0.399	-0.347	14.990	15.410	71.612%	73.041%
2	18:46:30	68.760%	-2.795	-0.426	-0.395	16.720	15.360	72.729%	72.488%
3	18:46:38	69.465%	-2.856	-0.410	-0.443	15.170	16.110	74.482%	73.423%
x		68.916%	-2.825	-0.412	-0.395	15.630	15.630	72.941%	72.984%
σ		0.490%	0.030	0.013	0.048	0.954	0.420	1.447%	0.470%
%RSD		0.711	1.078	3.253	12.150	6.103	2.686	1.983	0.644
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:46:23	-0.017	-0.008	0.068	0.104	0.103	68.553%		
2	18:46:30	-0.008	-0.010	0.118	0.141	0.106	69.094%		
3	18:46:38	-0.017	-0.010	0.084	0.134	0.109	69.037%		
x		-0.014	-0.009	0.090	0.126	0.106	68.895%		
σ		0.005	0.001	0.025	0.020	0.003	0.297%		
%RSD		38.040	11.910	28.260	15.680	2.726	0.431		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:31	84.234%	-0.258	5.548	6.952	0.000	2753.000	2863.000	2861.000
2	18:51:39	79.777%	-0.294	7.348	7.615	0.000	2885.000	2878.000	2867.000
3	18:51:46	77.730%	-0.380	6.853	8.151	0.000	2950.000	3019.000	3007.000
x		80.580%	-0.311	6.583	7.573	0.000	2863.000	2920.000	2912.000
σ		3.325%	0.063	0.930	0.601	0.000	100.500	85.970	82.660
%RSD		4.127	20.190	14.130	7.933	0.000	3.510	2.944	2.839
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:31	22.450	2424.000	0.000	911.800	47930.000	45600.000	75.265%	1.829
2	18:51:39	22.040	2451.000	0.000	925.200	48050.000	46650.000	74.326%	2.398
3	18:51:46	24.330	2524.000	0.000	921.300	49190.000	47460.000	73.249%	2.761
x		22.940	2466.000	0.000	919.400	48390.000	46570.000	74.280%	2.330
σ		1.220	51.390	0.000	6.901	694.500	931.200	1.009%	0.470
%RSD		5.320	2.084	0.000	0.751	1.435	2.000	1.358	20.170
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:31	2.913	3.049	0.923	20.880	160.800	0.091	0.317	0.447
2	18:51:39	-0.075	3.144	0.977	21.190	176.200	0.162	0.467	0.482
3	18:51:46	-1.875	3.133	1.031	21.200	170.800	0.036	0.322	0.276
x		0.321	3.109	0.977	21.090	169.200	0.096	0.369	0.402
σ		2.418	0.052	0.054	0.184	7.819	0.063	0.085	0.110
%RSD		753.400	1.661	5.531	0.872	4.620	65.770	23.190	27.440
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:31	0.578	1.934	2.117	0.482	0.328	3.383	0.000	188.500
2	18:51:39	0.500	2.590	1.919	0.486	0.141	6.073	0.000	187.700
3	18:51:46	0.407	2.725	3.000	0.479	-0.044	1.773	0.000	187.500
x		0.495	2.417	2.345	0.483	0.142	3.743	0.000	187.900
σ		0.086	0.423	0.576	0.004	0.186	2.173	0.000	0.552
%RSD		17.300	17.510	24.540	0.773	130.900	58.050	0.000	0.294
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:31	69.213%	-0.145	-0.086	64.817%	-0.025	-0.038	-0.000	-0.079
2	18:51:39	69.953%	-0.127	-0.041	66.234%	-0.026	-0.044	-0.000	-0.066
3	18:51:46	70.558%	-0.033	-0.006	66.012%	-0.031	-0.025	-0.000	-0.066
x		69.908%	-0.102	-0.044	65.688%	-0.027	-0.036	-0.000	-0.070
σ		0.674%	0.060	0.040	0.762%	0.003	0.010	0.000	0.007
%RSD		0.964	59.180	91.180	1.160	12.710	26.890	51.540	10.710
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:31	68.550%	-2.895	-0.086	-0.193	13.990	14.310	72.582%	72.208%
2	18:51:39	70.374%	-2.874	-0.097	-0.144	13.680	14.300	75.141%	74.164%
3	18:51:46	69.711%	-2.942	-0.178	-0.198	16.880	14.490	73.861%	74.696%
x		69.545%	-2.904	-0.120	-0.178	14.850	14.370	73.862%	73.689%
σ		0.923%	0.035	0.051	0.030	1.767	0.108	1.279%	1.310%
%RSD		1.328	1.200	41.980	16.910	11.900	0.754	1.732	1.778
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:51:31	-0.012	-0.004	0.028	0.064	0.048	69.291%		
2	18:51:39	0.001	-0.006	0.054	0.068	0.058	70.562%		
3	18:51:46	-0.017	-0.008	0.047	0.061	0.029	71.169%		
x		-0.009	-0.006	0.043	0.064	0.045	70.341%		
σ		0.009	0.002	0.014	0.004	0.015	0.958%		
%RSD		98.560	31.110	31.630	5.569	32.710	1.362		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:37	77.631%	-0.223	8.144	7.219	0.000	2938.000	3048.000	3124.000
2	18:56:45	78.055%	-0.264	7.575	6.972	0.000	2929.000	3074.000	3080.000
3	18:56:52	77.820%	-0.289	7.437	7.358	0.000	2958.000	3080.000	3119.000
x		77.835%	-0.259	7.718	7.183	0.000	2942.000	3067.000	3108.000
σ		0.212%	0.033	0.375	0.196	0.000	14.830	17.350	24.260
%RSD		0.272	12.840	4.854	2.721	0.000	0.504	0.566	0.781
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:37	80.000	2469.000	0.000	911.700	47850.000	46300.000	74.573%	2.566
2	18:56:45	82.360	2515.000	0.000	980.500	50800.000	48370.000	73.000%	4.275
3	18:56:52	88.560	2535.000	0.000	972.900	51590.000	49540.000	72.665%	2.012
x		83.640	2506.000	0.000	955.000	50080.000	48070.000	73.413%	2.951
σ		4.421	33.790	0.000	37.710	1971.000	1639.000	1.019%	1.179
%RSD		5.286	1.348	0.000	3.949	3.936	3.410	1.387	39.970
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:37	-0.135	2.812	3.121	94.550	226.300	0.106	0.339	0.598
2	18:56:45	0.483	2.960	3.286	94.820	254.200	0.108	0.323	0.629
3	18:56:52	-0.287	2.772	3.226	96.260	238.600	0.113	0.130	0.652
x		0.021	2.848	3.211	95.210	239.700	0.109	0.264	0.626
σ		0.408	0.099	0.083	0.917	14.010	0.003	0.116	0.027
%RSD		1986.000	3.467	2.597	0.963	5.844	3.007	44.080	4.347
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:37	0.721	1.375	1.519	0.467	0.080	2.763	0.000	189.200
2	18:56:45	0.679	2.105	0.781	0.422	0.141	3.878	0.000	188.500
3	18:56:52	0.771	1.534	1.200	0.410	0.200	3.592	0.000	189.500
x		0.724	1.671	1.167	0.433	0.140	3.411	0.000	189.100
σ		0.046	0.384	0.370	0.030	0.060	0.579	0.000	0.526
%RSD		6.367	22.980	31.720	6.953	42.910	16.990	0.000	0.278
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:37	69.822%	-0.050	-0.063	65.419%	-0.007	-0.038	-0.000	-0.066
2	18:56:45	70.531%	-0.089	-0.076	66.006%	-0.025	-0.013	-0.000	-0.065
3	18:56:52	71.516%	-0.109	-0.031	66.728%	-0.008	-0.026	0.032	-0.066
x		70.623%	-0.083	-0.057	66.051%	-0.014	-0.025	0.011	-0.066
σ		0.851%	0.030	0.023	0.656%	0.010	0.013	0.019	0.000
%RSD		1.205	36.220	40.840	0.993	75.840	50.250	175.500	0.129
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:37	69.976%	-2.872	-0.444	-0.396	15.160	14.940	72.750%	74.801%
2	18:56:45	68.936%	-2.954	-0.418	-0.396	15.340	15.940	74.952%	75.166%
3	18:56:52	69.358%	-2.870	-0.461	-0.431	13.910	14.770	74.892%	74.560%
x		69.423%	-2.899	-0.441	-0.408	14.800	15.220	74.198%	74.842%
σ		0.523%	0.048	0.022	0.020	0.782	0.632	1.254%	0.305%
%RSD		0.753	1.660	4.955	4.979	5.279	4.156	1.691	0.408
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:56:37	-0.017	-0.010	0.070	0.056	0.041	70.488%		
2	18:56:45	-0.012	-0.008	0.037	0.025	0.039	70.718%		
3	18:56:52	-0.017	-0.008	0.009	0.055	0.058	71.266%		
x		-0.015	-0.009	0.038	0.045	0.046	70.824%		
σ		0.003	0.001	0.031	0.018	0.011	0.400%		
%RSD		16.670	12.060	80.050	39.410	23.270	0.565		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:01:43	77.893%	-0.302	7.087	7.607	0.000	2872.000	2992.000	2991.000
2	19:01:51	76.516%	-0.298	5.971	7.199	0.000	2979.000	3114.000	3108.000
3	19:01:59	78.672%	-0.356	4.634	7.141	0.000	2943.000	3108.000	3115.000
x		77.694%	-0.319	5.897	7.315	0.000	2931.000	3071.000	3071.000
σ		1.092%	0.032	1.228	0.254	0.000	54.650	69.020	69.850
%RSD		1.405	10.060	20.830	3.472	0.000	1.864	2.247	2.274
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:01:43	2.739	2364.000	0.000	907.200	46740.000	45430.000	74.388%	1.458
2	19:01:51	3.575	2430.000	0.000	918.500	48740.000	47080.000	72.166%	2.123
3	19:01:59	3.645	2411.000	0.000	946.300	50200.000	47720.000	71.981%	1.669
x		3.320	2402.000	0.000	924.000	48560.000	46750.000	72.845%	1.750
σ		0.504	34.280	0.000	20.140	1737.000	1183.000	1.339%	0.340
%RSD		15.190	1.427	0.000	2.180	3.577	2.531	1.839	19.440
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:01:43	0.870	2.685	0.497	1.724	168.100	0.082	0.385	0.435
2	19:01:51	-2.874	2.698	0.574	2.078	146.700	0.088	0.177	0.357
3	19:01:59	0.095	3.211	0.499	1.659	161.600	0.057	0.307	0.425
x		-0.637	2.865	0.523	1.820	158.800	0.076	0.289	0.406
σ		1.976	0.300	0.044	0.225	11.000	0.016	0.105	0.043
%RSD		310.400	10.460	8.363	12.370	6.926	21.580	36.330	10.470
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:01:43	0.440	1.481	1.493	0.544	0.081	4.735	0.000	187.900
2	19:01:51	0.557	1.494	1.274	0.451	0.080	2.383	0.000	187.900
3	19:01:59	0.573	1.148	0.858	0.445	0.389	3.275	0.000	187.600
x		0.523	1.374	1.208	0.480	0.183	3.464	0.000	187.800
σ		0.073	0.196	0.322	0.056	0.178	1.187	0.000	0.164
%RSD		13.910	14.280	26.680	11.600	97.170	34.260	0.000	0.087
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:01:43	69.066%	-0.030	0.021	65.366%	-0.007	-0.032	0.000	-0.079
2	19:01:51	70.271%	-0.032	-0.051	65.149%	-0.013	-0.038	0.033	-0.079
3	19:01:59	70.380%	-0.089	-0.064	65.483%	-0.031	-0.025	-0.000	-0.065
x		69.906%	-0.050	-0.031	65.333%	-0.017	-0.032	0.011	-0.074
σ		0.730%	0.034	0.046	0.170%	0.013	0.006	0.019	0.008
%RSD		1.044	66.740	145.300	0.260	73.180	20.370	174.300	10.330
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:01:43	67.320%	-2.993	-0.248	-0.333	14.310	13.470	72.927%	72.667%
2	19:01:51	69.135%	-2.883	-0.175	-0.278	14.700	14.640	72.352%	72.305%
3	19:01:59	68.434%	-2.837	-0.321	-0.312	12.880	14.890	73.439%	73.705%
x		68.296%	-2.904	-0.248	-0.308	13.960	14.340	72.906%	72.893%
σ		0.915%	0.080	0.073	0.028	0.960	0.758	0.544%	0.727%
%RSD		1.340	2.765	29.410	9.136	6.876	5.287	0.746	0.997
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:01:43	-0.012	-0.006	0.006	0.027	0.008	68.217%		
2	19:01:51	-0.012	-0.012	0.028	-0.024	-0.000	69.130%		
3	19:01:59	-0.008	-0.012	-0.017	-0.012	-0.005	68.831%		
x		-0.011	-0.010	0.006	-0.003	0.001	68.726%		
σ		0.003	0.003	0.023	0.027	0.007	0.465%		
%RSD		24.340	33.440	408.900	935.400	863.600	0.677		

CCV 1533080 4/27/2015 7:07:44 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:50	76.239%	94.190	90.350	93.700	0.000	47280.000	45060.000	45340.000
2	19:06:57	75.425%	96.980	94.420	92.670	0.000	47870.000	45820.000	45670.000
3	19:07:05	75.030%	98.600	97.930	98.330	0.000	49190.000	46810.000	47070.000
x		75.565%	96.591%	94.233%	94.902%	0.000	96.233%	91.790%	92.061%
σ		0.616%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.815	2.306	4.029	3.179	0.000	2.035	1.919	1.998

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:50	446.400	4562.000	0.000	46070.000	46260.000	43900.000	72.546%	91.160
2	19:06:57	463.000	4660.000	0.000	46550.000	47450.000	45310.000	71.303%	93.410
3	19:07:05	461.300	4718.000	0.000	47950.000	47680.000	46790.000	70.025%	96.410
x		91.373%	92.940%	0.000	93.715%	94.263%	90.669%	71.291%	93.662%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.260%	n/a
%RSD		1.997	1.693	0.000	2.086	1.619	3.189	1.768	2.814

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:50	89.850	89.980	444.200	23510.000	22440.000	92.890	94.270	90.930
2	19:06:57	92.010	92.890	459.000	23470.000	23150.000	94.230	92.640	91.130
3	19:07:05	95.340	96.590	466.900	24340.000	24020.000	94.750	96.910	94.530
x		92.401%	93.153%	91.343%	95.090%	92.817%	93.957%	94.605%	92.195%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.994	3.560	2.527	2.070	3.426	1.020	2.273	2.193

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:50	89.620	91.600	94.200	92.770	96.070	98.440	0.000	93.920
2	19:06:57	93.470	95.380	87.430	92.290	93.580	97.690	0.000	92.470
3	19:07:05	92.670	96.330	95.200	95.020	96.160	94.930	0.000	94.080
x		91.920%	94.438%	92.280%	93.363%	95.270%	97.023%	0.000	93.490%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.210	2.649	4.580	1.563	1.533	1.904	0.000	0.949

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:50	70.702%	94.570	93.020	66.171%	93.560	93.280	95.270	97.890
2	19:06:57	72.571%	93.710	93.220	66.673%	93.660	95.010	95.610	99.070
3	19:07:05	72.684%	92.600	94.800	67.668%	93.160	92.820	101.000	98.540
x		71.986%	93.625%	93.682%	66.838%	93.462%	93.704%	97.298%	98.501%
σ		1.113%	n/a	n/a	0.762%	n/a	n/a	n/a	n/a
%RSD		1.546	1.051	1.043	1.140	0.281	1.234	3.311	0.598

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:50	65.730%	93.330	94.900	92.890	94.860	89.510	73.460%	74.272%
2	19:06:57	66.562%	93.120	96.360	94.110	94.130	93.400	74.119%	74.120%
3	19:07:05	66.372%	95.650	98.140	95.810	92.710	96.160	74.964%	74.316%
x		66.221%	94.036%	96.465%	94.274%	93.903%	93.023%	74.181%	74.236%
σ		0.436%	n/a	n/a	n/a	n/a	n/a	0.754%	0.103%
%RSD		0.658	1.493	1.679	1.557	1.164	3.590	1.016	0.139

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:50	95.740	96.680	99.060	96.960	97.600	66.980%
2	19:06:57	97.640	97.520	99.870	98.770	98.330	67.783%
3	19:07:05	99.280	97.440	99.930	101.500	99.780	67.597%
x		97.551%	97.213%	99.621%	99.060%	98.574%	67.453%
σ		n/a	n/a	n/a	n/a	n/a	0.420%
%RSD		1.815	0.476	0.491	2.281	1.126	0.623

CCB8 4/27/2015 7:16:40 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:47	82.482%	-0.240	-0.528	-0.658	0.000	34.550	7.510	5.699
2	19:15:55	84.474%	-0.222	-0.428	-0.505	0.000	35.710	8.874	7.673
3	19:16:03	84.227%	-0.318	-0.420	-0.357	0.000	37.130	9.850	6.620
x		83.728%	-0.260	-0.459	-0.507	0.000	35.800	8.745	6.664
σ		1.086%	0.051	0.060	0.151	0.000	1.291	1.176	0.988
%RSD		1.297	19.520	13.060	29.770	0.000	3.606	13.440	14.820

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:47	0.154	6.129	0.000	-21.260	35.430	18.260	80.276%	-0.234
2	19:15:55	0.649	3.149	0.000	-12.870	-2.534	22.430	78.789%	-0.562
3	19:16:03	0.271	2.747	0.000	-18.330	20.790	19.550	78.579%	-0.561
x		0.358	4.008	0.000	-17.490	17.900	20.080	79.215%	-0.452
σ		0.259	1.848	0.000	4.262	19.150	2.134	0.925%	0.189
%RSD		72.380	46.100	0.000	24.370	107.000	10.630	1.168	41.830

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:47	-0.065	0.070	0.141	11.060	11.140	0.014	-0.074	0.081
2	19:15:55	-0.157	0.111	0.263	10.310	11.800	0.014	0.106	0.139
3	19:16:03	0.010	0.069	0.173	10.340	8.002	0.019	0.144	0.014
x		-0.071	0.083	0.192	10.570	10.320	0.015	0.059	0.078
σ		0.084	0.024	0.064	0.425	2.032	0.003	0.116	0.062
%RSD		118.300	28.930	33.080	4.020	19.690	18.040	198.400	79.820

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:47	0.040	0.059	-0.110	-0.057	-0.044	3.204	0.000	0.083
2	19:15:55	0.101	-0.108	-0.217	-0.103	0.013	2.469	0.000	0.066
3	19:16:03	0.115	-0.023	-0.108	-0.033	0.124	-3.017	0.000	0.071
x		0.085	-0.024	-0.145	-0.065	0.031	0.885	0.000	0.073
σ		0.040	0.084	0.062	0.036	0.085	3.400	0.000	0.009
%RSD		46.570	349.500	42.780	54.890	274.100	384.000	0.000	11.900

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:47	77.782%	0.137	0.102	73.916%	-0.016	-0.039	0.030	-0.067
2	19:15:55	77.212%	0.222	0.102	74.398%	-0.011	-0.016	-0.000	-0.067
3	19:16:03	78.178%	0.152	0.079	74.413%	-0.011	-0.016	-0.000	-0.079
x		77.724%	0.170	0.094	74.242%	-0.012	-0.023	0.010	-0.071
σ		0.486%	0.046	0.013	0.283%	0.003	0.013	0.017	0.007
%RSD		0.625	26.770	13.840	0.381	23.860	56.180	176.400	9.896

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:47	74.422%	-2.875	-0.214	-0.238	0.188	0.057	77.416%	77.059%
2	19:15:55	75.349%	-2.827	-0.329	-0.263	0.046	0.056	79.113%	77.483%
3	19:16:03	76.399%	-2.857	-0.346	-0.340	0.000	-0.001	78.915%	78.092%
x		75.390%	-2.853	-0.296	-0.280	0.078	0.037	78.481%	77.545%
σ		0.989%	0.025	0.072	0.053	0.098	0.033	0.928%	0.519%
%RSD		1.312	0.864	24.290	19.050	125.500	89.010	1.182	0.669

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:47	0.073	0.084	-0.032	-0.015	-0.022	76.593%
2	19:15:55	0.081	0.067	-0.032	-0.015	-0.014	76.435%
3	19:16:03	0.053	0.057	-0.042	0.008	-0.027	76.514%
x		0.069	0.070	-0.035	-0.008	-0.021	76.514%
σ		0.015	0.014	0.006	0.013	0.006	0.079%
%RSD		21.420	19.980	16.750	172.600	30.250	0.103

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:55	81.521%	-0.287	5.100	7.608	0.000	3233.000	3126.000	3090.000
2	19:21:03	81.024%	-0.260	5.965	7.841	0.000	3198.000	3133.000	3107.000
3	19:21:10	79.431%	-0.230	6.227	7.032	0.000	3146.000	3047.000	3108.000
x		80.659%	-0.259	5.764	7.494	0.000	3193.000	3102.000	3102.000
σ		1.092%	0.028	0.590	0.417	0.000	43.890	47.430	10.310
%RSD		1.353	11.010	10.240	5.564	0.000	1.375	1.529	0.332

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:55	72.380	2404.000	0.000	1002.000	49020.000	47670.000	71.214%	3.421
2	19:21:03	78.700	2488.000	0.000	1005.000	51210.000	49030.000	71.584%	3.399
3	19:21:10	80.710	2501.000	0.000	1015.000	51010.000	49460.000	71.032%	3.432
x		77.260	2464.000	0.000	1007.000	50420.000	48720.000	71.277%	3.417
σ		4.344	52.750	0.000	6.983	1213.000	935.300	0.281%	0.016
%RSD		5.623	2.141	0.000	0.693	2.405	1.920	0.394	0.478

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:55	0.209	2.375	5.600	88.180	253.400	0.132	0.250	0.671
2	19:21:03	-0.197	2.388	5.706	87.700	247.800	0.063	0.292	0.884
3	19:21:10	-0.261	2.717	5.570	86.970	221.800	0.058	0.289	0.737
x		-0.083	2.493	5.625	87.620	241.000	0.084	0.277	0.764
σ		0.255	0.194	0.071	0.608	16.870	0.041	0.024	0.109
%RSD		306.200	7.775	1.270	0.693	7.001	49.050	8.557	14.260

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:55	0.768	2.661	2.875	0.328	0.147	1.063	0.000	194.700
2	19:21:03	0.864	3.587	3.196	0.520	0.464	0.221	0.000	198.500
3	19:21:10	0.837	3.602	3.768	0.519	0.266	2.493	0.000	198.100
x		0.823	3.283	3.280	0.455	0.292	1.259	0.000	197.100
σ		0.049	0.539	0.452	0.111	0.160	1.149	0.000	2.120
%RSD		6.008	16.410	13.790	24.320	54.770	91.250	0.000	1.076

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:55	68.205%	0.031	0.206	64.223%	-0.025	-0.005	-0.000	-0.065
2	19:21:03	68.151%	0.068	0.228	64.878%	-0.025	-0.031	-0.000	-0.038
3	19:21:10	70.458%	0.140	0.188	64.791%	-0.007	-0.038	0.033	-0.052
x		68.938%	0.080	0.207	64.631%	-0.019	-0.025	0.011	-0.052
σ		1.317%	0.055	0.020	0.355%	0.011	0.017	0.019	0.014
%RSD		1.910	69.530	9.707	0.550	55.090	69.570	174.800	26.270

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:55	67.458%	-2.466	-0.142	-0.141	16.230	15.350	71.857%	71.807%
2	19:21:03	67.029%	-2.728	-0.238	-0.163	16.650	15.420	72.325%	73.406%
3	19:21:10	67.673%	-2.732	-0.205	-0.190	14.830	14.970	72.888%	72.670%
x		67.387%	-2.642	-0.195	-0.165	15.900	15.250	72.357%	72.628%
σ		0.328%	0.152	0.049	0.025	0.953	0.241	0.516%	0.800%
%RSD		0.487	5.754	25.100	15.100	5.995	1.580	0.713	1.102

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:55	0.093	0.079	0.249	0.171	0.164	67.561%
2	19:21:03	0.043	0.068	0.151	0.119	0.137	67.335%
3	19:21:10	0.028	0.037	0.128	0.133	0.144	69.672%
x		0.055	0.061	0.176	0.141	0.148	68.189%
σ		0.034	0.022	0.064	0.027	0.014	1.289%
%RSD		62.600	35.510	36.480	18.950	9.624	1.890

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:03	79.895%	-0.282	6.339	7.345	0.000	3033.000	2906.000	2990.000
2	19:26:10	79.923%	-0.320	5.095	6.890	0.000	3129.000	3009.000	3004.000
3	19:26:18	81.059%	-0.385	6.859	6.858	0.000	3151.000	3037.000	3087.000
x		80.292%	-0.329	6.098	7.031	0.000	3104.000	2984.000	3027.000
σ		0.664%	0.052	0.907	0.273	0.000	62.410	69.260	52.180
%RSD		0.827	15.870	14.870	3.875	0.000	2.011	2.321	1.724
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:03	2.526	2286.000	0.000	912.700	47690.000	44880.000	74.075%	2.947
2	19:26:10	2.197	2327.000	0.000	952.400	49930.000	47170.000	72.313%	3.450
3	19:26:18	2.545	2350.000	0.000	956.000	49850.000	48190.000	72.147%	2.631
x		2.423	2321.000	0.000	940.400	49160.000	46750.000	72.845%	3.009
σ		0.196	32.070	0.000	24.030	1268.000	1693.000	1.069%	0.413
%RSD		8.091	1.382	0.000	2.555	2.580	3.621	1.467	13.730
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:03	1.048	2.765	0.895	3.831	148.900	0.067	0.237	0.446
2	19:26:10	0.215	2.950	0.967	4.364	143.900	0.067	0.304	0.363
3	19:26:18	1.656	2.984	1.056	4.365	158.200	0.108	0.154	0.397
x		0.973	2.899	0.972	4.187	150.300	0.081	0.232	0.402
σ		0.723	0.118	0.081	0.308	7.291	0.024	0.075	0.042
%RSD		74.370	4.065	8.298	7.365	4.850	29.690	32.500	10.360
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:03	0.826	2.023	3.096	0.462	0.206	1.632	0.000	191.900
2	19:26:10	0.554	2.302	2.924	0.474	0.141	4.727	0.000	191.300
3	19:26:18	0.586	2.364	2.694	0.460	0.325	2.720	0.000	191.100
x		0.655	2.230	2.905	0.465	0.224	3.026	0.000	191.400
σ		0.149	0.182	0.202	0.007	0.093	1.570	0.000	0.436
%RSD		22.690	8.161	6.937	1.585	41.620	51.870	0.000	0.228
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:03	68.794%	0.085	0.033	65.344%	-0.037	-0.032	-0.000	-0.052
2	19:26:10	70.748%	0.041	-0.077	66.359%	-0.026	-0.038	-0.000	-0.066
3	19:26:18	70.942%	0.059	-0.042	66.758%	-0.026	-0.032	-0.000	-0.066
x		70.162%	0.062	-0.029	66.154%	-0.029	-0.034	-0.000	-0.061
σ		1.188%	0.022	0.056	0.729%	0.007	0.004	0.000	0.008
%RSD		1.694	35.650	195.900	1.102	23.090	10.800	41.450	12.760
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:03	68.755%	-2.925	-0.122	-0.171	14.740	12.370	73.574%	73.655%
2	19:26:10	69.747%	-2.857	-0.077	-0.118	14.770	15.630	75.252%	74.264%
3	19:26:18	71.090%	-2.890	0.002	-0.317	14.470	13.630	73.481%	74.776%
x		69.864%	-2.891	-0.066	-0.202	14.660	13.880	74.102%	74.232%
σ		1.172%	0.034	0.063	0.103	0.163	1.644	0.997%	0.561%
%RSD		1.677	1.166	95.610	51.110	1.112	11.850	1.345	0.756
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:26:03	0.014	0.007	0.060	0.056	0.053	70.118%		
2	19:26:10	0.005	0.010	0.065	0.050	0.039	70.412%		
3	19:26:18	-0.008	0.001	0.036	0.067	0.035	71.474%		
x		0.004	0.006	0.053	0.058	0.043	70.668%		
σ		0.011	0.005	0.016	0.009	0.009	0.713%		
%RSD		285.200	78.530	29.120	14.800	22.140	1.009		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:10	75.301%	-0.228	57.070	61.790	0.000	147200.000	16710.000	16350.000
2	19:40:18	74.550%	-0.171	62.370	61.010	0.000	147000.000	16260.000	16790.000
3	19:40:26	74.895%	-0.253	60.040	62.400	0.000	149500.000	16540.000	16480.000
x		74.915%	-0.217	59.830	61.740	0.000	147900.000	16510.000	16540.000
σ		0.376%	0.042	2.660	0.699	0.000	1416.000	226.600	227.000
%RSD		0.502	19.510	4.447	1.132	0.000	0.957	1.373	1.372

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:10	2.208	11.010	0.000	4789.000	5416.000	4795.000	75.668%	0.016
2	19:40:18	3.456	9.689	0.000	4953.000	5445.000	4975.000	75.174%	-0.377
3	19:40:26	3.493	7.284	0.000	4896.000	5389.000	5003.000	74.903%	-0.154
x		3.053	9.329	0.000	4879.000	5417.000	4924.000	75.248%	-0.172
σ		0.731	1.891	0.000	83.040	27.890	112.900	0.388%	0.197
%RSD		23.960	20.270	0.000	1.702	0.515	2.292	0.516	114.800

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:10	0.362	0.178	0.220	1.838	20.380	0.049	-0.108	0.186
2	19:40:18	-0.206	0.188	0.197	1.159	11.240	0.074	0.078	0.244
3	19:40:26	-0.086	0.197	0.209	1.550	13.320	0.059	0.014	0.150
x		0.023	0.188	0.209	1.515	14.980	0.061	-0.005	0.193
σ		0.299	0.010	0.012	0.341	4.790	0.013	0.095	0.047
%RSD		1289.000	5.198	5.681	22.490	31.980	20.730	1798.000	24.410

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:10	0.142	0.174	0.226	-0.143	-0.044	10.160	0.000	96.850
2	19:40:18	0.220	0.447	0.176	-0.124	0.192	7.980	0.000	99.400
3	19:40:26	0.199	0.256	0.141	-0.144	0.014	7.577	0.000	97.600
x		0.187	0.293	0.181	-0.137	0.054	8.571	0.000	97.950
σ		0.040	0.140	0.043	0.011	0.123	1.388	0.000	1.310
%RSD		21.540	47.870	23.500	8.123	226.800	16.190	0.000	1.338

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:10	73.766%	0.052	0.149	67.476%	-0.032	-0.032	0.032	-0.079
2	19:40:18	73.824%	0.103	0.244	69.285%	-0.009	-0.032	0.032	-0.040
3	19:40:26	76.560%	0.201	0.159	70.004%	-0.015	-0.014	-0.000	-0.054
x		74.717%	0.119	0.184	68.921%	-0.018	-0.026	0.021	-0.057
σ		1.596%	0.076	0.052	1.302%	0.012	0.010	0.018	0.020
%RSD		2.137	63.570	28.470	1.890	64.510	39.400	86.990	33.950

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:10	71.265%	-2.697	-0.420	-0.398	0.195	0.540	75.183%	74.889%
2	19:40:18	70.763%	-2.750	-0.437	-0.432	0.341	0.211	75.710%	75.144%
3	19:40:26	72.415%	-2.663	-0.438	-0.400	0.382	0.500	76.957%	77.001%
x		71.481%	-2.703	-0.431	-0.410	0.306	0.417	75.950%	75.678%
σ		0.847%	0.044	0.010	0.019	0.098	0.180	0.911%	1.153%
%RSD		1.185	1.613	2.295	4.676	32.190	43.130	1.200	1.523

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:10	0.052	0.083	-0.052	-0.019	-0.035	72.024%
2	19:40:18	0.052	0.046	-0.003	-0.013	-0.021	72.326%
3	19:40:26	0.018	0.031	-0.036	-0.001	-0.021	72.625%
x		0.041	0.054	-0.030	-0.011	-0.026	72.325%
σ		0.020	0.027	0.025	0.009	0.008	0.301%
%RSD		49.320	49.510	81.910	79.720	32.020	0.416

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:18	81.563%	-0.299	9.475	11.770	0.000	28220.000	3115.000	3113.000
2	19:45:26	83.496%	-0.365	8.475	11.870	0.000	28470.000	3143.000	3157.000
3	19:45:34	82.097%	-0.276	9.314	11.410	0.000	29180.000	3200.000	3211.000
x		82.385%	-0.313	9.088	11.680	0.000	28620.000	3152.000	3160.000
σ		0.998%	0.046	0.537	0.244	0.000	497.500	43.540	49.190
%RSD		1.212	14.710	5.909	2.092	0.000	1.738	1.381	1.556
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:18	0.912	6.059	0.000	970.300	1039.000	932.700	82.765%	-0.449
2	19:45:26	0.987	2.956	0.000	1005.000	930.800	983.200	82.009%	-0.325
3	19:45:34	1.488	2.595	0.000	1014.000	1044.000	982.400	80.983%	-0.730
x		1.129	3.870	0.000	996.400	1005.000	966.100	81.919%	-0.502
σ		0.313	1.904	0.000	22.980	64.080	28.940	0.894%	0.208
%RSD		27.750	49.200	0.000	2.306	6.378	2.996	1.092	41.360
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:18	-0.131	0.067	0.108	-0.799	4.359	0.018	0.097	-0.043
2	19:45:26	-0.160	0.055	0.097	-0.891	2.694	-0.000	-0.020	-0.053
3	19:45:34	-0.363	0.060	0.106	-0.845	5.658	0.027	0.040	-0.035
x		-0.218	0.061	0.104	-0.845	4.237	0.015	0.039	-0.044
σ		0.127	0.006	0.006	0.046	1.486	0.014	0.058	0.009
%RSD		58.230	9.590	5.560	5.473	35.070	94.240	149.300	19.740
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:18	0.053	4.247	4.241	-0.187	0.012	3.743	0.000	19.750
2	19:45:26	0.092	3.478	4.364	-0.170	0.011	4.097	0.000	18.850
3	19:45:34	-0.033	4.014	4.043	-0.152	0.067	4.863	0.000	19.200
x		0.037	3.913	4.216	-0.169	0.030	4.234	0.000	19.260
σ		0.064	0.394	0.162	0.017	0.032	0.573	0.000	0.455
%RSD		173.100	10.070	3.843	10.240	106.700	13.520	0.000	2.363
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:18	76.901%	-0.100	-0.152	73.898%	-0.016	-0.027	-0.000	-0.067
2	19:45:26	80.367%	-0.070	-0.101	74.527%	-0.011	-0.022	-0.000	-0.044
3	19:45:34	78.970%	-0.119	-0.153	75.520%	-0.027	-0.028	-0.000	-0.079
x		78.746%	-0.096	-0.135	74.649%	-0.018	-0.026	-0.000	-0.063
σ		1.744%	0.025	0.030	0.818%	0.008	0.003	0.000	0.018
%RSD		2.215	25.920	22.090	1.096	45.500	12.570	37.150	28.200
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:18	76.370%	-2.960	-0.488	-0.425	0.092	0.027	78.795%	78.632%
2	19:45:26	77.973%	-2.939	-0.457	-0.469	0.135	0.109	80.339%	78.507%
3	19:45:34	77.788%	-2.900	-0.449	-0.479	0.180	0.026	80.465%	79.200%
x		77.377%	-2.933	-0.465	-0.458	0.136	0.054	79.867%	78.780%
σ		0.877%	0.030	0.020	0.028	0.044	0.048	0.930%	0.369%
%RSD		1.134	1.038	4.366	6.214	32.540	87.890	1.165	0.468
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:45:18	-0.009	-0.002	-0.037	-0.010	-0.033	77.073%		
2	19:45:26	0.008	-0.003	-0.047	-0.044	-0.039	76.675%		
3	19:45:34	0.004	-0.007	-0.047	-0.021	-0.029	77.304%		
x		0.001	-0.004	-0.044	-0.025	-0.034	77.017%		
σ		0.008	0.003	0.006	0.017	0.005	0.318%		
%RSD		941.200	67.240	13.310	69.240	14.510	0.413		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:24	78.679%	0.713	69.630	72.890	0.000	130200.000	15310.000	15380.000
2	19:50:32	76.667%	0.824	72.910	76.760	0.000	131200.000	15760.000	15460.000
3	19:50:40	77.458%	0.628	75.130	74.200	0.000	131800.000	15700.000	15360.000
x		77.601%	0.722	72.550	74.620	0.000	131100.000	15590.000	15400.000
σ		1.013%	0.099	2.767	1.968	0.000	784.100	245.200	49.460
%RSD		1.306	13.670	3.814	2.637	0.000	0.598	1.573	0.321

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:24	42.090	192.900	0.000	5196.000	5589.000	5052.000	79.284%	17.910
2	19:50:32	42.870	200.300	0.000	5360.000	5522.000	5234.000	77.786%	16.480
3	19:50:40	44.220	198.400	0.000	5363.000	5930.000	5305.000	77.087%	17.200
x		43.060	197.200	0.000	5306.000	5680.000	5197.000	78.052%	17.200
σ		1.078	3.842	0.000	95.720	218.800	130.600	1.122%	0.718
%RSD		2.503	1.948	0.000	1.804	3.852	2.513	1.438	4.172

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:24	8.753	3.723	8.117	17.990	46.040	9.296	9.916	4.288
2	19:50:32	9.592	3.821	8.564	17.930	35.360	9.018	9.104	4.663
3	19:50:40	9.149	3.889	8.797	18.800	42.000	8.801	9.450	4.894
x		9.165	3.811	8.493	18.240	41.130	9.038	9.490	4.615
σ		0.420	0.083	0.345	0.483	5.393	0.248	0.408	0.306
%RSD		4.579	2.187	4.065	2.648	13.110	2.748	4.295	6.623

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:24	5.317	9.152	9.698	0.508	-0.044	4.213	0.000	105.700
2	19:50:32	4.530	9.024	8.432	0.525	0.184	4.772	0.000	102.400
3	19:50:40	4.903	9.988	9.757	0.609	0.184	6.427	0.000	105.600
x		4.917	9.388	9.296	0.547	0.108	5.137	0.000	104.600
σ		0.393	0.523	0.749	0.054	0.131	1.151	0.000	1.900
%RSD		8.000	5.575	8.052	9.916	121.500	22.410	0.000	1.817

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:24	75.019%	17.340	20.210	69.992%	1.020	0.772	0.741	1.605
2	19:50:32	76.746%	19.270	18.750	70.596%	0.885	0.923	0.770	1.542
3	19:50:40	76.983%	18.590	19.220	70.161%	1.014	0.950	0.887	1.670
x		76.249%	18.400	19.390	70.250%	0.973	0.882	0.799	1.605
σ		1.072%	0.980	0.743	0.311%	0.076	0.096	0.077	0.064
%RSD		1.406	5.324	3.832	0.443	7.810	10.910	9.665	3.968

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:24	73.441%	31.070	9.161	8.679	35.970	36.910	76.882%	75.335%
2	19:50:32	73.423%	31.020	8.767	9.106	36.130	35.870	77.728%	76.434%
3	19:50:40	74.437%	31.530	8.667	8.804	34.980	35.940	78.105%	77.101%
x		73.767%	31.210	8.865	8.863	35.690	36.240	77.572%	76.290%
σ		0.580%	0.280	0.261	0.220	0.621	0.579	0.626%	0.892%
%RSD		0.787	0.899	2.946	2.478	1.738	1.597	0.807	1.169

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:24	0.961	0.873	0.343	0.370	0.363	73.179%
2	19:50:32	0.975	0.908	0.331	0.327	0.325	73.329%
3	19:50:40	0.898	0.994	0.384	0.273	0.314	73.316%
x		0.945	0.925	0.353	0.323	0.334	73.275%
σ		0.041	0.062	0.028	0.048	0.026	0.083%
%RSD		4.366	6.683	7.891	15.010	7.719	0.113

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:30	81.157%	0.538	66.020	69.240	0.000	127300.000	14700.000	14840.000
2	19:55:38	81.827%	0.542	66.920	68.570	0.000	124800.000	14970.000	14750.000
3	19:55:46	77.801%	1.131	67.300	72.520	0.000	130000.000	15520.000	15340.000
x		80.262%	0.737	66.750	70.110	0.000	127300.000	15060.000	14980.000
σ		2.157%	0.341	0.654	2.116	0.000	2578.000	415.700	318.300
%RSD		2.688	46.240	0.980	3.018	0.000	2.025	2.760	2.125
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:30	41.310	193.300	0.000	5150.000	5343.000	4958.000	79.220%	15.540
2	19:55:38	39.610	191.400	0.000	5128.000	5460.000	4946.000	78.097%	17.470
3	19:55:46	40.620	198.400	0.000	5218.000	6021.000	5216.000	76.837%	18.210
x		40.510	194.400	0.000	5165.000	5608.000	5040.000	78.051%	17.070
σ		0.853	3.656	0.000	47.150	362.500	152.500	1.192%	1.378
%RSD		2.105	1.881	0.000	0.913	6.464	3.026	1.527	8.070
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:30	9.235	4.092	8.523	18.220	36.290	9.160	9.723	4.342
2	19:55:38	9.195	4.019	8.807	19.510	39.350	9.316	8.290	4.690
3	19:55:46	9.294	3.786	8.822	18.810	30.020	9.445	9.760	4.743
x		9.241	3.966	8.717	18.840	35.220	9.307	9.258	4.592
σ		0.050	0.160	0.168	0.646	4.756	0.142	0.838	0.218
%RSD		0.540	4.030	1.929	3.427	13.500	1.529	9.051	4.745
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:30	4.861	8.549	9.896	0.668	0.128	8.199	0.000	103.000
2	19:55:38	4.290	9.559	9.392	0.596	0.125	8.818	0.000	103.000
3	19:55:46	5.009	9.783	9.165	0.563	0.126	7.139	0.000	102.100
x		4.720	9.297	9.485	0.609	0.126	8.052	0.000	102.700
σ		0.380	0.658	0.374	0.054	0.002	0.849	0.000	0.543
%RSD		8.041	7.073	3.944	8.790	1.304	10.550	0.000	0.529
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:30	75.442%	18.470	19.830	69.681%	0.924	0.873	0.745	1.740
2	19:55:38	77.631%	19.200	19.700	70.462%	0.882	0.800	1.111	1.435
3	19:55:46	77.732%	18.360	19.130	71.447%	0.949	0.780	1.071	1.807
x		76.935%	18.680	19.550	70.530%	0.918	0.817	0.976	1.661
σ		1.294%	0.457	0.372	0.885%	0.034	0.049	0.201	0.198
%RSD		1.682	2.444	1.905	1.255	3.695	5.980	20.560	11.930
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:30	72.952%	31.940	9.153	8.853	36.990	38.050	75.839%	75.030%
2	19:55:38	73.203%	34.040	8.981	9.601	36.060	37.200	76.535%	75.684%
3	19:55:46	73.661%	33.730	8.706	8.692	37.040	39.370	77.311%	78.134%
x		73.272%	33.240	8.947	9.049	36.700	38.210	76.562%	76.283%
σ		0.360%	1.133	0.225	0.485	0.556	1.094	0.736%	1.636%
%RSD		0.491	3.409	2.516	5.364	1.514	2.863	0.962	2.145
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:55:30	0.911	0.879	0.306	0.309	0.345	72.025%		
2	19:55:38	0.815	0.972	0.317	0.400	0.373	72.019%		
3	19:55:46	0.937	0.989	0.401	0.289	0.350	72.302%		
x		0.888	0.947	0.341	0.333	0.356	72.116%		
σ		0.064	0.059	0.052	0.059	0.015	0.161%		
%RSD		7.239	6.225	15.200	17.800	4.163	0.224		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:40	78.543%	0.767	72.110	74.950	0.000	137600.000	16380.000	16050.000
2	20:00:48	76.002%	0.929	72.090	80.560	0.000	143200.000	16780.000	16820.000
3	20:00:56	77.789%	0.844	76.410	76.820	0.000	141100.000	16720.000	17140.000
x		77.445%	0.847	73.540	77.440	0.000	140700.000	16620.000	16670.000
σ		1.305%	0.081	2.487	2.857	0.000	2823.000	217.200	561.000
%RSD		1.685	9.608	3.382	3.690	0.000	2.007	1.307	3.365
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:40	40.570	220.800	0.000	5586.000	5661.000	5419.000	79.701%	18.650
2	20:00:48	41.260	224.900	0.000	5615.000	5768.000	5609.000	78.136%	19.290
3	20:00:56	43.620	217.400	0.000	5666.000	6139.000	5617.000	77.703%	19.660
x		41.820	221.100	0.000	5622.000	5856.000	5549.000	78.513%	19.200
σ		1.598	3.765	0.000	40.620	250.900	112.300	1.051%	0.512
%RSD		3.820	1.703	0.000	0.723	4.284	2.024	1.339	2.666
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:40	9.568	4.024	8.787	18.020	36.030	9.412	9.658	5.000
2	20:00:48	9.713	4.018	8.927	18.230	39.040	9.502	9.413	5.045
3	20:00:56	9.058	4.025	9.019	19.810	34.800	9.460	10.170	5.256
x		9.446	4.022	8.911	18.690	36.620	9.458	9.748	5.100
σ		0.344	0.003	0.117	0.977	2.179	0.045	0.388	0.137
%RSD		3.642	0.085	1.313	5.225	5.950	0.476	3.984	2.679
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:40	5.283	10.880	8.879	0.590	0.127	8.852	0.000	109.900
2	20:00:48	5.403	9.695	10.970	0.661	0.353	8.813	0.000	113.100
3	20:00:56	5.295	10.400	8.400	0.565	0.350	12.510	0.000	109.900
x		5.327	10.330	9.418	0.605	0.277	10.060	0.000	111.000
σ		0.066	0.598	1.369	0.050	0.130	2.124	0.000	1.831
%RSD		1.247	5.790	14.540	8.212	46.830	21.120	0.000	1.650
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:40	76.009%	21.940	22.360	70.298%	0.953	0.708	1.014	1.781
2	20:00:48	76.800%	21.250	22.380	71.492%	0.823	0.679	1.091	1.758
3	20:00:56	77.941%	22.390	23.190	71.964%	0.769	0.824	1.240	1.843
x		76.917%	21.860	22.650	71.251%	0.849	0.737	1.115	1.794
σ		0.972%	0.572	0.469	0.859%	0.095	0.076	0.115	0.044
%RSD		1.263	2.618	2.069	1.205	11.150	10.370	10.310	2.440
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:40	73.829%	39.160	9.879	9.854	37.260	39.080	77.845%	77.068%
2	20:00:48	74.712%	35.870	9.707	10.020	39.000	39.770	77.934%	76.888%
3	20:00:56	74.688%	39.600	9.911	10.270	37.770	40.130	76.981%	78.172%
x		74.410%	38.210	9.832	10.050	38.010	39.660	77.587%	77.376%
σ		0.503%	2.041	0.110	0.208	0.896	0.535	0.526%	0.696%
%RSD		0.676	5.341	1.117	2.071	2.356	1.349	0.678	0.899
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:00:40	1.108	0.894	1.539	1.489	1.534	74.356%		
2	20:00:48	0.970	0.930	1.534	1.572	1.539	74.355%		
3	20:00:56	1.024	1.028	1.626	1.675	1.643	73.869%		
x		1.034	0.951	1.566	1.579	1.572	74.194%		
σ		0.069	0.069	0.052	0.094	0.061	0.281%		
%RSD		6.708	7.296	3.323	5.923	3.905	0.379		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:05:46	79.438%	-0.204	76.840	80.350	0.000	196500.000	22430.000	22200.000
2	20:05:54	78.291%	-0.238	77.510	82.540	0.000	201600.000	22490.000	22440.000
3	20:06:02	79.738%	-0.320	78.530	79.520	0.000	198700.000	22810.000	22550.000
x		79.156%	-0.254	77.630	80.800	0.000	198900.000	22580.000	22390.000
σ		0.764%	0.059	0.852	1.563	0.000	2562.000	201.900	179.100
%RSD		0.965	23.350	1.097	1.934	0.000	1.288	0.894	0.800

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:05:46	1.881	7.285	0.000	6588.000	6829.000	6271.000	79.665%	-0.439
2	20:05:54	0.853	4.685	0.000	6589.000	6704.000	6454.000	77.827%	-0.133
3	20:06:02	1.794	3.161	0.000	6697.000	7049.000	6452.000	77.983%	-0.304
x		1.509	5.044	0.000	6625.000	6861.000	6392.000	78.492%	-0.292
σ		0.570	2.085	0.000	62.860	174.800	105.400	1.019%	0.153
%RSD		37.780	41.340	0.000	0.949	2.548	1.649	1.298	52.480

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:05:46	-0.401	0.137	0.102	-1.000	25.100	0.009	-0.053	0.130
2	20:05:54	-0.273	0.122	0.037	-1.205	22.060	-0.000	-0.131	-0.023
3	20:06:02	-0.216	0.209	0.129	-1.132	24.570	-0.000	-0.052	0.062
x		-0.297	0.156	0.089	-1.113	23.910	0.003	-0.079	0.057
σ		0.095	0.047	0.047	0.104	1.622	0.005	0.045	0.077
%RSD		31.950	30.080	53.220	9.316	6.784	184.400	57.810	135.600

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:05:46	0.071	0.467	0.224	-0.139	0.070	11.920	0.000	128.900
2	20:05:54	0.116	0.210	0.261	-0.110	0.069	12.770	0.000	127.500
3	20:06:02	0.013	0.498	0.592	-0.139	0.013	10.630	0.000	132.300
x		0.067	0.392	0.359	-0.129	0.050	11.770	0.000	129.600
σ		0.052	0.158	0.203	0.017	0.033	1.075	0.000	2.475
%RSD		76.950	40.360	56.410	13.170	64.900	9.130	0.000	1.910

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:05:46	76.478%	0.463	0.444	70.201%	-0.026	-0.038	0.031	-0.029
2	20:05:54	77.902%	0.299	0.350	70.646%	-0.026	-0.033	-0.000	-0.066
3	20:06:02	77.836%	0.348	0.249	71.585%	-0.032	-0.039	-0.000	-0.007
x		77.406%	0.370	0.348	70.811%	-0.028	-0.037	0.010	-0.034
σ		0.804%	0.084	0.098	0.707%	0.003	0.003	0.018	0.030
%RSD		1.039	22.780	28.120	0.998	11.700	9.368	175.600	88.560

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:05:46	73.422%	-1.645	-0.308	-0.423	0.238	0.147	76.145%	76.210%
2	20:05:54	74.648%	-1.088	-0.391	-0.348	0.373	0.057	78.336%	76.993%
3	20:06:02	75.839%	-1.719	-0.416	-0.393	0.139	0.170	78.126%	77.295%
x		74.636%	-1.484	-0.372	-0.388	0.250	0.125	77.536%	76.832%
σ		1.209%	0.345	0.057	0.038	0.117	0.060	1.209%	0.560%
%RSD		1.619	23.240	15.290	9.743	47.010	48.060	1.559	0.729

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:05:46	0.000	0.012	-0.030	-0.026	-0.032	72.597%
2	20:05:54	-0.017	0.010	-0.057	-0.026	-0.032	72.861%
3	20:06:02	0.000	0.002	-0.052	-0.020	-0.033	73.259%
x		-0.005	0.008	-0.046	-0.024	-0.032	72.906%
σ		0.010	0.005	0.014	0.003	0.001	0.333%
%RSD		185.800	61.030	30.660	14.140	2.664	0.457

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:56	78.269%	-0.290	26.650	29.880	0.000	14130.000	50620.000	50930.000
2	20:11:04	78.120%	-0.303	27.890	30.630	0.000	14360.000	51160.000	51950.000
3	20:11:11	78.190%	-0.303	25.580	29.890	0.000	14340.000	50910.000	52000.000
x		78.193%	-0.299	26.700	30.130	0.000	14270.000	50890.000	51630.000
σ		0.074%	0.007	1.157	0.427	0.000	125.900	272.700	604.900
%RSD		0.095	2.445	4.333	1.418	0.000	0.882	0.536	1.172

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:56	1051.000	3674.000	0.000	2358.000	330900.000	337100.000	71.214%	32.250
2	20:11:04	1068.000	3794.000	0.000	2445.000	342800.000	347700.000	69.903%	31.680
3	20:11:11	1066.000	3711.000	0.000	2481.000	347000.000	351000.000	69.826%	33.810
x		1062.000	3726.000	0.000	2428.000	340200.000	345300.000	70.315%	32.580
σ		9.063	61.270	0.000	63.320	8328.000	7305.000	0.780%	1.102
%RSD		0.854	1.644	0.000	2.608	2.448	2.116	1.109	3.384

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:56	4.593	5.486	1392.000	28650.000	28780.000	9.345	10.220	2.638
2	20:11:04	5.899	5.680	1434.000	29120.000	28920.000	9.697	10.570	2.918
3	20:11:11	5.573	5.901	1439.000	29300.000	29650.000	9.801	10.360	2.596
x		5.355	5.689	1422.000	29020.000	29110.000	9.615	10.380	2.717
σ		0.680	0.208	25.880	334.100	466.000	0.239	0.173	0.175
%RSD		12.700	3.653	1.820	1.151	1.601	2.485	1.668	6.444

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:56	3.172	21.290	22.070	5.526	0.084	3.320	0.000	3476.000
2	20:11:04	3.246	20.720	21.070	5.682	0.143	6.130	0.000	3415.000
3	20:11:11	3.323	20.300	22.010	5.946	0.453	2.799	0.000	3438.000
x		3.247	20.770	21.720	5.718	0.227	4.083	0.000	3443.000
σ		0.075	0.496	0.560	0.213	0.198	1.792	0.000	31.110
%RSD		2.316	2.387	2.577	3.718	87.390	43.890	0.000	0.904

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:56	67.751%	0.590	0.777	61.923%	-0.025	-0.024	0.069	0.046
2	20:11:04	70.349%	0.898	0.550	62.712%	-0.006	-0.031	-0.000	-0.037
3	20:11:11	70.682%	0.659	0.651	63.538%	-0.006	-0.031	0.034	-0.023
x		69.594%	0.716	0.659	62.724%	-0.012	-0.029	0.034	-0.005
σ		1.605%	0.162	0.114	0.808%	0.011	0.004	0.035	0.045
%RSD		2.306	22.560	17.290	1.288	87.500	13.770	100.900	934.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:56	65.659%	-1.229	-0.114	-0.205	23.620	21.620	70.285%	70.446%
2	20:11:04	65.571%	-1.604	-0.259	-0.193	24.160	22.500	70.950%	69.949%
3	20:11:11	65.550%	-1.619	-0.150	-0.095	23.850	24.590	71.375%	71.351%
x		65.593%	-1.484	-0.175	-0.164	23.880	22.900	70.870%	70.582%
σ		0.058%	0.221	0.076	0.061	0.276	1.527	0.549%	0.711%
%RSD		0.088	14.890	43.340	36.900	1.154	6.667	0.775	1.007

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:56	0.007	0.029	1.184	1.051	1.082	63.963%
2	20:11:04	0.012	0.039	1.055	1.111	1.068	64.460%
3	20:11:11	0.012	0.026	1.063	1.014	1.089	65.356%
x		0.010	0.031	1.100	1.059	1.080	64.593%
σ		0.003	0.007	0.072	0.049	0.011	0.706%
%RSD		24.650	21.320	6.580	4.604	0.985	1.093

CCV 1533080 4/27/2015 8:16:56 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:16:03	77.625%	95.460	89.790	93.050	0.000	48890.000	47710.000	47900.000
2	20:16:11	77.315%	93.810	99.400	93.880	0.000	49180.000	46110.000	47140.000
3	20:16:19	77.748%	95.330	98.320	97.120	0.000	49230.000	47860.000	48210.000
x		77.563%	94.865%	95.836%	94.685%	0.000	98.198%	94.448%	95.503%
σ		0.223%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.288	0.967	5.495	2.274	0.000	0.376	2.056	1.153
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:16:03	481.100	4680.000	0.000	46640.000	46420.000	44930.000	73.195%	98.610
2	20:16:11	480.300	4677.000	0.000	47550.000	48180.000	46190.000	72.999%	96.600
3	20:16:19	492.600	4787.000	0.000	48720.000	49260.000	46910.000	71.538%	96.400
x		96.931%	94.295%	0.000	95.270%	95.909%	92.015%	72.577%	97.205%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.905%	n/a
%RSD		1.416	1.327	0.000	2.183	2.994	2.181	1.248	1.257
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:16:03	94.440	94.210	453.500	24150.000	23330.000	94.690	97.560	95.700
2	20:16:11	94.990	95.990	465.800	24090.000	23640.000	94.970	92.160	93.380
3	20:16:19	95.650	98.150	473.500	24620.000	24040.000	98.140	96.430	96.790
x		95.024%	96.114%	92.853%	97.147%	94.687%	95.933%	95.384%	95.290%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.639	2.054	2.171	1.184	1.512	1.999	2.984	1.830
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:16:03	96.470	96.870	93.010	98.170	100.700	98.490	0.000	97.400
2	20:16:11	93.950	95.690	90.690	98.220	98.600	109.100	0.000	97.860
3	20:16:19	96.480	95.650	94.760	97.230	93.690	98.830	0.000	95.110
x		95.634%	96.068%	92.819%	97.875%	97.652%	102.127%	0.000	96.794%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.523	0.726	2.198	0.569	3.669	5.887	0.000	1.521
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:16:03	70.231%	95.550	94.230	68.538%	93.890	98.230	94.970	97.730
2	20:16:11	71.713%	95.310	96.310	69.021%	93.300	93.850	92.910	99.330
3	20:16:19	73.387%	94.980	97.230	70.020%	93.990	96.220	95.260	99.030
x		71.777%	95.280%	95.922%	69.193%	93.726%	96.101%	94.380%	98.699%
σ		1.579%	n/a	n/a	0.756%	n/a	n/a	n/a	n/a
%RSD		2.200	0.297	1.603	1.092	0.398	2.282	1.357	0.864
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:16:03	67.854%	93.790	96.600	94.190	93.220	97.730	76.061%	75.357%
2	20:16:11	68.797%	93.450	95.820	95.600	98.220	91.060	76.331%	76.057%
3	20:16:19	68.786%	92.250	97.500	95.220	96.390	92.770	77.188%	77.195%
x		68.479%	93.163%	96.639%	95.003%	95.944%	93.854%	76.527%	76.203%
σ		0.541%	n/a	n/a	n/a	n/a	n/a	0.588%	0.928%
%RSD		0.790	0.866	0.867	0.771	2.636	3.691	0.769	1.217
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:16:03	98.260	95.960	98.300	98.040	98.210	69.407%		
2	20:16:11	96.870	97.290	97.790	98.190	97.930	69.906%		
3	20:16:19	98.290	96.150	97.260	97.480	97.570	70.678%		
x		97.807%	96.468%	97.785%	97.905%	97.904%	69.997%		
σ		n/a	n/a	n/a	n/a	n/a	0.640%		
%RSD		0.830	0.743	0.531	0.380	0.331	0.915		

CCB9 4/27/2015 8:25:55 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	20:25:03	87.419%	-0.325	-0.210	-0.500	0.000	32.830	7.667	10.150
2	20:25:11	85.271%	-0.273	-1.304	-0.777	0.000	32.310	7.434	9.698
3	20:25:18	84.577%	-0.211	-0.118	-0.595	0.000	34.600	9.656	7.898
x		85.756%	-0.269	-0.544	-0.624	0.000	33.250	8.253	9.249
σ		1.481%	0.057	0.660	0.141	0.000	1.197	1.221	1.192
%RSD		1.727	21.190	121.400	22.560	0.000	3.601	14.800	12.890
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:03	1.527	9.191	0.000	8.895	38.230	20.610	82.079%	-0.285
2	20:25:11	0.126	7.252	0.000	2.681	32.180	21.420	81.372%	-0.445
3	20:25:18	1.475	5.868	0.000	12.290	44.550	18.020	80.250%	-0.441
x		1.042	7.437	0.000	7.955	38.320	20.020	81.233%	-0.390
σ		0.794	1.669	0.000	4.872	6.188	1.775	0.922%	0.091
%RSD		76.190	22.440	0.000	61.250	16.150	8.868	1.136	23.300
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:03	-0.001	0.026	0.161	11.350	12.850	0.009	-0.000	-0.007
2	20:25:11	-0.099	0.021	0.280	11.190	11.240	0.013	0.114	0.030
3	20:25:18	-0.003	-0.007	0.273	10.930	7.327	0.023	0.041	0.055
x		-0.034	0.013	0.238	11.160	10.470	0.015	0.051	0.026
σ		0.056	0.018	0.067	0.211	2.840	0.007	0.058	0.031
%RSD		162.000	136.300	28.130	1.891	27.120	47.860	112.200	120.900
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:03	0.079	0.106	-0.152	-0.089	0.285	-0.903	0.000	0.070
2	20:25:11	0.064	-0.007	-0.083	-0.096	0.173	1.135	0.000	0.097
3	20:25:18	0.223	0.109	-0.079	-0.100	0.066	2.453	0.000	0.052
x		0.122	0.070	-0.105	-0.095	0.174	0.895	0.000	0.073
σ		0.088	0.066	0.041	0.006	0.110	1.691	0.000	0.022
%RSD		71.960	95.030	39.220	6.110	62.860	188.900	0.000	30.730
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:03	79.222%	0.132	0.139	74.827%	-0.011	-0.016	0.029	-0.067
2	20:25:11	80.752%	0.125	0.061	76.375%	-0.001	0.011	-0.000	-0.055
3	20:25:18	80.088%	0.078	0.053	75.688%	0.015	-0.017	-0.000	-0.067
x		80.021%	0.112	0.085	75.630%	0.001	-0.007	0.010	-0.063
σ		0.767%	0.029	0.048	0.776%	0.013	0.016	0.017	0.007
%RSD		0.959	26.000	56.220	1.026	1329.000	221.900	175.300	10.600
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:03	77.752%	-2.721	-0.271	-0.247	0.045	0.027	78.621%	77.663%
2	20:25:11	78.064%	-2.545	-0.303	-0.395	0.136	0.055	78.666%	78.862%
3	20:25:18	78.254%	-2.610	-0.311	-0.364	0.135	0.054	79.994%	79.513%
x		78.023%	-2.625	-0.295	-0.335	0.105	0.045	79.094%	78.679%
σ		0.254%	0.089	0.021	0.078	0.052	0.016	0.780%	0.938%
%RSD		0.325	3.393	7.160	23.250	49.270	35.140	0.987	1.193
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:25:03	0.086	0.083	-0.037	0.002	-0.010	76.191%		
2	20:25:11	0.073	0.087	-0.022	-0.004	-0.024	76.782%		
3	20:25:18	0.069	0.079	-0.042	-0.010	-0.020	76.509%		
x		0.076	0.083	-0.034	-0.004	-0.018	76.494%		
σ		0.009	0.004	0.011	0.006	0.007	0.296%		
%RSD		11.730	5.008	31.340	152.300	39.550	0.387		

MB 180-139165/1-A 4/27/2015 8:31:06 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	20:30:12	87.676%	-0.164	-0.746	-0.182	0.000	2.602	-1.338	-1.024
2	20:30:20	87.389%	-0.348	0.094	-0.763	0.000	4.530	-1.977	-0.286
3	20:30:28	84.031%	-0.402	-0.572	-0.348	0.000	6.679	-0.070	-0.371
x		86.365%	-0.304	-0.408	-0.431	0.000	4.604	-1.128	-0.560
σ		2.027%	0.125	0.443	0.299	0.000	2.039	0.971	0.404
%RSD		2.347	41.030	108.700	69.420	0.000	44.300	86.030	72.050

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:12	-0.307	4.082	0.000	11.180	4.518	6.006	82.744%	-0.490
2	20:30:20	0.620	2.051	0.000	6.082	5.130	8.265	81.611%	-0.649
3	20:30:28	0.007	2.169	0.000	8.060	27.450	9.125	81.661%	-0.446
x		0.107	2.767	0.000	8.440	12.370	7.798	82.005%	-0.528
σ		0.472	1.140	0.000	2.570	13.070	1.611	0.640%	0.107
%RSD		442.500	41.190	0.000	30.450	105.700	20.660	0.780	20.260

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:12	0.127	-0.011	0.033	1.005	3.086	-0.005	-0.077	-0.067
2	20:30:20	0.188	-0.020	0.072	1.294	2.311	0.009	0.038	-0.097
3	20:30:28	0.005	0.009	0.048	1.398	-1.359	-0.005	-0.040	-0.047
x		0.107	-0.007	0.051	1.232	1.346	-0.000	-0.026	-0.070
σ		0.093	0.015	0.020	0.204	2.375	0.008	0.058	0.025
%RSD		87.240	198.500	38.600	16.510	176.400	2055.000	222.100	35.910

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:12	0.036	-0.062	0.108	-0.158	-0.044	1.577	0.000	0.013
2	20:30:20	0.022	-0.118	-0.118	-0.164	0.011	0.148	0.000	0.001
3	20:30:28	-0.078	-0.176	-0.052	-0.170	0.063	0.745	0.000	0.006
x		-0.007	-0.118	-0.021	-0.164	0.010	0.824	0.000	0.007
σ		0.062	0.057	0.116	0.006	0.053	0.718	0.000	0.006
%RSD		939.300	48.240	557.800	3.699	536.900	87.190	0.000	85.990

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:12	78.993%	-0.053	-0.060	76.169%	-0.016	-0.022	-0.000	-0.067
2	20:30:20	80.422%	-0.039	-0.082	77.001%	-0.032	-0.017	-0.000	-0.067
3	20:30:28	82.736%	-0.123	-0.055	78.423%	-0.012	-0.028	-0.000	-0.079
x		80.717%	-0.072	-0.066	77.197%	-0.020	-0.022	-0.000	-0.071
σ		1.889%	0.045	0.015	1.140%	0.011	0.006	0.000	0.007
%RSD		2.340	62.650	22.190	1.476	52.570	25.000	18.430	9.424

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:12	77.422%	-2.873	-0.426	-0.394	0.045	-0.029	79.056%	78.505%
2	20:30:20	79.282%	-2.880	-0.397	-0.417	0.089	0.026	80.792%	79.701%
3	20:30:28	79.407%	-2.917	-0.374	-0.335	0.000	-0.029	80.426%	80.144%
x		78.703%	-2.890	-0.399	-0.382	0.045	-0.011	80.091%	79.450%
σ		1.111%	0.024	0.026	0.043	0.044	0.032	0.915%	0.848%
%RSD		1.412	0.828	6.443	11.140	99.240	287.300	1.143	1.067

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:12	0.008	0.026	-0.063	-0.021	-0.040	77.436%
2	20:30:20	0.007	0.025	-0.058	-0.033	-0.039	78.251%
3	20:30:28	0.003	0.017	-0.053	-0.039	-0.044	78.681%
x		0.006	0.022	-0.058	-0.031	-0.041	78.123%
σ		0.002	0.005	0.005	0.009	0.003	0.632%
%RSD		40.810	22.610	8.630	28.280	6.273	0.809

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:20	89.731%	-0.251	-0.427	-0.404	0.000	-3.283	-3.621	1.907
2	20:35:28	89.261%	-0.226	-0.118	-0.416	0.000	-2.878	-1.633	0.601
3	20:35:36	87.807%	-0.349	-0.222	-0.664	0.000	1.068	-2.237	1.044
x		88.933%	-0.275	-0.255	-0.495	0.000	-1.698	-2.497	1.184
σ		1.003%	0.065	0.158	0.147	0.000	2.403	1.019	0.664
%RSD		1.128	23.520	61.700	29.650	0.000	141.600	40.830	56.120
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:20	-0.141	5.909	0.000	2.709	-0.971	4.198	85.052%	-0.613
2	20:35:28	0.024	3.747	0.000	13.350	-4.935	1.337	84.249%	-0.454
3	20:35:36	0.941	2.042	0.000	18.990	8.834	6.061	82.906%	-0.690
x		0.275	3.899	0.000	11.680	0.976	3.865	84.069%	-0.586
σ		0.583	1.938	0.000	8.267	7.088	2.379	1.084%	0.120
%RSD		212.200	49.690	0.000	70.760	726.400	61.560	1.289	20.530
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:20	-0.058	-0.018	-0.032	0.323	0.520	0.004	-0.025	0.015
2	20:35:28	-0.082	-0.012	0.004	0.085	1.726	-0.005	-0.098	-0.020
3	20:35:36	-0.077	-0.018	0.061	0.056	1.375	-0.005	0.051	-0.049
x		-0.072	-0.016	0.011	0.155	1.207	-0.002	-0.024	-0.018
σ		0.013	0.003	0.047	0.147	0.621	0.005	0.075	0.032
%RSD		17.530	19.950	413.800	94.630	51.420	253.200	308.500	176.000
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:20	-0.024	-0.072	0.011	-0.159	0.062	1.738	0.000	0.001
2	20:35:28	-0.010	-0.178	-0.194	-0.159	0.009	2.729	0.000	0.001
3	20:35:36	-0.051	-0.070	-0.229	-0.187	0.009	2.143	0.000	0.006
x		-0.028	-0.107	-0.137	-0.168	0.027	2.204	0.000	0.003
σ		0.021	0.062	0.130	0.016	0.031	0.498	0.000	0.003
%RSD		73.440	58.150	94.330	9.528	114.700	22.610	0.000	112.000
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:20	82.138%	-0.041	-0.084	77.736%	-0.022	-0.044	-0.000	-0.079
2	20:35:28	82.476%	-0.107	-0.105	78.612%	-0.027	-0.039	-0.000	-0.067
3	20:35:36	83.723%	-0.045	-0.145	79.891%	-0.022	-0.034	-0.000	-0.067
x		82.779%	-0.064	-0.111	78.746%	-0.024	-0.039	-0.000	-0.071
σ		0.835%	0.037	0.031	1.084%	0.003	0.005	0.000	0.006
%RSD		1.008	56.800	28.130	1.376	12.270	13.670	33.030	9.081
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:20	79.127%	-2.929	-0.420	-0.376	0.044	-0.002	81.884%	80.263%
2	20:35:28	80.942%	-2.995	-0.451	-0.378	0.000	-0.002	82.199%	81.466%
3	20:35:36	81.046%	-2.959	-0.436	-0.449	0.000	-0.002	82.403%	81.793%
x		80.372%	-2.961	-0.436	-0.401	0.015	-0.002	82.162%	81.174%
σ		1.079%	0.033	0.016	0.042	0.026	0.000	0.261%	0.805%
%RSD		1.343	1.116	3.583	10.360	173.200	9.827	0.318	0.992
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:35:20	-0.017	-0.002	-0.038	-0.044	-0.040	79.950%		
2	20:35:28	-0.009	0.006	-0.063	-0.022	-0.040	80.025%		
3	20:35:36	-0.001	0.005	-0.053	-0.033	-0.048	79.592%		
x		-0.009	0.003	-0.051	-0.033	-0.043	79.855%		
σ		0.008	0.004	0.012	0.011	0.005	0.231%		
%RSD		88.650	147.100	24.090	32.970	11.250	0.290		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:40:28	79.443%	46.290	910.000	928.300	0.000	46240.000	42460.000	43520.000
2	20:40:36	79.135%	46.630	936.700	952.300	0.000	46980.000	44500.000	44300.000
3	20:40:44	77.651%	47.880	969.600	990.500	0.000	47060.000	44210.000	44540.000
x		78.743%	46.930	938.800	957.100	0.000	46760.000	43720.000	44120.000
σ		0.958%	0.838	29.880	31.370	0.000	450.000	1102.000	535.600
%RSD		1.217	1.785	3.183	3.278	0.000	0.962	2.521	1.214
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:40:28	1774.000	8540.000	0.000	44980.000	44520.000	42860.000	70.720%	886.900
2	20:40:36	1786.000	8516.000	0.000	45610.000	46200.000	43660.000	71.134%	895.500
3	20:40:44	1819.000	8855.000	0.000	46170.000	46670.000	44510.000	70.556%	921.500
x		1793.000	8637.000	0.000	45590.000	45800.000	43680.000	70.803%	901.300
σ		23.410	189.200	0.000	598.100	1129.000	822.800	0.298%	18.010
%RSD		1.306	2.190	0.000	1.312	2.466	1.884	0.421	1.998
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:40:28	463.200	188.900	417.600	930.800	1061.000	451.800	453.700	231.300
2	20:40:36	470.200	188.600	423.600	920.000	1105.000	457.200	458.000	231.200
3	20:40:44	475.400	193.100	433.300	937.000	1109.000	470.000	476.100	237.900
x		469.600	190.200	424.900	929.200	1092.000	459.700	462.600	233.500
σ		6.154	2.550	7.904	8.588	26.410	9.354	11.870	3.834
%RSD		1.311	1.340	1.860	0.924	2.420	2.035	2.565	1.642
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:40:28	236.200	458.200	450.200	38.160	10.970	10.400	0.000	943.600
2	20:40:36	230.600	459.300	449.900	38.270	12.090	10.890	0.000	941.900
3	20:40:44	241.000	460.200	462.400	39.420	10.040	9.879	0.000	945.400
x		235.900	459.200	454.100	38.610	11.040	10.390	0.000	943.600
σ		5.230	1.030	7.142	0.699	1.023	0.507	0.000	1.779
%RSD		2.217	0.224	1.573	1.809	9.271	4.879	0.000	0.189
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:40:28	68.530%	992.000	1016.000	63.450%	48.180	48.550	50.960	90.570
2	20:40:36	70.000%	984.800	1009.000	63.933%	47.590	48.250	48.710	88.580
3	20:40:44	69.523%	1007.000	1012.000	64.642%	47.600	48.240	48.160	86.590
x		69.351%	994.500	1012.000	64.008%	47.790	48.350	49.280	88.580
σ		0.750%	11.100	3.344	0.599%	0.339	0.177	1.480	1.990
%RSD		1.081	1.116	0.330	0.936	0.710	0.365	3.004	2.246
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:40:28	65.803%	1893.000	478.900	466.700	1826.000	1835.000	71.300%	71.307%
2	20:40:36	66.627%	1873.000	466.400	463.500	1820.000	1829.000	72.564%	72.280%
3	20:40:44	67.326%	1879.000	471.600	466.800	1845.000	1840.000	72.415%	73.362%
x		66.585%	1882.000	472.300	465.700	1830.000	1835.000	72.093%	72.316%
σ		0.762%	10.240	6.268	1.877	13.070	5.409	0.691%	1.028%
%RSD		1.144	0.544	1.327	0.403	0.714	0.295	0.958	1.422
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:40:28	49.520	49.940	20.740	19.820	20.150	65.013%		
2	20:40:36	50.140	49.310	20.140	20.720	20.470	65.416%		
3	20:40:44	48.350	47.850	19.310	18.650	19.110	68.146%		
x		49.340	49.030	20.060	19.730	19.910	66.192%		
σ		0.909	1.072	0.722	1.038	0.708	1.705%		
%RSD		1.843	2.187	3.596	5.262	3.554	2.575		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:45:40	84.723%	-0.307	9.715	10.780	0.000	3132.000	3121.000	3173.000
2	20:45:47	82.157%	-0.399	9.707	11.360	0.000	3262.000	3255.000	3155.000
3	20:45:55	85.442%	-0.226	7.982	9.847	0.000	3166.000	3095.000	3109.000
x		84.107%	-0.311	9.135	10.660	0.000	3187.000	3157.000	3146.000
σ		1.727%	0.087	0.998	0.763	0.000	67.470	86.060	33.340
%RSD		2.054	27.960	10.930	7.159	0.000	2.117	2.726	1.060
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:45:40	80.940	2375.000	0.000	999.600	49620.000	47300.000	74.037%	4.384
2	20:45:47	88.690	2505.000	0.000	1024.000	51500.000	48770.000	74.121%	3.482
3	20:45:55	80.300	2452.000	0.000	1012.000	51890.000	50060.000	73.149%	3.856
x		83.310	2444.000	0.000	1012.000	51000.000	48710.000	73.769%	3.907
σ		4.668	65.280	0.000	12.160	1213.000	1386.000	0.539%	0.453
%RSD		5.603	2.671	0.000	1.201	2.378	2.845	0.730	11.600
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:45:40	-1.128	2.885	7.688	101.100	250.600	0.096	0.446	0.481
2	20:45:47	1.329	3.005	7.559	96.440	259.900	0.141	0.337	0.519
3	20:45:55	1.034	3.150	8.245	97.770	259.300	0.112	0.234	0.595
x		0.412	3.014	7.831	98.430	256.600	0.116	0.339	0.532
σ		1.341	0.133	0.364	2.387	5.206	0.023	0.106	0.058
%RSD		325.900	4.398	4.652	2.425	2.029	19.610	31.310	10.970
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:45:40	0.704	2.397	2.454	0.502	0.079	-0.229	0.000	194.500
2	20:45:47	0.809	2.225	2.409	0.656	0.260	2.076	0.000	193.200
3	20:45:55	0.716	1.703	1.897	0.487	0.138	5.806	0.000	191.500
x		0.743	2.108	2.253	0.548	0.159	2.551	0.000	193.100
σ		0.057	0.361	0.309	0.093	0.092	3.045	0.000	1.517
%RSD		7.722	17.130	13.730	17.000	58.150	119.400	0.000	0.786
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:45:40	70.589%	2.270	2.371	65.617%	-0.025	-0.044	-0.000	-0.000
2	20:45:47	71.415%	1.639	2.108	65.360%	-0.025	-0.025	-0.000	-0.013
3	20:45:55	72.245%	1.411	1.355	66.322%	-0.014	-0.032	0.033	-0.053
x		71.417%	1.773	1.945	65.766%	-0.021	-0.034	0.011	-0.022
σ		0.828%	0.445	0.528	0.498%	0.007	0.010	0.019	0.027
%RSD		1.159	25.100	27.120	0.757	31.670	28.860	174.700	125.600
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:45:40	69.420%	0.051	-0.358	-0.290	15.450	15.170	72.603%	72.322%
2	20:45:47	69.071%	-0.320	-0.340	-0.431	16.630	16.530	72.759%	72.239%
3	20:45:55	69.459%	-0.994	-0.324	-0.396	14.890	14.400	74.799%	73.666%
x		69.317%	-0.421	-0.340	-0.372	15.660	15.370	73.387%	72.742%
σ		0.214%	0.530	0.017	0.073	0.887	1.076	1.225%	0.801%
%RSD		0.308	125.900	4.958	19.680	5.667	7.000	1.670	1.102
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:45:40	0.047	0.048	0.081	0.047	0.046	67.734%		
2	20:45:47	0.037	0.049	0.119	0.084	0.094	68.967%		
3	20:45:55	0.028	0.022	0.034	0.071	0.058	68.840%		
x		0.038	0.040	0.078	0.067	0.066	68.514%		
σ		0.010	0.015	0.043	0.019	0.025	0.678%		
%RSD		25.260	37.960	54.630	27.500	37.680	0.990		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:47	80.666%	-0.347	7.235	8.038	0.000	3319.000	3150.000	3157.000
2	20:50:54	82.628%	-0.400	5.792	7.781	0.000	3263.000	3195.000	3107.000
3	20:51:02	82.881%	-0.339	6.245	8.353	0.000	3289.000	3121.000	3162.000
x		82.058%	-0.362	6.424	8.057	0.000	3290.000	3156.000	3142.000
σ		1.213%	0.033	0.738	0.287	0.000	27.850	37.370	30.170
%RSD		1.478	9.133	11.480	3.556	0.000	0.847	1.184	0.960
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:47	6.019	2383.000	0.000	949.800	48520.000	46570.000	75.589%	1.994
2	20:50:54	3.666	2430.000	0.000	980.400	50810.000	48690.000	73.845%	2.328
3	20:51:02	5.867	2437.000	0.000	1013.000	51340.000	49550.000	73.573%	2.520
x		5.184	2416.000	0.000	980.900	50220.000	48270.000	74.336%	2.281
σ		1.317	29.290	0.000	31.340	1499.000	1533.000	1.094%	0.266
%RSD		25.400	1.212	0.000	3.195	2.986	3.176	1.472	11.670
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:47	0.486	2.812	1.431	4.862	181.500	0.090	0.435	0.454
2	20:50:54	-0.092	2.776	1.653	4.683	165.800	0.065	0.251	0.466
3	20:51:02	-1.112	2.967	1.610	5.620	160.700	0.076	0.213	0.406
x		-0.240	2.852	1.565	5.055	169.400	0.077	0.300	0.442
σ		0.809	0.102	0.118	0.498	10.860	0.012	0.119	0.032
%RSD		337.700	3.564	7.514	9.841	6.411	15.740	39.670	7.210
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:47	0.598	1.530	1.188	0.449	0.078	4.057	0.000	196.600
2	20:50:54	0.539	1.505	1.660	0.477	0.137	3.866	0.000	194.300
3	20:51:02	0.419	1.091	1.749	0.377	0.078	4.667	0.000	197.000
x		0.519	1.375	1.532	0.435	0.097	4.197	0.000	196.000
σ		0.091	0.247	0.302	0.052	0.034	0.418	0.000	1.435
%RSD		17.590	17.960	19.690	11.860	34.780	9.964	0.000	0.732
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:47	71.187%	0.357	0.435	66.805%	-0.026	-0.044	-0.000	-0.040
2	20:50:54	72.505%	0.426	0.258	66.606%	-0.002	-0.038	-0.000	-0.066
3	20:51:02	71.256%	0.093	0.312	68.167%	-0.032	-0.032	-0.000	-0.040
x		71.649%	0.292	0.335	67.193%	-0.020	-0.038	-0.000	-0.048
σ		0.742%	0.176	0.091	0.850%	0.016	0.006	0.000	0.015
%RSD		1.036	60.180	27.060	1.265	79.550	16.200	57.370	30.800
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:47	69.713%	-2.333	-0.085	-0.175	16.660	14.300	74.626%	73.414%
2	20:50:54	70.108%	-2.380	-0.104	-0.165	12.560	15.840	74.638%	74.303%
3	20:51:02	70.705%	-2.456	-0.149	-0.110	14.380	14.520	75.009%	74.383%
x		70.175%	-2.389	-0.113	-0.150	14.530	14.890	74.757%	74.033%
σ		0.500%	0.062	0.033	0.035	2.051	0.829	0.218%	0.537%
%RSD		0.712	2.596	29.410	23.270	14.110	5.571	0.292	0.726
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:50:47	0.010	0.005	-0.013	0.037	0.015	70.781%		
2	20:50:54	-0.004	0.008	-0.008	0.012	0.013	71.118%		
3	20:51:02	-0.012	-0.003	0.035	0.017	0.015	71.737%		
x		-0.002	0.004	0.005	0.022	0.014	71.212%		
σ		0.011	0.006	0.027	0.013	0.001	0.485%		
%RSD		544.000	161.800	535.900	59.520	7.657	0.681		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:55	81.271%	-0.286	6.834	7.059	0.000	3020.000	2954.000	2928.000
2	20:56:03	82.506%	-0.326	6.367	7.152	0.000	3075.000	3076.000	3068.000
3	20:56:10	80.280%	-0.321	6.377	7.038	0.000	3107.000	3023.000	3130.000
x		81.352%	-0.311	6.526	7.083	0.000	3067.000	3018.000	3042.000
σ		1.116%	0.022	0.267	0.061	0.000	43.940	60.970	103.500
%RSD		1.371	7.038	4.085	0.855	0.000	1.432	2.020	3.403
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:55	145.100	2415.000	0.000	942.500	47150.000	45190.000	74.953%	3.302
2	20:56:03	145.200	2361.000	0.000	972.600	50060.000	47550.000	72.654%	2.607
3	20:56:10	147.400	2475.000	0.000	963.300	49690.000	47610.000	73.438%	2.979
x		145.900	2417.000	0.000	959.500	48970.000	46780.000	73.681%	2.963
σ		1.291	56.800	0.000	15.370	1586.000	1378.000	1.169%	0.348
%RSD		0.885	2.350	0.000	1.602	3.238	2.945	1.586	11.740
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:55	-0.431	2.846	14.030	198.900	355.500	0.206	0.355	0.524
2	20:56:03	0.923	2.980	14.760	201.000	338.300	0.165	0.370	0.660
3	20:56:10	0.265	2.800	15.090	200.400	314.500	0.167	0.339	0.471
x		0.252	2.875	14.620	200.100	336.100	0.179	0.355	0.552
σ		0.677	0.093	0.543	1.085	20.590	0.023	0.015	0.098
%RSD		268.600	3.248	3.715	0.542	6.127	12.750	4.301	17.730
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:55	0.461	1.879	1.248	0.407	0.200	5.340	0.000	183.300
2	20:56:03	0.652	2.059	1.556	0.492	0.266	1.734	0.000	189.800
3	20:56:10	0.638	1.457	1.976	0.400	0.259	2.841	0.000	186.500
x		0.584	1.798	1.593	0.433	0.242	3.305	0.000	186.500
σ		0.106	0.309	0.365	0.051	0.037	1.847	0.000	3.248
%RSD		18.220	17.190	22.940	11.780	15.190	55.890	0.000	1.741
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:55	71.039%	0.247	0.134	66.337%	-0.025	-0.044	-0.000	-0.052
2	20:56:03	69.876%	0.025	0.160	66.027%	-0.019	-0.013	-0.000	-0.013
3	20:56:10	71.865%	0.225	0.179	66.400%	-0.025	-0.032	-0.000	-0.079
x		70.927%	0.166	0.158	66.255%	-0.023	-0.030	-0.000	-0.048
σ		0.999%	0.122	0.023	0.200%	0.003	0.016	0.000	0.033
%RSD		1.409	73.950	14.380	0.302	14.630	53.880	48.680	68.590
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:55	67.759%	-2.615	-0.337	-0.394	15.970	15.840	71.956%	72.222%
2	20:56:03	69.517%	-2.600	-0.435	-0.349	14.300	14.670	73.535%	73.320%
3	20:56:10	69.461%	-2.628	-0.409	-0.396	15.480	15.240	72.199%	73.677%
x		68.912%	-2.614	-0.394	-0.379	15.250	15.250	72.563%	73.073%
σ		0.999%	0.014	0.051	0.026	0.859	0.585	0.850%	0.758%
%RSD		1.450	0.525	12.960	6.912	5.635	3.836	1.172	1.038
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:55:55	0.015	-0.006	0.196	0.146	0.148	69.328%		
2	20:56:03	-0.012	-0.001	0.241	0.158	0.194	69.450%		
3	20:56:10	-0.003	0.001	0.220	0.118	0.192	70.487%		
x		-0.000	-0.002	0.219	0.141	0.178	69.755%		
σ		0.014	0.004	0.022	0.021	0.026	0.637%		
%RSD		4867.000	207.400	10.110	14.660	14.610	0.913		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:03	80.695%	-0.334	5.182	7.194	0.000	3127.000	3090.000	2975.000
2	21:01:10	79.816%	-0.333	5.686	7.085	0.000	3183.000	3019.000	3095.000
3	21:01:18	79.903%	-0.409	7.249	7.037	0.000	3166.000	3077.000	3093.000
x		80.138%	-0.359	6.039	7.105	0.000	3159.000	3062.000	3055.000
σ		0.484%	0.043	1.078	0.080	0.000	28.370	37.850	68.680
%RSD		0.604	12.130	17.850	1.131	0.000	0.898	1.236	2.248
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:03	2.950	2414.000	0.000	963.500	49240.000	46260.000	73.321%	1.444
2	21:01:10	2.786	2416.000	0.000	970.200	50350.000	47670.000	72.070%	1.528
3	21:01:18	3.237	2414.000	0.000	968.300	50810.000	48380.000	71.496%	2.382
x		2.991	2414.000	0.000	967.300	50130.000	47440.000	72.295%	1.785
σ		0.228	0.988	0.000	3.469	807.200	1078.000	0.933%	0.519
%RSD		7.632	0.041	0.000	0.359	1.610	2.272	1.291	29.090
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:03	1.080	2.872	0.877	3.793	172.100	0.088	0.284	0.688
2	21:01:10	0.595	2.990	1.125	3.694	153.700	0.104	0.243	0.768
3	21:01:18	0.236	3.170	0.981	3.218	146.400	0.084	0.115	0.808
x		0.637	3.011	0.994	3.569	157.400	0.092	0.214	0.755
σ		0.424	0.150	0.125	0.308	13.270	0.011	0.088	0.061
%RSD		66.560	4.993	12.530	8.624	8.428	11.660	41.190	8.066
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:03	0.736	2.514	1.756	0.295	0.270	0.199	0.000	192.200
2	21:01:10	0.625	2.710	2.121	0.502	0.206	2.770	0.000	194.500
3	21:01:18	0.889	2.470	2.241	0.393	0.144	2.698	0.000	192.400
x		0.750	2.565	2.039	0.397	0.207	1.889	0.000	193.000
σ		0.132	0.128	0.253	0.104	0.063	1.464	0.000	1.256
%RSD		17.630	4.987	12.390	26.180	30.520	77.520	0.000	0.651
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:03	68.550%	-0.029	0.035	64.816%	-0.037	-0.031	-0.000	-0.065
2	21:01:10	69.511%	0.180	-0.002	64.853%	-0.019	-0.032	-0.000	-0.065
3	21:01:18	69.422%	0.026	0.103	65.604%	-0.037	-0.019	0.033	-0.065
x		69.161%	0.059	0.045	65.091%	-0.031	-0.027	0.011	-0.065
σ		0.531%	0.108	0.054	0.445%	0.010	0.007	0.019	0.000
%RSD		0.768	182.900	118.900	0.684	33.470	26.870	175.100	0.193
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:03	67.489%	-2.730	-0.088	-0.056	14.540	13.540	71.267%	71.979%
2	21:01:10	68.727%	-2.550	-0.260	-0.240	14.100	15.130	71.049%	72.059%
3	21:01:18	68.603%	-2.679	-0.138	-0.134	14.950	13.760	72.462%	71.998%
x		68.273%	-2.653	-0.162	-0.143	14.530	14.140	71.593%	72.012%
σ		0.682%	0.093	0.088	0.093	0.426	0.863	0.761%	0.042%
%RSD		0.998	3.502	54.510	64.540	2.930	6.101	1.063	0.058
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:01:03	0.002	0.002	-0.005	-0.017	-0.010	67.750%		
2	21:01:10	-0.003	-0.006	-0.012	0.033	0.007	69.184%		
3	21:01:18	0.015	0.002	0.011	0.008	-0.005	68.562%		
x		0.005	-0.001	-0.002	0.008	-0.003	68.499%		
σ		0.009	0.004	0.012	0.025	0.009	0.719%		
%RSD		208.800	451.800	668.200	326.100	308.200	1.050		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:09	81.313%	-0.361	6.747	7.266	0.000	3122.000	3054.000	3024.000
2	21:06:17	79.498%	-0.332	5.221	6.677	0.000	3225.000	3120.000	3139.000
3	21:06:24	81.863%	-0.337	6.116	7.453	0.000	3114.000	3035.000	3069.000
x		80.892%	-0.343	6.028	7.132	0.000	3154.000	3070.000	3077.000
σ		1.238%	0.015	0.767	0.405	0.000	62.240	44.340	58.330
%RSD		1.530	4.492	12.720	5.675	0.000	1.974	1.445	1.895
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:09	73.360	2348.000	0.000	941.700	47490.000	46110.000	74.058%	2.006
2	21:06:17	72.460	2480.000	0.000	974.300	49920.000	48280.000	72.714%	3.107
3	21:06:24	70.120	2398.000	0.000	983.800	50670.000	48990.000	71.966%	2.454
x		71.980	2409.000	0.000	966.600	49360.000	47790.000	72.913%	2.522
σ		1.676	66.350	0.000	22.070	1661.000	1497.000	1.060%	0.554
%RSD		2.328	2.755	0.000	2.284	3.365	3.133	1.454	21.950
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:09	0.714	2.847	6.260	81.610	249.000	0.143	0.538	0.514
2	21:06:17	-0.040	3.047	6.563	85.840	257.600	0.093	0.196	0.473
3	21:06:24	-1.151	2.918	6.828	86.280	253.900	0.109	0.309	0.463
x		-0.159	2.937	6.551	84.580	253.500	0.115	0.348	0.483
σ		0.938	0.101	0.284	2.580	4.276	0.026	0.174	0.027
%RSD		590.600	3.452	4.338	3.051	1.687	22.450	50.000	5.641
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:09	0.635	1.459	1.477	0.464	0.332	5.311	0.000	197.000
2	21:06:17	0.730	1.330	1.042	0.327	-0.044	4.571	0.000	195.200
3	21:06:24	0.449	1.507	1.328	0.589	0.206	2.561	0.000	196.600
x		0.605	1.432	1.282	0.460	0.165	4.148	0.000	196.300
σ		0.143	0.092	0.221	0.131	0.191	1.423	0.000	0.897
%RSD		23.700	6.401	17.250	28.460	115.900	34.310	0.000	0.457
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:09	68.604%	0.049	-0.037	64.503%	-0.031	-0.025	-0.000	-0.065
2	21:06:17	70.213%	0.120	0.067	65.414%	-0.031	-0.044	-0.000	-0.039
3	21:06:24	69.434%	-0.049	-0.039	65.079%	-0.031	-0.038	-0.000	-0.065
x		69.417%	0.040	-0.003	64.999%	-0.031	-0.036	-0.000	-0.057
σ		0.805%	0.085	0.061	0.461%	0.000	0.010	0.000	0.015
%RSD		1.159	214.000	2043.000	0.709	0.168	27.830	88.890	26.640
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:09	67.515%	-2.613	-0.416	-0.441	15.400	14.030	72.462%	72.134%
2	21:06:17	69.129%	-2.897	-0.426	-0.395	15.780	14.740	72.612%	73.367%
3	21:06:24	68.558%	-2.722	-0.408	-0.395	14.330	16.820	72.684%	72.277%
x		68.401%	-2.744	-0.417	-0.410	15.170	15.200	72.586%	72.593%
σ		0.818%	0.143	0.009	0.027	0.750	1.450	0.113%	0.675%
%RSD		1.196	5.215	2.157	6.534	4.941	9.541	0.156	0.929
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:06:09	-0.017	-0.000	0.016	0.045	0.051	69.170%		
2	21:06:17	-0.017	0.001	0.032	0.100	0.067	70.238%		
3	21:06:24	-0.017	-0.008	0.089	0.066	0.052	72.104%		
x		-0.017	-0.002	0.046	0.070	0.056	70.504%		
σ		0.000	0.005	0.038	0.028	0.009	1.485%		
%RSD		0.000	201.400	83.720	39.220	15.840	2.106		

180-43165-G-13-C SD@5 4/27/2015 9:12:07 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	21:11:15	79.216%	-0.370	0.407	0.164	0.000	660.100	636.900	644.900
2	21:11:23	77.201%	-0.392	0.837	1.102	0.000	674.700	645.900	655.500
3	21:11:30	79.714%	-0.294	0.801	0.571	0.000	666.000	637.400	638.000
x		78.710%	-0.352	0.681	0.612	0.000	667.000	640.100	646.100
σ		1.330%	0.051	0.239	0.470	0.000	7.361	5.017	8.799
%RSD		1.690	14.580	35.010	76.810	0.000	1.104	0.784	1.362
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:15	15.430	480.100	0.000	127.000	9795.000	9035.000	77.028%	0.046
2	21:11:23	15.180	489.500	0.000	134.200	9675.000	9292.000	76.740%	-0.211
3	21:11:30	14.450	484.800	0.000	141.200	10160.000	9545.000	74.861%	-0.020
x		15.020	484.800	0.000	134.200	9876.000	9291.000	76.210%	-0.062
σ		0.510	4.740	0.000	7.094	251.500	255.000	1.177%	0.133
%RSD		3.397	0.978	0.000	5.288	2.547	2.745	1.544	215.600
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:15	0.194	0.846	1.278	15.750	51.870	0.015	0.034	0.120
2	21:11:23	0.033	0.768	1.400	15.600	46.760	0.015	0.158	0.144
3	21:11:30	0.088	0.853	1.425	16.850	43.290	0.025	-0.065	0.150
x		0.105	0.822	1.368	16.070	47.310	0.018	0.042	0.138
σ		0.082	0.047	0.079	0.682	4.313	0.006	0.112	0.016
%RSD		78.380	5.720	5.763	4.242	9.118	33.020	265.100	11.590
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:15	0.141	0.292	0.327	-0.105	0.193	2.626	0.000	39.450
2	21:11:23	0.141	0.293	0.225	-0.130	-0.044	0.889	0.000	39.220
3	21:11:30	0.052	0.394	0.143	-0.104	0.136	0.090	0.000	39.750
x		0.112	0.326	0.232	-0.113	0.095	1.201	0.000	39.470
σ		0.051	0.058	0.092	0.015	0.124	1.297	0.000	0.267
%RSD		45.890	17.910	39.840	12.910	129.800	107.900	0.000	0.677
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:15	72.819%	-0.148	-0.081	68.682%	-0.037	-0.044	-0.000	-0.066
2	21:11:23	72.979%	0.033	-0.059	69.115%	-0.037	-0.038	-0.000	-0.066
3	21:11:30	72.711%	-0.075	-0.081	68.944%	-0.026	-0.032	-0.000	-0.066
x		72.836%	-0.063	-0.073	68.914%	-0.034	-0.038	-0.000	-0.066
σ		0.135%	0.091	0.013	0.218%	0.007	0.006	0.000	0.000
%RSD		0.185	143.600	17.440	0.316	19.680	15.920	12.610	0.160
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:15	70.826%	-3.015	-0.453	-0.467	2.915	3.110	76.043%	74.806%
2	21:11:23	70.992%	-2.960	-0.496	-0.467	2.971	2.760	75.384%	75.421%
3	21:11:30	72.014%	-2.921	-0.471	-0.478	2.129	3.012	75.150%	74.934%
x		71.277%	-2.965	-0.473	-0.470	2.672	2.961	75.526%	75.054%
σ		0.644%	0.047	0.021	0.007	0.471	0.181	0.463%	0.324%
%RSD		0.903	1.595	4.474	1.420	17.620	6.106	0.613	0.432
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:11:15	-0.017	-0.008	-0.036	-0.020	-0.028	73.583%		
2	21:11:23	-0.012	-0.008	-0.047	-0.002	-0.019	74.112%		
3	21:11:30	-0.008	-0.006	-0.041	-0.038	-0.025	73.324%		
x		-0.012	-0.008	-0.041	-0.020	-0.024	73.673%		
σ		0.004	0.001	0.005	0.018	0.004	0.402%		
%RSD		34.260	13.630	13.000	88.440	18.620	0.545		

180-43165-E-13-A MS 4/27/2015 9:17:15 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	21:16:23	74.814%	46.410	924.900	964.800	0.000	47450.000	45320.000	45890.000
2	21:16:31	74.426%	46.410	942.300	967.800	0.000	47960.000	44880.000	45310.000
3	21:16:38	74.132%	45.900	965.000	988.600	0.000	47590.000	45670.000	46390.000
x		74.457%	46.240	944.100	973.700	0.000	47670.000	45290.000	45860.000
σ		0.342%	0.295	20.100	12.980	0.000	262.800	397.600	540.200
%RSD		0.460	0.638	2.129	1.333	0.000	0.551	0.878	1.178
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:16:23	1818.000	10550.000	0.000	44850.000	93780.000	91380.000	68.990%	865.500
2	21:16:31	1845.000	10670.000	0.000	44920.000	97620.000	94840.000	67.789%	892.900
3	21:16:38	1864.000	10860.000	0.000	44770.000	96310.000	100600.000	68.400%	883.900
x		1842.000	10690.000	0.000	44850.000	95900.000	95590.000	68.393%	880.700
σ		23.320	157.500	0.000	76.640	1951.000	4636.000	0.601%	13.950
%RSD		1.266	1.472	0.000	0.171	2.034	4.850	0.879	1.583
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:16:23	442.800	180.100	417.600	977.700	1266.000	442.400	439.200	224.400
2	21:16:31	448.700	182.500	425.700	987.100	1263.000	447.200	445.100	225.800
3	21:16:38	457.300	184.800	429.900	991.200	1273.000	444.300	450.600	224.500
x		449.600	182.500	424.400	985.400	1267.000	444.600	445.000	224.900
σ		7.303	2.345	6.233	6.929	5.123	2.409	5.677	0.797
%RSD		1.624	1.285	1.469	0.703	0.404	0.542	1.276	0.354
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:16:23	226.700	434.100	431.900	38.400	8.745	12.550	0.000	1113.000
2	21:16:31	228.300	435.200	441.300	37.260	9.742	10.530	0.000	1120.000
3	21:16:38	224.900	436.500	431.100	37.460	9.829	14.640	0.000	1114.000
x		226.700	435.300	434.800	37.700	9.439	12.570	0.000	1116.000
σ		1.696	1.185	5.687	0.609	0.602	2.056	0.000	4.038
%RSD		0.748	0.272	1.308	1.614	6.379	16.360	0.000	0.362
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:16:23	66.573%	983.000	1000.000	60.028%	46.630	46.850	45.590	87.400
2	21:16:31	66.774%	969.100	996.100	60.633%	46.670	45.700	46.730	88.860
3	21:16:38	67.550%	977.300	998.700	61.283%	45.100	46.180	47.130	86.680
x		66.966%	976.500	998.200	60.648%	46.130	46.240	46.480	87.650
σ		0.516%	6.990	1.988	0.628%	0.900	0.582	0.802	1.109
%RSD		0.770	0.716	0.199	1.035	1.950	1.258	1.726	1.266
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:16:23	62.401%	1862.000	468.200	457.900	1801.000	1808.000	69.959%	69.103%
2	21:16:31	63.362%	1863.000	466.000	450.300	1786.000	1797.000	70.034%	70.007%
3	21:16:38	64.153%	1850.000	459.600	454.200	1786.000	1814.000	69.659%	70.305%
x		63.305%	1858.000	464.600	454.200	1791.000	1806.000	69.884%	69.805%
σ		0.878%	7.352	4.459	3.798	8.437	8.667	0.198%	0.626%
%RSD		1.386	0.396	0.960	0.836	0.471	0.480	0.283	0.897
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:16:23	48.080	48.670	19.880	20.140	20.230	63.022%		
2	21:16:31	49.690	49.310	20.220	20.380	20.460	63.631%		
3	21:16:38	48.740	48.370	19.330	20.270	20.060	64.251%		
x		48.830	48.780	19.810	20.260	20.250	63.634%		
σ		0.809	0.483	0.453	0.122	0.200	0.614%		
%RSD		1.656	0.989	2.288	0.603	0.986	0.966		

CCV 1533080 4/27/2015 9:22:20 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	21:21:28	75.786%	94.480	94.220	98.000	0.000	47580.000	45150.000	46230.000
2	21:21:35	75.932%	93.680	90.720	96.890	0.000	48330.000	47290.000	47130.000
3	21:21:43	76.860%	93.840	94.070	96.040	0.000	48830.000	46520.000	47960.000
x		76.192%	94.000%	93.003%	96.976%	0.000	96.492%	92.639%	94.212%
σ		0.582%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.764	0.449	2.125	1.010	0.000	1.301	2.344	1.843
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:21:28	454.900	4609.000	0.000	46000.000	44540.000	44010.000	71.587%	94.670
2	21:21:35	477.500	4587.000	0.000	47340.000	48140.000	45250.000	70.074%	94.450
3	21:21:43	473.900	4692.000	0.000	48040.000	48820.000	46590.000	68.873%	97.360
x		93.754%	92.589%	0.000	94.256%	94.333%	90.566%	70.178%	95.492%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.360%	n/a
%RSD		2.591	1.186	0.000	2.196	4.870	2.842	1.938	1.700
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:21:28	93.780	95.560	440.500	24130.000	23610.000	93.280	92.020	94.330
2	21:21:35	93.200	94.750	459.700	24210.000	23380.000	95.190	92.510	96.540
3	21:21:43	94.770	96.630	465.000	24550.000	23680.000	97.110	96.490	98.280
x		93.918%	95.645%	91.011%	97.193%	94.215%	95.195%	93.673%	96.384%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.843	0.987	2.836	0.901	0.672	2.014	2.619	2.056
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:21:28	93.030	93.100	89.440	97.010	97.190	108.100	0.000	97.410
2	21:21:35	95.740	90.880	95.160	97.370	97.590	94.520	0.000	96.640
3	21:21:43	95.630	96.940	97.260	98.880	103.500	96.920	0.000	98.090
x		94.802%	93.638%	93.953%	97.753%	99.422%	99.830%	0.000	97.380%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.615	3.273	4.304	1.013	3.546	7.238	0.000	0.747
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:21:28	67.812%	98.180	94.050	65.893%	94.300	92.800	94.130	101.900
2	21:21:35	68.550%	97.850	99.040	65.811%	92.130	95.120	95.970	96.950
3	21:21:43	68.554%	97.060	98.490	65.953%	93.430	95.520	95.800	97.050
x		68.305%	97.699%	97.194%	65.886%	93.287%	94.478%	95.301%	98.624%
σ		0.428%	n/a	n/a	0.071%	n/a	n/a	n/a	n/a
%RSD		0.626	0.589	2.812	0.108	1.170	1.553	1.068	2.852
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:21:28	64.126%	95.570	98.520	92.160	89.600	93.760	71.830%	72.333%
2	21:21:35	66.515%	90.740	93.980	93.560	93.560	90.610	72.352%	71.622%
3	21:21:43	65.431%	95.510	95.420	94.610	92.840	94.720	73.658%	73.011%
x		65.357%	93.943%	95.975%	93.445%	91.999%	93.030%	72.613%	72.322%
σ		1.196%	n/a	n/a	n/a	n/a	n/a	0.941%	0.694%
%RSD		1.830	2.948	2.420	1.319	2.289	2.306	1.296	0.960
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:21:28	96.970	96.550	97.350	97.950	97.650	65.731%		
2	21:21:35	95.370	95.690	96.820	96.310	96.830	66.765%		
3	21:21:43	96.740	97.020	98.730	97.610	98.200	66.578%		
x		96.361%	96.422%	97.633%	97.289%	97.561%	66.358%		
σ		n/a	n/a	n/a	n/a	n/a	0.551%		
%RSD		0.898	0.701	1.011	0.885	0.710	0.831		

CCB10 4/27/2015 9:31:17 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:26	83.233%	-0.242	1.040	0.002	0.000	27.370	12.980	12.880
2	21:30:33	81.535%	-0.299	0.717	-0.174	0.000	30.750	10.120	13.640
3	21:30:41	81.237%	-0.286	0.975	0.462	0.000	29.890	10.010	13.060
x		82.001%	-0.276	0.911	0.096	0.000	29.340	11.040	13.190
σ		1.077%	0.030	0.171	0.329	0.000	1.756	1.687	0.400
%RSD		1.313	10.730	18.750	340.600	0.000	5.986	15.280	3.028

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:26	0.433	8.465	0.000	-4.008	16.060	24.320	78.704%	-0.435
2	21:30:33	1.498	7.566	0.000	-3.018	18.580	20.040	78.429%	-0.519
3	21:30:41	0.966	5.596	0.000	-3.430	2.850	20.170	77.396%	-0.473
x		0.966	7.209	0.000	-3.485	12.500	21.510	78.176%	-0.476
σ		0.532	1.467	0.000	0.497	8.448	2.435	0.690%	0.042
%RSD		55.130	20.350	0.000	14.260	67.610	11.320	0.882	8.811

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:26	0.047	0.093	0.264	12.810	16.020	0.033	0.086	0.031
2	21:30:33	-0.093	0.057	0.317	12.680	12.660	0.023	-0.013	0.038
3	21:30:41	-0.098	0.065	0.249	12.250	16.240	0.014	0.109	0.079
x		-0.048	0.072	0.276	12.580	14.980	0.023	0.061	0.049
σ		0.082	0.019	0.036	0.294	2.004	0.009	0.065	0.026
%RSD		170.300	26.500	12.980	2.338	13.380	39.850	106.600	52.920

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:26	0.131	0.036	-0.242	-0.050	0.182	1.690	0.000	0.078
2	21:30:33	0.116	0.122	-0.034	-0.039	0.069	1.104	0.000	0.095
3	21:30:41	0.014	-0.106	-0.105	-0.085	-0.044	-2.469	0.000	0.083
x		0.087	0.017	-0.127	-0.058	0.069	0.108	0.000	0.085
σ		0.063	0.115	0.106	0.024	0.113	2.251	0.000	0.009
%RSD		72.940	665.900	83.140	41.910	163.400	2081.000	0.000	10.140

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:26	77.258%	0.379	0.403	73.259%	-0.016	-0.021	0.060	-0.054
2	21:30:33	77.821%	0.240	0.305	73.382%	-0.010	-0.010	-0.000	-0.042
3	21:30:41	77.639%	0.411	0.348	73.372%	0.017	0.008	0.030	0.006
x		77.573%	0.343	0.352	73.338%	-0.003	-0.008	0.030	-0.030
σ		0.287%	0.091	0.049	0.069%	0.017	0.014	0.030	0.032
%RSD		0.370	26.480	13.920	0.093	560.500	186.400	100.900	104.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:26	73.790%	-2.336	-0.309	-0.190	0.048	0.088	75.623%	74.834%
2	21:30:33	75.036%	-2.455	-0.368	-0.185	0.000	0.057	77.458%	76.187%
3	21:30:41	75.440%	-2.419	-0.169	-0.305	0.047	-0.000	76.792%	76.293%
x		74.755%	-2.403	-0.282	-0.227	0.031	0.048	76.625%	75.771%
σ		0.860%	0.061	0.102	0.068	0.027	0.045	0.929%	0.813%
%RSD		1.151	2.550	36.180	29.910	86.610	93.200	1.212	1.074

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:26	0.104	0.105	-0.016	0.009	-0.017	75.397%
2	21:30:33	0.067	0.074	-0.021	0.015	-0.008	74.963%
3	21:30:41	0.094	0.075	-0.021	0.008	-0.015	75.910%
x		0.088	0.085	-0.019	0.010	-0.014	75.423%
σ		0.019	0.018	0.003	0.004	0.005	0.474%
%RSD		21.910	20.980	15.790	35.150	35.040	0.628

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:30	75.395%	45.080	911.700	940.700	0.000	49250.000	45920.000	46090.000
2	21:35:38	74.308%	46.730	940.900	976.400	0.000	49200.000	46280.000	46130.000
3	21:35:46	76.848%	44.480	918.300	959.800	0.000	47860.000	45790.000	45510.000
x		75.517%	45.430	923.700	959.000	0.000	48770.000	46000.000	45910.000
σ		1.275%	1.164	15.300	17.850	0.000	790.500	252.300	344.000
%RSD		1.688	2.562	1.656	1.862	0.000	1.621	0.549	0.749

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:30	1891.000	10780.000	0.000	45450.000	93560.000	91960.000	67.040%	880.500
2	21:35:38	1909.000	11030.000	0.000	45570.000	95310.000	94050.000	66.532%	891.200
3	21:35:46	1878.000	11030.000	0.000	46170.000	96990.000	95710.000	67.551%	902.600
x		1893.000	10950.000	0.000	45730.000	95290.000	93910.000	67.041%	891.400
σ		15.340	145.600	0.000	383.300	1716.000	1879.000	0.510%	11.050
%RSD		0.810	1.330	0.000	0.838	1.800	2.001	0.760	1.240

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:30	466.300	187.100	424.000	1034.000	1378.000	452.300	465.200	230.400
2	21:35:38	465.400	188.900	432.300	1024.000	1336.000	458.200	457.300	230.400
3	21:35:46	459.400	185.700	435.300	1028.000	1314.000	456.000	457.300	227.500
x		463.700	187.200	430.600	1029.000	1343.000	455.500	459.900	229.500
σ		3.724	1.586	5.838	4.850	32.750	2.979	4.567	1.679
%RSD		0.803	0.847	1.356	0.472	2.439	0.654	0.993	0.732

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:30	234.400	451.900	447.200	39.050	9.698	13.780	0.000	1150.000
2	21:35:38	230.900	454.700	446.000	38.930	8.646	11.690	0.000	1126.000
3	21:35:46	224.900	435.200	435.500	38.360	9.404	8.875	0.000	1110.000
x		230.100	447.300	442.900	38.780	9.249	11.450	0.000	1128.000
σ		4.794	10.560	6.400	0.367	0.543	2.462	0.000	20.020
%RSD		2.084	2.362	1.445	0.946	5.869	21.510	0.000	1.774

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:30	64.457%	988.600	1012.000	59.151%	47.290	47.030	45.070	87.230
2	21:35:38	66.387%	976.300	996.600	60.407%	45.500	46.000	47.480	88.120
3	21:35:46	67.581%	972.600	986.500	61.572%	46.290	46.240	47.070	90.080
x		66.141%	979.200	998.400	60.377%	46.360	46.420	46.540	88.480
σ		1.576%	8.355	12.850	1.211%	0.897	0.540	1.289	1.455
%RSD		2.383	0.853	1.287	2.006	1.936	1.164	2.769	1.644

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:30	62.286%	1864.000	466.400	452.200	1794.000	1798.000	68.878%	68.224%
2	21:35:38	62.977%	1857.000	465.700	456.200	1799.000	1825.000	69.830%	70.001%
3	21:35:46	62.534%	1882.000	470.300	459.800	1812.000	1832.000	69.555%	68.790%
x		62.599%	1868.000	467.500	456.100	1802.000	1818.000	69.421%	69.005%
σ		0.350%	12.650	2.504	3.771	9.127	18.010	0.490%	0.908%
%RSD		0.560	0.677	0.536	0.827	0.507	0.990	0.706	1.316

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:30	49.060	48.840	20.560	20.890	20.550	61.514%
2	21:35:38	49.540	48.880	20.270	20.010	20.240	62.762%
3	21:35:46	49.750	49.240	19.600	20.320	19.910	62.996%
x		49.450	48.990	20.140	20.410	20.230	62.424%
σ		0.352	0.222	0.496	0.450	0.321	0.796%
%RSD		0.712	0.453	2.460	2.205	1.588	1.276

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:36	74.490%	49.580	1026.000	1047.000	0.000	52540.000	49510.000	49720.000
2	21:40:44	75.559%	50.050	1002.000	1048.000	0.000	52790.000	49980.000	50680.000
3	21:40:52	74.144%	50.420	1045.000	1064.000	0.000	53020.000	50360.000	50150.000
x		74.731%	50.020	1025.000	1053.000	0.000	52780.000	49950.000	50180.000
σ		0.737%	0.419	21.310	9.347	0.000	239.800	421.300	477.500
%RSD		0.987	0.837	2.080	0.888	0.000	0.454	0.843	0.952
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:36	1901.000	12070.000	0.000	50180.000	98200.000	97620.000	67.842%	999.700
2	21:40:44	1936.000	12000.000	0.000	49930.000	100700.000	105100.000	67.663%	1043.000
3	21:40:52	1961.000	12140.000	0.000	50460.000	100900.000	105000.000	68.162%	1041.000
x		1933.000	12070.000	0.000	50190.000	99940.000	102600.000	67.889%	1028.000
σ		29.940	67.070	0.000	264.600	1514.000	4281.000	0.253%	24.400
%RSD		1.549	0.556	0.000	0.527	1.515	4.174	0.372	2.374
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:36	489.700	198.800	456.000	1030.000	1335.000	473.600	477.400	242.900
2	21:40:44	483.900	196.500	461.000	1050.000	1335.000	480.900	485.300	238.200
3	21:40:52	494.900	194.900	466.500	1042.000	1284.000	476.800	473.300	242.000
x		489.500	196.700	461.200	1040.000	1318.000	477.100	478.700	241.100
σ		5.478	1.989	5.294	10.120	29.660	3.643	6.124	2.497
%RSD		1.119	1.011	1.148	0.973	2.250	0.764	1.279	1.036
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:36	242.500	472.200	477.300	40.770	9.733	11.710	0.000	1182.000
2	21:40:44	238.300	470.400	466.800	39.670	10.290	10.180	0.000	1171.000
3	21:40:52	241.200	475.000	465.000	40.800	10.540	9.447	0.000	1187.000
x		240.600	472.500	469.700	40.410	10.190	10.450	0.000	1180.000
σ		2.128	2.334	6.660	0.643	0.413	1.155	0.000	8.107
%RSD		0.884	0.494	1.418	1.590	4.054	11.050	0.000	0.687
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:36	66.247%	1131.000	1153.000	60.055%	45.640	46.200	48.540	95.160
2	21:40:44	67.724%	1132.000	1154.000	60.942%	45.860	45.090	50.530	97.010
3	21:40:52	67.073%	1125.000	1143.000	60.783%	44.600	44.770	49.700	97.950
x		67.015%	1130.000	1150.000	60.593%	45.370	45.350	49.590	96.710
σ		0.740%	3.988	5.988	0.473%	0.676	0.751	0.998	1.419
%RSD		1.104	0.353	0.521	0.781	1.489	1.655	2.013	1.468
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:36	62.913%	2128.000	533.300	518.400	1929.000	1922.000	69.183%	69.058%
2	21:40:44	63.922%	2124.000	526.200	516.600	1909.000	1939.000	70.447%	70.571%
3	21:40:52	64.170%	2122.000	534.500	517.500	1904.000	1937.000	69.989%	69.940%
x		63.668%	2125.000	531.300	517.500	1914.000	1933.000	69.873%	69.857%
σ		0.666%	2.582	4.501	0.889	12.920	9.019	0.640%	0.760%
%RSD		1.045	0.122	0.847	0.172	0.675	0.467	0.915	1.088
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:40:36	52.340	52.680	22.030	22.240	21.620	62.189%		
2	21:40:44	54.020	52.290	21.450	20.660	21.430	63.138%		
3	21:40:52	53.000	52.680	21.470	21.550	21.390	63.670%		
x		53.120	52.550	21.650	21.480	21.480	62.999%		
σ		0.847	0.224	0.328	0.793	0.125	0.750%		
%RSD		1.595	0.427	1.516	3.690	0.581	1.191		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:45:44	80.304%	-0.271	12.720	12.330	0.000	3057.000	3022.000	2944.000
2	21:45:52	79.346%	-0.331	10.320	13.060	0.000	3063.000	2993.000	2976.000
3	21:46:00	77.385%	-0.262	13.480	12.700	0.000	3103.000	3095.000	3089.000
x		79.012%	-0.288	12.170	12.700	0.000	3074.000	3037.000	3003.000
σ		1.488%	0.038	1.647	0.364	0.000	24.910	52.740	76.030
%RSD		1.883	13.230	13.530	2.866	0.000	0.810	1.736	2.532

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:45:44	4.112	2308.000	0.000	917.700	46770.000	45380.000	70.779%	2.977
2	21:45:52	4.653	2232.000	0.000	927.700	48150.000	46460.000	70.323%	2.954
3	21:46:00	3.583	2371.000	0.000	943.900	48560.000	47360.000	70.119%	3.201
x		4.116	2304.000	0.000	929.800	47830.000	46400.000	70.407%	3.044
σ		0.535	69.500	0.000	13.220	937.900	995.500	0.338%	0.137
%RSD		13.000	3.017	0.000	1.421	1.961	2.146	0.480	4.492

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:45:44	-0.405	3.254	1.494	4.042	170.200	0.132	0.426	0.411
2	21:45:52	-0.863	3.321	1.510	3.466	163.600	0.106	0.296	0.423
3	21:46:00	-1.698	3.334	1.616	3.357	127.900	0.106	0.341	0.397
x		-0.989	3.303	1.540	3.622	153.900	0.115	0.354	0.410
σ		0.656	0.043	0.066	0.368	22.750	0.015	0.066	0.013
%RSD		66.310	1.296	4.299	10.160	14.780	12.910	18.560	3.196

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:45:44	0.603	2.267	2.659	0.463	0.082	3.125	0.000	184.500
2	21:45:52	0.541	2.216	2.962	0.526	-0.044	2.430	0.000	184.200
3	21:46:00	0.524	2.053	3.137	0.584	0.272	4.584	0.000	186.800
x		0.556	2.179	2.919	0.525	0.104	3.380	0.000	185.200
σ		0.042	0.112	0.242	0.060	0.159	1.099	0.000	1.438
%RSD		7.469	5.143	8.285	11.520	153.300	32.520	0.000	0.776

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:45:44	69.035%	3.028	3.347	63.851%	-0.000	-0.031	0.034	0.058
2	21:45:52	68.782%	3.050	2.860	64.045%	-0.019	-0.031	-0.000	-0.052
3	21:46:00	69.116%	2.025	2.470	64.833%	-0.031	-0.032	-0.000	0.028
x		68.978%	2.701	2.893	64.243%	-0.017	-0.031	0.011	0.011
σ		0.174%	0.586	0.439	0.520%	0.016	0.000	0.020	0.057
%RSD		0.252	21.680	15.190	0.810	92.650	0.404	174.600	497.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:45:44	66.565%	0.495	1.126	0.972	12.880	14.810	71.372%	70.748%
2	21:45:52	67.442%	0.173	0.657	0.656	13.530	12.840	71.079%	70.665%
3	21:46:00	68.154%	-0.500	0.592	0.322	12.690	14.690	71.699%	72.123%
x		67.387%	0.056	0.792	0.650	13.030	14.110	71.383%	71.178%
σ		0.796%	0.508	0.292	0.325	0.442	1.106	0.310%	0.819%
%RSD		1.181	903.300	36.810	50.000	3.391	7.838	0.434	1.150

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:45:44	0.178	0.157	-0.010	0.009	0.013	66.921%
2	21:45:52	0.140	0.093	0.048	0.015	0.018	67.341%
3	21:46:00	0.065	0.090	0.006	0.008	0.016	68.235%
x		0.128	0.113	0.014	0.011	0.016	67.499%
σ		0.057	0.038	0.030	0.004	0.003	0.671%
%RSD		44.940	33.140	205.200	36.140	16.490	0.994

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:54	79.092%	-0.318	1.583	2.304	0.000	613.900	625.600	590.700
2	21:51:02	78.637%	-0.304	1.525	3.002	0.000	638.600	632.600	609.900
3	21:51:10	77.143%	-0.116	2.983	2.994	0.000	630.200	596.500	612.900
x		78.291%	-0.246	2.030	2.766	0.000	627.600	618.200	604.500
σ		1.020%	0.113	0.826	0.401	0.000	12.590	19.150	12.060
%RSD		1.302	45.800	40.670	14.480	0.000	2.006	3.098	1.995
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:54	1.988	451.500	0.000	129.100	9254.000	8531.000	75.732%	0.410
2	21:51:02	1.613	464.600	0.000	130.900	9461.000	8880.000	74.353%	-0.016
3	21:51:10	1.165	475.100	0.000	122.900	9366.000	8819.000	74.420%	-0.106
x		1.589	463.800	0.000	127.600	9360.000	8743.000	74.835%	0.096
σ		0.412	11.820	0.000	4.162	103.500	186.500	0.778%	0.275
%RSD		25.940	2.550	0.000	3.260	1.106	2.134	1.039	285.900
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:54	-0.406	0.825	0.337	-0.360	31.220	0.020	0.122	-0.029
2	21:51:02	-0.223	0.917	0.405	-0.285	27.280	0.035	0.105	0.081
3	21:51:10	0.850	0.878	0.411	-0.448	21.740	0.030	0.166	0.128
x		0.074	0.873	0.384	-0.364	26.750	0.029	0.131	0.060
σ		0.678	0.046	0.041	0.081	4.764	0.008	0.032	0.081
%RSD		920.900	5.278	10.630	22.360	17.810	27.670	24.010	135.200
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:54	0.084	0.397	0.314	-0.129	-0.044	1.668	0.000	37.280
2	21:51:02	0.213	0.500	0.549	-0.077	-0.044	-0.262	0.000	37.220
3	21:51:10	0.132	0.492	0.617	-0.104	-0.044	1.336	0.000	36.920
x		0.143	0.463	0.494	-0.103	-0.044	0.914	0.000	37.140
σ		0.065	0.057	0.159	0.026	0.000	1.032	0.000	0.196
%RSD		45.590	12.410	32.180	25.260	0.000	112.900	0.000	0.527
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:54	71.264%	0.783	0.584	67.107%	-0.037	-0.032	-0.000	-0.079
2	21:51:02	70.659%	0.431	0.595	67.484%	-0.031	-0.038	-0.000	-0.066
3	21:51:10	71.974%	0.185	0.487	67.327%	-0.020	-0.044	-0.000	-0.013
x		71.299%	0.466	0.555	67.306%	-0.030	-0.038	-0.000	-0.053
σ		0.658%	0.300	0.059	0.190%	0.009	0.006	0.000	0.035
%RSD		0.923	64.400	10.670	0.282	30.390	16.460	37.230	65.610
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:54	69.775%	-2.431	-0.384	-0.256	2.400	2.405	72.591%	72.358%
2	21:51:02	69.463%	-2.443	-0.306	-0.302	2.844	2.460	73.340%	72.031%
3	21:51:10	69.624%	-2.530	-0.306	-0.349	2.694	2.951	73.196%	72.496%
x		69.621%	-2.468	-0.332	-0.302	2.646	2.606	73.043%	72.295%
σ		0.156%	0.054	0.045	0.047	0.226	0.301	0.397%	0.239%
%RSD		0.224	2.177	13.480	15.440	8.537	11.540	0.544	0.330
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:50:54	-0.012	0.019	-0.034	-0.018	-0.026	68.410%		
2	21:51:02	0.006	0.003	-0.023	0.001	-0.017	69.759%		
3	21:51:10	0.006	0.001	-0.035	-0.018	-0.027	70.085%		
x		-0.000	0.008	-0.031	-0.012	-0.023	69.418%		
σ		0.010	0.010	0.006	0.011	0.005	0.888%		
%RSD		3462.000	124.100	20.730	90.740	23.350	1.280		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:01	73.310%	47.800	948.000	974.200	0.000	49320.000	46510.000	45740.000
2	21:56:09	73.112%	47.900	953.100	981.900	0.000	49440.000	46670.000	46740.000
3	21:56:16	73.165%	47.950	955.200	1008.000	0.000	48550.000	46030.000	47140.000
x		73.195%	47.890	952.100	987.900	0.000	49100.000	46400.000	46540.000
σ		0.103%	0.077	3.717	17.570	0.000	481.700	333.500	720.400
%RSD		0.140	0.161	0.390	1.779	0.000	0.981	0.719	1.548

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:01	1779.000	11040.000	0.000	45160.000	93760.000	92000.000	65.446%	907.300
2	21:56:09	1808.000	10800.000	0.000	45650.000	95310.000	92490.000	66.080%	890.800
3	21:56:16	1777.000	11170.000	0.000	46320.000	95810.000	93980.000	66.423%	891.400
x		1788.000	11010.000	0.000	45710.000	94960.000	92820.000	65.983%	896.500
σ		17.200	185.200	0.000	580.700	1068.000	1030.000	0.496%	9.327
%RSD		0.962	1.683	0.000	1.270	1.124	1.110	0.751	1.040

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:01	463.100	188.200	433.200	920.000	1206.000	458.000	458.600	232.100
2	21:56:09	471.500	188.300	434.100	915.200	1200.000	459.400	466.300	230.200
3	21:56:16	462.100	188.400	436.500	913.300	1197.000	452.900	458.800	229.300
x		465.600	188.300	434.600	916.100	1201.000	456.800	461.200	230.600
σ		5.136	0.079	1.686	3.454	4.924	3.402	4.390	1.454
%RSD		1.103	0.042	0.388	0.377	0.410	0.745	0.952	0.631

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:01	230.500	442.400	435.200	38.720	9.534	11.230	0.000	1122.000
2	21:56:09	232.200	439.700	443.500	37.900	8.769	14.480	0.000	1130.000
3	21:56:16	228.400	439.400	442.100	38.340	9.101	11.270	0.000	1109.000
x		230.400	440.500	440.300	38.320	9.134	12.330	0.000	1120.000
σ		1.923	1.652	4.458	0.410	0.384	1.866	0.000	10.560
%RSD		0.835	0.375	1.013	1.071	4.199	15.140	0.000	0.943

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:01	64.627%	983.600	992.200	58.990%	46.700	47.510	49.830	86.890
2	21:56:09	64.647%	994.800	1010.000	59.228%	46.680	47.140	44.860	82.550
3	21:56:16	66.480%	978.000	1012.000	60.207%	46.170	45.860	46.580	86.690
x		65.251%	985.500	1005.000	59.475%	46.520	46.840	47.090	85.380
σ		1.064%	8.547	10.990	0.645%	0.303	0.865	2.522	2.453
%RSD		1.631	0.867	1.094	1.084	0.652	1.847	5.355	2.873

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:01	61.928%	1854.000	467.400	455.900	1796.000	1812.000	68.501%	67.781%
2	21:56:09	63.152%	1847.000	458.300	456.800	1783.000	1809.000	69.794%	69.653%
3	21:56:16	63.378%	1859.000	467.300	459.900	1807.000	1839.000	68.878%	70.164%
x		62.820%	1853.000	464.300	457.500	1796.000	1820.000	69.058%	69.200%
σ		0.780%	6.226	5.241	2.126	11.810	16.640	0.665%	1.255%
%RSD		1.242	0.336	1.129	0.465	0.658	0.914	0.963	1.813

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:01	49.290	48.930	20.370	20.580	20.400	61.527%
2	21:56:09	49.600	49.250	20.890	19.930	20.270	63.016%
3	21:56:16	50.950	48.660	20.640	20.910	20.390	63.848%
x		49.950	48.940	20.630	20.470	20.360	62.797%
σ		0.883	0.292	0.263	0.501	0.073	1.176%
%RSD		1.767	0.597	1.276	2.448	0.357	1.872

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:09	73.302%	45.210	941.100	986.400	0.000	48680.000	46330.000	46170.000
2	22:01:17	73.915%	47.320	975.100	995.800	0.000	48810.000	46130.000	46550.000
3	22:01:25	72.906%	49.820	997.200	1012.000	0.000	48320.000	46380.000	46430.000
x		73.374%	47.450	971.100	997.900	0.000	48600.000	46280.000	46380.000
σ		0.508%	2.309	28.260	12.800	0.000	252.700	133.100	196.400
%RSD		0.693	4.867	2.910	1.282	0.000	0.520	0.288	0.424
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:09	1737.000	10530.000	0.000	44860.000	93030.000	91260.000	66.782%	886.000
2	22:01:17	1746.000	10470.000	0.000	44440.000	93870.000	98640.000	67.676%	890.600
3	22:01:25	1724.000	10800.000	0.000	44830.000	95430.000	95200.000	67.037%	911.400
x		1736.000	10600.000	0.000	44710.000	94110.000	95030.000	67.165%	896.000
σ		11.130	176.500	0.000	234.400	1219.000	3694.000	0.460%	13.550
%RSD		0.641	1.665	0.000	0.524	1.295	3.887	0.685	1.513
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:09	463.900	185.600	421.300	906.900	1146.000	452.800	465.100	234.600
2	22:01:17	465.300	188.200	424.100	908.000	1187.000	457.400	453.300	227.300
3	22:01:25	461.600	187.300	437.400	913.200	1211.000	454.400	457.100	227.700
x		463.600	187.000	427.600	909.400	1182.000	454.900	458.500	229.900
σ		1.867	1.286	8.619	3.371	32.940	2.323	6.014	4.115
%RSD		0.403	0.688	2.016	0.371	2.788	0.511	1.312	1.790
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:09	232.800	440.500	437.000	37.860	10.660	8.845	0.000	1123.000
2	22:01:17	232.900	451.300	443.700	39.250	11.250	13.390	0.000	1155.000
3	22:01:25	229.900	437.800	440.900	39.660	10.350	10.960	0.000	1131.000
x		231.900	443.200	440.500	38.930	10.750	11.060	0.000	1136.000
σ		1.682	7.128	3.396	0.944	0.453	2.273	0.000	16.470
%RSD		0.725	1.608	0.771	2.424	4.215	20.540	0.000	1.449
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:09	65.980%	987.900	1010.000	60.724%	46.780	46.360	48.170	85.260
2	22:01:17	64.751%	1002.000	1015.000	61.055%	47.100	46.630	47.250	88.400
3	22:01:25	66.255%	995.100	1016.000	60.991%	47.380	46.340	49.680	89.750
x		65.662%	995.100	1014.000	60.923%	47.080	46.440	48.370	87.800
σ		0.801%	7.266	3.010	0.176%	0.300	0.162	1.228	2.300
%RSD		1.219	0.730	0.297	0.288	0.638	0.349	2.539	2.620
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:09	64.160%	1835.000	466.300	451.200	1787.000	1802.000	70.414%	69.327%
2	22:01:17	63.669%	1861.000	469.500	460.700	1796.000	1806.000	70.477%	68.989%
3	22:01:25	63.263%	1881.000	474.100	461.400	1810.000	1837.000	71.321%	70.380%
x		63.698%	1859.000	470.000	457.800	1798.000	1815.000	70.737%	69.565%
σ		0.449%	23.300	3.918	5.688	11.620	19.370	0.507%	0.725%
%RSD		0.705	1.253	0.834	1.243	0.646	1.067	0.716	1.043
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:01:09	50.490	49.620	20.560	20.480	20.530	63.326%		
2	22:01:17	48.810	49.670	20.560	20.250	20.380	64.476%		
3	22:01:25	50.360	49.600	20.750	20.380	20.250	64.671%		
x		49.890	49.630	20.620	20.370	20.390	64.158%		
σ		0.936	0.035	0.110	0.113	0.141	0.727%		
%RSD		1.876	0.071	0.532	0.553	0.692	1.133		

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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	22:06:19	73.801%	49.480	990.500	1023.000	0.000	51200.000	48920.000	49970.000
2	22:06:26	74.015%	49.260	1024.000	1047.000	0.000	51620.000	48940.000	49680.000
3	22:06:34	72.398%	51.200	1070.000	1080.000	0.000	52790.000	49800.000	50630.000
x		73.405%	49.980	1028.000	1050.000	0.000	51870.000	49220.000	50100.000
σ		0.879%	1.059	39.790	28.670	0.000	826.700	506.000	485.600
%RSD		1.197	2.120	3.870	2.731	0.000	1.594	1.028	0.969
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:06:19	1794.000	11710.000	0.000	49620.000	95470.000	98860.000	66.962%	1014.000
2	22:06:26	1842.000	11900.000	0.000	49930.000	98180.000	95700.000	66.901%	1031.000
3	22:06:34	1830.000	12110.000	0.000	49440.000	99340.000	97140.000	66.684%	1040.000
x		1822.000	11910.000	0.000	49670.000	97660.000	97240.000	66.849%	1028.000
σ		24.970	200.900	0.000	247.800	1984.000	1585.000	0.146%	13.430
%RSD		1.371	1.687	0.000	0.499	2.032	1.630	0.219	1.306
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:06:19	463.900	187.700	442.100	926.200	1210.000	469.400	466.000	237.000
2	22:06:26	476.000	191.000	449.100	929.900	1234.000	468.700	478.100	235.800
3	22:06:34	480.800	191.600	456.600	944.700	1258.000	470.500	463.700	234.000
x		473.600	190.100	449.300	933.600	1234.000	469.600	469.300	235.600
σ		8.693	2.125	7.278	9.791	24.190	0.927	7.713	1.504
%RSD		1.836	1.118	1.620	1.049	1.960	0.198	1.644	0.639
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:06:19	236.600	461.100	469.400	39.760	9.683	14.970	0.000	1167.000
2	22:06:26	238.200	461.500	457.100	39.570	9.801	12.170	0.000	1148.000
3	22:06:34	235.800	464.800	461.000	39.940	11.360	13.160	0.000	1141.000
x		236.900	462.500	462.500	39.760	10.280	13.440	0.000	1152.000
σ		1.219	1.992	6.261	0.186	0.936	1.420	0.000	13.530
%RSD		0.515	0.431	1.354	0.468	9.104	10.570	0.000	1.174
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:06:19	64.023%	1135.000	1148.000	59.283%	44.810	45.120	52.200	98.570
2	22:06:26	65.352%	1113.000	1146.000	59.719%	43.510	43.670	50.610	95.400
3	22:06:34	66.216%	1118.000	1151.000	59.508%	44.220	44.360	50.060	93.430
x		65.197%	1122.000	1149.000	59.503%	44.180	44.380	50.960	95.800
σ		1.105%	11.680	2.432	0.218%	0.651	0.728	1.109	2.592
%RSD		1.695	1.041	0.212	0.366	1.474	1.640	2.177	2.706
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:06:19	61.331%	2153.000	537.800	521.500	1885.000	1923.000	67.636%	68.741%
2	22:06:26	62.264%	2139.000	529.600	521.500	1866.000	1893.000	68.785%	67.920%
3	22:06:34	62.375%	2124.000	528.000	516.300	1855.000	1906.000	68.495%	69.954%
x		61.990%	2139.000	531.800	519.800	1869.000	1908.000	68.305%	68.871%
σ		0.573%	14.120	5.227	3.036	15.170	14.750	0.598%	1.024%
%RSD		0.925	0.660	0.983	0.584	0.812	0.773	0.875	1.486
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:06:19	51.560	51.390	20.710	21.520	20.920	60.988%		
2	22:06:26	51.210	50.650	21.180	20.600	20.970	62.829%		
3	22:06:34	51.460	51.730	20.820	20.400	20.730	61.970%		
x		51.410	51.260	20.900	20.840	20.870	61.929%		
σ		0.178	0.551	0.245	0.596	0.129	0.921%		
%RSD		0.346	1.075	1.172	2.862	0.617	1.488		

180-43165-G-14-A 4/27/2015 10:12:15 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	22:11:23	76.931%	-0.194	11.250	14.150	0.000	3428.000	3387.000	3368.000
2	22:11:31	75.612%	-0.162	11.590	15.630	0.000	3438.000	3346.000	3406.000
3	22:11:38	77.049%	-0.168	10.460	13.500	0.000	3475.000	3341.000	3425.000
x		76.531%	-0.175	11.100	14.430	0.000	3447.000	3358.000	3400.000
σ		0.798%	0.017	0.580	1.092	0.000	24.470	25.280	28.940
%RSD		1.043	9.779	5.226	7.573	0.000	0.710	0.753	0.851
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:11:23	166.400	2639.000	0.000	1103.000	52460.000	49380.000	69.968%	4.017
2	22:11:31	162.500	2691.000	0.000	1121.000	53480.000	51650.000	68.205%	5.211
3	22:11:38	172.500	2650.000	0.000	1136.000	54550.000	52280.000	67.974%	4.645
x		167.100	2660.000	0.000	1120.000	53490.000	51100.000	68.716%	4.624
σ		5.033	27.710	0.000	16.300	1045.000	1527.000	1.091%	0.597
%RSD		3.012	1.042	0.000	1.456	1.954	2.988	1.587	12.920
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:11:23	-0.033	3.540	11.700	225.800	399.400	0.177	0.369	1.168
2	22:11:31	1.875	3.882	12.550	227.700	436.300	0.197	0.357	1.273
3	22:11:38	1.022	3.736	12.540	228.600	354.900	0.225	0.358	1.132
x		0.955	3.719	12.260	227.400	396.800	0.199	0.361	1.191
σ		0.956	0.172	0.491	1.430	40.770	0.024	0.007	0.073
%RSD		100.100	4.620	4.002	0.629	10.270	11.990	1.860	6.146
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:11:23	1.684	4.121	4.728	0.607	0.150	3.794	0.000	204.000
2	22:11:31	1.358	4.994	3.563	0.761	0.217	1.001	0.000	205.200
3	22:11:38	1.377	3.800	5.168	0.514	0.152	2.625	0.000	204.000
x		1.473	4.305	4.486	0.628	0.173	2.473	0.000	204.400
σ		0.183	0.618	0.829	0.125	0.038	1.403	0.000	0.697
%RSD		12.390	14.350	18.490	19.860	22.120	56.720	0.000	0.341
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:11:23	67.135%	3.395	3.548	61.445%	-0.018	-0.044	0.071	-0.007
2	22:11:31	66.693%	2.778	2.464	61.821%	-0.012	-0.031	-0.000	0.005
3	22:11:38	66.771%	2.352	2.043	62.075%	-0.025	-0.031	-0.000	0.005
x		66.866%	2.842	2.685	61.780%	-0.018	-0.035	0.024	0.001
σ		0.236%	0.525	0.777	0.317%	0.006	0.008	0.041	0.007
%RSD		0.353	18.460	28.930	0.513	35.050	22.020	174.000	914.100
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:11:23	63.653%	0.570	0.883	0.569	16.370	16.220	67.908%	68.143%
2	22:11:31	65.148%	-0.028	0.643	0.372	14.460	16.930	68.357%	69.614%
3	22:11:38	65.582%	-0.156	0.433	0.254	17.240	17.960	69.662%	69.440%
x		64.794%	0.129	0.653	0.398	16.020	17.040	68.642%	69.066%
σ		1.012%	0.388	0.225	0.159	1.422	0.870	0.911%	0.804%
%RSD		1.561	300.800	34.450	39.970	8.874	5.106	1.328	1.164
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:11:23	0.150	0.158	0.141	0.263	0.191	62.990%		
2	22:11:31	0.094	0.090	0.180	0.155	0.170	64.152%		
3	22:11:38	0.062	0.072	0.191	0.151	0.140	67.675%		
x		0.102	0.107	0.171	0.190	0.167	64.939%		
σ		0.045	0.046	0.026	0.063	0.025	2.440%		
%RSD		43.980	42.850	15.340	33.460	15.210	3.757		

180-43165-H-14-B 4/27/2015 10:17:21 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	22:16:28	75.559%	-0.282	8.097	10.550	0.000	3157.000	3168.000	3215.000
2	22:16:36	75.681%	-0.309	7.992	10.940	0.000	3265.000	3231.000	3197.000
3	22:16:44	77.066%	-0.234	9.427	10.300	0.000	3256.000	3167.000	3156.000
x		76.102%	-0.275	8.505	10.600	0.000	3226.000	3189.000	3190.000
σ		0.837%	0.038	0.800	0.326	0.000	59.670	36.840	30.150
%RSD		1.099	13.850	9.402	3.080	0.000	1.850	1.155	0.945
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:28	14.900	2436.000	0.000	1023.000	48400.000	46330.000	70.286%	1.633
2	22:16:36	14.470	2486.000	0.000	1050.000	50700.000	47790.000	69.082%	2.443
3	22:16:44	15.820	2430.000	0.000	1027.000	51000.000	48720.000	69.669%	2.035
x		15.070	2450.000	0.000	1034.000	50030.000	47610.000	69.679%	2.037
σ		0.689	30.750	0.000	14.680	1424.000	1206.000	0.602%	0.405
%RSD		4.572	1.255	0.000	1.420	2.847	2.532	0.864	19.900
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:28	1.254	2.822	0.792	13.020	186.600	0.118	0.326	0.381
2	22:16:36	1.323	3.122	0.807	13.680	182.000	0.115	0.310	0.504
3	22:16:44	1.489	3.113	0.714	14.570	164.100	0.129	0.281	0.618
x		1.355	3.019	0.771	13.750	177.600	0.121	0.306	0.501
σ		0.120	0.171	0.050	0.781	11.880	0.008	0.023	0.119
%RSD		8.887	5.649	6.476	5.679	6.690	6.319	7.372	23.710
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:28	0.570	1.379	2.039	0.341	-0.044	2.550	0.000	194.100
2	22:16:36	0.731	1.499	1.925	0.374	0.022	2.775	0.000	198.400
3	22:16:44	0.669	1.506	2.172	0.548	0.344	2.941	0.000	196.500
x		0.657	1.461	2.045	0.421	0.108	2.755	0.000	196.300
σ		0.081	0.072	0.124	0.111	0.208	0.196	0.000	2.151
%RSD		12.350	4.894	6.046	26.450	192.800	7.116	0.000	1.095
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:28	66.073%	0.840	0.870	62.261%	-0.031	-0.017	-0.000	-0.064
2	22:16:36	65.736%	0.724	0.560	62.030%	-0.018	-0.044	-0.000	-0.051
3	22:16:44	66.988%	0.532	0.588	62.645%	-0.025	-0.024	0.034	-0.037
x		66.265%	0.698	0.672	62.312%	-0.025	-0.029	0.011	-0.051
σ		0.648%	0.156	0.172	0.311%	0.006	0.014	0.020	0.014
%RSD		0.978	22.300	25.490	0.499	25.450	49.360	174.900	26.810
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:28	63.803%	-2.011	0.092	-0.046	14.330	14.200	69.920%	69.233%
2	22:16:36	65.955%	-2.017	-0.026	-0.084	14.090	16.280	71.408%	69.418%
3	22:16:44	65.700%	-2.388	-0.032	0.190	13.010	14.900	70.231%	69.918%
x		65.153%	-2.139	0.011	0.020	13.810	15.130	70.520%	69.523%
σ		1.176%	0.216	0.070	0.149	0.699	1.058	0.785%	0.355%
%RSD		1.805	10.090	621.800	758.000	5.062	6.997	1.113	0.510
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:16:28	0.017	0.000	0.028	0.045	0.030	64.593%		
2	22:16:36	-0.007	0.032	0.084	0.082	0.050	66.411%		
3	22:16:44	0.010	0.012	0.058	0.049	0.028	71.346%		
x		0.006	0.015	0.057	0.059	0.036	67.450%		
σ		0.012	0.016	0.028	0.020	0.012	3.494%		
%RSD		192.700	107.600	49.660	34.790	33.240	5.181		

CCV 1533080 4/27/2015 10:22:26 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:32	73.747%	98.500	91.250	95.450	0.000	49280.000	46980.000	47870.000
2	22:21:40	75.494%	95.100	89.950	97.690	0.000	49260.000	47360.000	47650.000
3	22:21:48	74.994%	95.850	89.860	95.710	0.000	48650.000	47090.000	46950.000
x		74.745%	96.482%	90.356%	96.280%	0.000	98.129%	94.289%	94.972%
σ		0.900%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.204	1.848	0.862	1.271	0.000	0.723	0.407	1.010
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:32	468.500	4829.000	0.000	46940.000	46390.000	44640.000	69.544%	89.530
2	22:21:40	467.200	4602.000	0.000	46680.000	48120.000	45440.000	69.135%	93.340
3	22:21:48	469.300	4727.000	0.000	47780.000	48660.000	46320.000	68.323%	98.250
x		93.668%	94.386%	0.000	94.270%	95.438%	90.931%	69.001%	93.705%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.622%	n/a
%RSD		0.229	2.403	0.000	1.219	2.486	1.857	0.901	4.664
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:32	95.700	96.240	451.700	23960.000	23680.000	95.190	96.610	96.180
2	22:21:40	94.870	96.840	457.400	24130.000	23670.000	94.200	91.160	93.130
3	22:21:48	94.700	96.680	465.600	24110.000	23820.000	95.160	98.420	95.400
x		95.090%	96.587%	91.643%	96.274%	94.905%	94.850%	95.398%	94.905%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.564	0.320	1.523	0.389	0.360	0.591	3.961	1.667
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:32	99.080	94.770	92.920	97.380	101.400	107.800	0.000	98.510
2	22:21:40	94.090	94.360	91.570	97.420	100.100	100.200	0.000	99.210
3	22:21:48	94.580	92.910	94.390	97.740	98.210	100.200	0.000	96.910
x		95.917%	94.018%	92.961%	97.513%	99.906%	102.743%	0.000	98.209%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.868	1.039	1.515	0.205	1.625	4.281	0.000	1.202
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:32	66.977%	94.030	95.520	65.083%	93.860	94.700	95.260	97.920
2	22:21:40	67.760%	95.980	96.730	66.212%	92.910	93.670	96.580	95.230
3	22:21:48	68.846%	95.670	97.870	66.303%	95.480	94.410	95.730	99.760
x		67.861%	95.226%	96.708%	65.866%	94.085%	94.263%	95.857%	97.638%
σ		0.939%	n/a	n/a	0.680%	n/a	n/a	n/a	n/a
%RSD		1.383	1.098	1.218	1.032	1.382	0.564	0.700	2.334
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:32	65.262%	91.190	92.680	92.190	89.610	89.690	71.989%	71.799%
2	22:21:40	65.340%	92.680	94.640	92.650	95.670	95.820	71.690%	72.695%
3	22:21:48	64.439%	96.630	95.180	93.500	91.440	95.190	74.215%	73.160%
x		65.014%	93.502%	94.169%	92.779%	92.242%	93.563%	72.631%	72.551%
σ		0.499%	n/a	n/a	n/a	n/a	n/a	1.380%	0.692%
%RSD		0.768	3.005	1.395	0.714	3.365	3.603	1.900	0.954
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:21:32	96.060	96.910	97.440	99.030	97.660	66.579%		
2	22:21:40	96.040	97.610	99.770	98.400	97.960	66.765%		
3	22:21:48	95.540	97.180	97.420	97.350	97.030	67.409%		
x		95.878%	97.231%	98.209%	98.262%	97.550%	66.918%		
σ		n/a	n/a	n/a	n/a	n/a	0.436%		
%RSD		0.305	0.364	1.378	0.863	0.489	0.651		

CCB11 4/27/2015 10:32:42 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:48	84.017%	-0.173	0.373	1.009	0.000	13.690	7.440	9.350
2	22:31:56	84.586%	-0.295	0.742	0.837	0.000	16.890	7.106	8.509
3	22:32:04	83.103%	-0.254	0.967	1.154	0.000	20.680	7.955	7.731
x		83.902%	-0.240	0.694	1.000	0.000	17.090	7.500	8.530
σ		0.748%	0.062	0.300	0.159	0.000	3.499	0.427	0.810
%RSD		0.892	25.860	43.180	15.860	0.000	20.470	5.698	9.497

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:48	1.270	8.709	0.000	11.810	12.650	22.930	76.853%	-0.385
2	22:31:56	0.941	5.663	0.000	3.386	23.980	22.620	77.505%	-0.602
3	22:32:04	0.559	4.681	0.000	4.000	24.230	18.550	77.209%	-0.601
x		0.923	6.351	0.000	6.400	20.290	21.370	77.189%	-0.529
σ		0.356	2.100	0.000	4.698	6.615	2.444	0.326%	0.125
%RSD		38.540	33.070	0.000	73.410	32.610	11.440	0.423	23.670

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:48	-0.072	0.066	0.250	9.160	9.196	0.019	0.073	-0.019
2	22:31:56	0.028	0.090	0.280	8.427	10.890	0.019	0.032	-0.019
3	22:32:04	0.137	0.059	0.265	7.920	8.681	0.014	-0.070	0.003
x		0.031	0.072	0.265	8.502	9.588	0.018	0.012	-0.011
σ		0.104	0.016	0.015	0.623	1.154	0.003	0.073	0.013
%RSD		338.900	22.590	5.737	7.332	12.040	16.250	631.500	112.800

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:48	0.077	-0.012	0.240	-0.083	0.072	2.036	0.000	0.104
2	22:31:56	0.078	0.166	-0.136	-0.107	0.015	1.228	0.000	0.051
3	22:32:04	0.090	-0.103	0.123	-0.054	0.128	2.444	0.000	0.043
x		0.082	0.017	0.076	-0.081	0.072	1.903	0.000	0.066
σ		0.008	0.137	0.192	0.027	0.057	0.619	0.000	0.033
%RSD		9.278	814.800	253.900	32.740	79.100	32.510	0.000	50.420

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:48	75.178%	0.311	0.271	70.159%	0.014	-0.014	0.062	-0.079
2	22:31:56	74.138%	0.207	0.217	70.388%	0.013	-0.027	-0.000	-0.042
3	22:32:04	76.024%	0.217	0.243	71.160%	0.007	-0.021	0.031	-0.066
x		75.114%	0.245	0.244	70.569%	0.011	-0.020	0.031	-0.062
σ		0.944%	0.057	0.027	0.524%	0.003	0.006	0.031	0.019
%RSD		1.257	23.350	11.150	0.743	30.920	30.170	100.800	30.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:48	71.921%	-2.700	-0.304	-0.251	0.049	0.091	73.975%	72.864%
2	22:31:56	73.446%	-2.615	-0.373	-0.245	0.000	0.059	74.988%	73.716%
3	22:32:04	72.786%	-2.651	-0.322	-0.332	0.145	0.090	74.718%	74.375%
x		72.718%	-2.656	-0.333	-0.276	0.064	0.080	74.561%	73.652%
σ		0.765%	0.043	0.036	0.049	0.074	0.018	0.525%	0.757%
%RSD		1.051	1.611	10.750	17.730	114.200	22.360	0.703	1.028

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:48	0.044	0.058	-0.024	-0.013	-0.019	71.714%
2	22:31:56	0.053	0.083	-0.041	-0.007	-0.023	71.921%
3	22:32:04	0.065	0.044	-0.052	-0.007	-0.024	72.327%
x		0.054	0.062	-0.039	-0.009	-0.022	71.987%
σ		0.011	0.020	0.014	0.003	0.002	0.312%
%RSD		19.480	31.810	35.330	37.140	10.930	0.433

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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	22:36:56	75.431%	-0.268	7.765	8.281	0.000	2963.000	3133.000	3155.000
2	22:37:03	76.435%	-0.245	6.500	8.192	0.000	2983.000	3220.000	3188.000
3	22:37:11	75.343%	-0.322	6.987	8.277	0.000	3045.000	3276.000	3217.000
x		75.736%	-0.279	7.084	8.250	0.000	2997.000	3210.000	3187.000
σ		0.607%	0.039	0.638	0.050	0.000	42.940	71.950	30.980
%RSD		0.801	14.140	9.010	0.611	0.000	1.433	2.242	0.972
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:36:56	73.350	2394.000	0.000	953.100	46750.000	45110.000	68.723%	3.475
2	22:37:03	70.080	2406.000	0.000	989.800	48860.000	47350.000	66.873%	3.591
3	22:37:11	77.380	2436.000	0.000	974.100	50210.000	48620.000	67.231%	2.530
x		73.600	2412.000	0.000	972.300	48600.000	47020.000	67.609%	3.199
σ		3.656	21.320	0.000	18.410	1745.000	1777.000	0.981%	0.582
%RSD		4.968	0.884	0.000	1.894	3.591	3.780	1.451	18.180
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:36:56	-0.006	2.634	3.951	83.120	241.500	0.137	0.197	0.513
2	22:37:03	-0.425	2.767	4.382	82.680	245.400	0.050	0.272	0.604
3	22:37:11	-1.091	2.892	4.202	82.840	261.200	0.106	0.156	0.712
x		-0.507	2.765	4.178	82.880	249.400	0.097	0.208	0.610
σ		0.547	0.129	0.216	0.221	10.470	0.044	0.059	0.100
%RSD		107.900	4.672	5.174	0.267	4.198	44.780	28.220	16.380
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:36:56	0.968	2.464	1.950	0.413	0.153	2.953	0.000	192.200
2	22:37:03	1.015	2.594	2.386	0.457	0.153	1.722	0.000	193.500
3	22:37:11	0.862	2.598	2.434	0.501	0.220	1.681	0.000	196.500
x		0.948	2.552	2.257	0.457	0.175	2.119	0.000	194.100
σ		0.079	0.077	0.267	0.044	0.039	0.723	0.000	2.199
%RSD		8.279	2.999	11.810	9.602	22.060	34.120	0.000	1.133
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:36:56	66.147%	0.222	0.174	61.048%	-0.005	-0.024	-0.000	-0.065
2	22:37:03	66.666%	0.178	0.283	61.673%	0.001	-0.044	0.069	-0.079
3	22:37:11	66.085%	0.197	0.192	62.693%	-0.012	-0.024	-0.000	-0.037
x		66.299%	0.199	0.216	61.804%	-0.006	-0.031	0.023	-0.060
σ		0.319%	0.022	0.059	0.830%	0.007	0.012	0.040	0.021
%RSD		0.482	11.030	27.110	1.344	117.100	37.930	173.900	34.990
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:36:56	64.628%	-2.284	-0.210	-0.063	16.000	15.410	69.674%	69.114%
2	22:37:03	65.582%	-2.476	-0.113	-0.068	15.750	15.170	69.258%	70.493%
3	22:37:11	65.879%	-2.390	-0.196	-0.107	16.530	15.160	70.004%	69.974%
x		65.363%	-2.383	-0.173	-0.080	16.090	15.250	69.645%	69.860%
σ		0.653%	0.096	0.053	0.024	0.398	0.141	0.374%	0.697%
%RSD		0.999	4.043	30.370	30.380	2.471	0.922	0.536	0.997
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:36:56	0.084	0.047	0.100	0.092	0.089	64.682%		
2	22:37:03	0.053	0.061	0.049	0.023	0.046	66.682%		
3	22:37:11	0.030	0.032	0.061	0.075	0.088	66.500%		
x		0.056	0.046	0.070	0.063	0.074	65.955%		
σ		0.027	0.015	0.027	0.036	0.024	1.106%		
%RSD		48.540	31.630	38.650	57.430	32.820	1.677		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:00	75.085%	-0.362	7.374	7.590	0.000	3088.000	3242.000	3194.000
2	22:42:08	79.203%	-0.370	7.924	7.683	0.000	3015.000	3147.000	3133.000
3	22:42:16	76.069%	-0.271	7.241	9.105	0.000	3119.000	3253.000	3254.000
x		76.786%	-0.334	7.513	8.126	0.000	3074.000	3214.000	3193.000
σ		2.150%	0.055	0.362	0.849	0.000	53.190	57.830	60.540
%RSD		2.800	16.490	4.821	10.450	0.000	1.730	1.799	1.896
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:00	46.690	2364.000	0.000	978.200	47640.000	46580.000	68.732%	1.928
2	22:42:08	50.150	2398.000	0.000	987.100	49360.000	47370.000	68.447%	2.667
3	22:42:16	50.430	2392.000	0.000	1005.000	50110.000	47770.000	68.060%	3.076
x		49.090	2385.000	0.000	990.300	49030.000	47240.000	68.413%	2.557
σ		2.086	18.130	0.000	13.870	1268.000	604.200	0.337%	0.582
%RSD		4.250	0.760	0.000	1.401	2.585	1.279	0.493	22.770
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:00	1.393	3.021	0.715	6.252	161.500	0.109	0.174	1.254
2	22:42:08	-0.057	3.154	0.803	6.290	168.300	0.082	0.129	1.248
3	22:42:16	0.843	3.255	0.769	6.062	170.400	0.121	0.336	1.431
x		0.727	3.143	0.762	6.201	166.700	0.104	0.213	1.311
σ		0.732	0.117	0.044	0.122	4.654	0.020	0.109	0.104
%RSD		100.700	3.728	5.788	1.974	2.791	18.990	51.150	7.939
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:00	1.476	5.493	5.535	0.510	0.087	4.146	0.000	194.900
2	22:42:08	1.582	4.773	4.441	0.414	0.284	4.368	0.000	196.900
3	22:42:16	1.535	5.417	4.646	0.449	0.153	2.408	0.000	197.800
x		1.531	5.228	4.874	0.458	0.175	3.641	0.000	196.500
σ		0.053	0.396	0.582	0.048	0.100	1.073	0.000	1.505
%RSD		3.460	7.575	11.930	10.560	57.300	29.470	0.000	0.766
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:00	66.158%	0.361	0.095	61.663%	-0.031	-0.017	-0.000	-0.065
2	22:42:08	66.135%	0.080	0.084	61.445%	-0.031	-0.038	0.035	-0.079
3	22:42:16	66.286%	0.178	0.307	62.136%	-0.006	-0.038	0.034	-0.079
x		66.193%	0.206	0.162	61.748%	-0.023	-0.031	0.023	-0.074
σ		0.081%	0.143	0.126	0.353%	0.015	0.012	0.020	0.008
%RSD		0.123	69.180	77.510	0.572	64.290	38.380	87.420	10.990
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:00	64.528%	-2.358	0.042	0.053	13.210	16.620	67.528%	69.092%
2	22:42:08	65.323%	-2.247	0.017	-0.054	14.320	14.730	69.067%	68.047%
3	22:42:16	66.063%	-2.347	-0.097	-0.133	14.910	13.780	69.680%	68.705%
x		65.304%	-2.317	-0.013	-0.044	14.150	15.040	68.758%	68.614%
σ		0.768%	0.061	0.074	0.093	0.861	1.446	1.109%	0.528%
%RSD		1.175	2.635	582.700	209.400	6.085	9.613	1.613	0.770
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:42:00	-0.007	0.019	0.243	0.232	0.224	63.635%		
2	22:42:08	0.002	0.004	0.207	0.185	0.219	65.230%		
3	22:42:16	0.002	0.004	0.266	0.191	0.253	65.398%		
x		-0.001	0.009	0.239	0.203	0.232	64.754%		
σ		0.005	0.009	0.030	0.025	0.018	0.973%		
%RSD		747.400	93.410	12.460	12.520	7.925	1.503		

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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	22:50:57	75.981%	0.783	20.400	21.100	0.000	513.300	505.100	506.700
2	22:51:04	73.335%	0.719	21.420	22.010	0.000	522.300	486.400	516.600
3	22:51:12	73.179%	0.902	20.840	21.570	0.000	529.800	518.100	514.900
x		74.165%	80.146%	417.727%	431.193%	0.000	652.263%	503.206%	512.725%
σ		1.574%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.123	11.560	2.454	2.123	0.000	1.585	3.171	1.027
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:50:57	35.350	517.100	0.000	455.600	557.500	479.100	75.802%	5.887
2	22:51:04	33.260	502.700	0.000	445.900	538.200	456.600	76.130%	5.858
3	22:51:12	34.690	494.500	0.000	449.100	546.000	483.500	75.110%	4.621
x		114.777%	100.954%	0.000	450.214%	547.238%	473.050%	75.680%	109.103%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.521%	n/a
%RSD		3.114	2.267	0.000	1.103	1.779	3.055	0.688	13.250
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:50:57	0.862	2.278	5.013	51.580	47.940	0.526	1.414	2.063
2	22:51:04	1.395	2.326	5.025	52.040	44.300	0.510	0.979	2.050
3	22:51:12	0.931	2.219	5.052	53.420	58.510	0.442	1.145	2.048
x		106.274%	113.734%	100.604%	104.697%	100.500%	98.502%	117.912%	102.687%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		27.310	2.356	0.402	1.834	14.690	9.022	18.620	0.404
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:50:57	1.901	5.431	4.569	0.855	6.082	5.043	0.000	4.795
2	22:51:04	2.003	5.060	5.389	0.829	4.666	8.655	0.000	5.105
3	22:51:12	2.241	4.892	4.892	0.745	3.850	5.407	0.000	4.988
x		102.417%	102.554%	99.000%	80.948%	97.321%	127.370%	0.000	99.253%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		8.537	5.374	8.345	7.099	23.210	31.220	0.000	3.160
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:50:57	73.723%	4.439	4.210	76.289%	1.191	1.288	1.245	1.247
2	22:51:04	73.681%	4.539	4.425	76.478%	1.218	1.273	1.067	1.412
3	22:51:12	75.279%	4.229	3.868	77.028%	1.259	1.340	1.451	1.512
x		74.228%	88.043%	83.356%	76.598%	122.285%	130.046%	125.418%	139.071%
σ		0.911%	n/a	n/a	0.384%	n/a	n/a	n/a	n/a
%RSD		1.227	3.598	6.737	0.501	2.798	2.685	15.340	9.616
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:50:57	44.830%	4.061	2.309	2.535	13.630	13.220	64.776%	72.460%
2	22:51:04	45.155%	3.598	2.721	2.203	11.950	12.930	65.623%	72.161%
3	22:51:12	45.051%	4.128	2.688	2.154	12.890	12.460	66.014%	74.253%
x		45.012%	78.580%	128.638%	114.868%	128.213%	128.677%	65.471%	72.958%
σ		0.166%	n/a	n/a	n/a	n/a	n/a	0.633%	1.131%
%RSD		0.369	7.345	8.899	9.029	6.564	2.957	0.967	1.551
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:50:57	0.873	0.907	0.960	1.098	1.035	69.080%		
2	22:51:04	0.868	0.906	1.057	0.985	1.063	71.240%		
3	22:51:12	0.901	0.921	0.947	1.109	1.025	71.498%		
x		88.035%	91.144%	98.802%	106.395%	104.061%	70.606%		
σ		n/a	n/a	n/a	n/a	n/a	1.328%		
%RSD		2.010	0.909	6.084	6.450	1.887	1.881		

CCV 1533080 4/27/2015 11:02:02 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	23:01:09	77.224%	93.450	88.470	93.250	0.000	49870.000	46400.000	48030.000
2	23:01:17	76.040%	96.800	95.810	94.660	0.000	49560.000	47990.000	48670.000
3	23:01:24	74.297%	98.380	93.670	97.040	0.000	50730.000	49530.000	49300.000
x		75.854%	96.208%	92.650%	94.982%	0.000	100.107%	95.944%	97.332%
σ		1.472%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.941	2.617	4.074	2.013	0.000	1.210	3.259	1.305

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:09	489.900	4833.000	0.000	49030.000	46920.000	45220.000	69.267%	94.740
2	23:01:17	489.600	4838.000	0.000	49820.000	48200.000	46240.000	68.502%	94.690
3	23:01:24	490.800	4833.000	0.000	49130.000	48430.000	46580.000	68.475%	95.160
x		98.019%	96.691%	0.000	98.655%	95.701%	92.025%	68.748%	94.865%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.450%	n/a
%RSD		0.128	0.063	0.000	0.875	1.709	1.543	0.654	0.275

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:09	96.220	98.160	451.700	24330.000	23600.000	94.310	95.110	97.650
2	23:01:17	96.820	98.290	470.400	24610.000	23900.000	97.720	95.680	98.060
3	23:01:24	98.020	99.010	466.100	24520.000	23800.000	95.500	98.870	96.340
x		97.018%	98.483%	92.546%	97.943%	95.063%	95.841%	96.554%	97.351%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.948	0.466	2.120	0.596	0.634	1.804	2.102	0.923

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:09	95.020	95.400	98.990	97.460	93.340	96.660	0.000	97.100
2	23:01:17	93.790	94.570	94.330	97.760	96.400	101.400	0.000	96.200
3	23:01:24	95.390	98.960	94.930	99.900	105.000	94.060	0.000	98.380
x		94.735%	96.311%	96.085%	98.373%	98.237%	97.366%	0.000	97.227%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.887	2.422	2.640	1.351	6.136	3.806	0.000	1.129

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:09	69.001%	93.260	93.760	65.968%	92.890	93.430	95.470	97.970
2	23:01:17	69.477%	95.400	97.640	65.956%	95.150	95.850	93.580	96.430
3	23:01:24	69.285%	97.300	97.040	66.402%	94.550	94.670	98.580	99.890
x		69.255%	95.321%	96.147%	66.108%	94.194%	94.649%	95.876%	98.096%
σ		0.240%	n/a	n/a	0.254%	n/a	n/a	n/a	n/a
%RSD		0.346	2.122	2.171	0.384	1.242	1.278	2.630	1.766

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:09	64.615%	92.080	94.180	94.010	91.960	93.320	70.845%	70.565%
2	23:01:17	64.938%	93.330	94.570	94.670	94.890	90.350	71.711%	72.526%
3	23:01:24	64.895%	91.540	95.420	95.490	93.790	94.120	71.959%	71.265%
x		64.816%	92.318%	94.725%	94.722%	93.549%	92.595%	71.505%	71.452%
σ		0.176%	n/a	n/a	n/a	n/a	n/a	0.585%	0.994%
%RSD		0.271	0.994	0.671	0.785	1.581	2.148	0.818	1.391

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:09	92.070	91.510	91.900	92.110	91.600	68.368%
2	23:01:17	92.960	92.510	93.130	93.280	93.380	67.666%
3	23:01:24	93.710	92.520	91.320	92.160	92.680	68.260%
x		92.913%	92.181%	92.119%	92.520%	92.554%	68.098%
σ		n/a	n/a	n/a	n/a	n/a	0.378%
%RSD		0.884	0.627	1.001	0.715	0.973	0.555

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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	23:10:10	82.585%	-0.253	1.632	0.367	0.000	8.510	15.300	12.530
2	23:10:18	82.797%	-0.278	1.381	0.338	0.000	7.572	12.750	14.320
3	23:10:26	82.242%	-0.301	0.123	0.194	0.000	8.605	6.564	12.190
x		82.541%	-0.277	1.045	0.299	0.000	8.229	11.540	13.010
σ		0.280%	0.024	0.809	0.093	0.000	0.571	4.494	1.142
%RSD		0.339	8.702	77.360	31.000	0.000	6.940	38.940	8.778

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:10	1.015	9.774	0.000	13.590	22.800	15.630	76.043%	-0.468
2	23:10:18	-0.021	6.749	0.000	20.730	38.160	20.580	75.112%	-0.598
3	23:10:26	0.452	6.268	0.000	21.710	21.570	23.830	74.591%	-0.508
x		0.482	7.597	0.000	18.680	27.510	20.010	75.249%	-0.525
σ		0.519	1.901	0.000	4.434	9.239	4.129	0.736%	0.066
%RSD		107.700	25.020	0.000	23.740	33.580	20.630	0.978	12.650

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:10	-0.082	0.020	0.277	11.550	12.830	0.015	0.116	-0.001
2	23:10:18	0.070	0.062	0.226	11.540	12.870	0.024	0.055	-0.065
3	23:10:26	0.109	0.060	0.216	10.470	13.890	0.020	-0.025	0.041
x		0.033	0.047	0.240	11.190	13.190	0.020	0.049	-0.009
σ		0.101	0.023	0.033	0.620	0.600	0.005	0.071	0.053
%RSD		308.300	49.160	13.800	5.546	4.548	25.010	146.200	627.800

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:10	0.034	0.051	0.095	-0.063	0.015	1.679	0.000	0.050
2	23:10:18	-0.012	0.287	0.016	-0.126	-0.044	1.684	0.000	0.079
3	23:10:26	0.004	0.323	0.172	-0.063	0.131	0.947	0.000	0.086
x		0.008	0.220	0.094	-0.084	0.034	1.437	0.000	0.072
σ		0.023	0.148	0.078	0.036	0.089	0.424	0.000	0.019
%RSD		275.600	67.010	83.030	42.720	260.200	29.530	0.000	26.230

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:10	74.375%	0.296	0.150	70.289%	-0.009	-0.032	0.031	-0.029
2	23:10:18	76.160%	0.200	0.156	70.999%	-0.004	-0.044	-0.000	-0.029
3	23:10:26	75.345%	0.113	0.112	71.323%	-0.026	-0.027	-0.000	-0.066
x		75.293%	0.203	0.139	70.870%	-0.013	-0.035	0.010	-0.041
σ		0.894%	0.091	0.024	0.529%	0.012	0.009	0.018	0.022
%RSD		1.187	44.940	16.940	0.746	88.980	26.180	175.500	52.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:10	72.869%	-2.460	-0.264	-0.242	0.000	0.001	73.077%	71.796%
2	23:10:18	73.134%	-2.721	-0.241	-0.277	0.048	-0.029	74.563%	73.735%
3	23:10:26	74.350%	-2.648	-0.253	-0.225	0.143	0.059	75.072%	74.366%
x		73.451%	-2.610	-0.253	-0.248	0.064	0.010	74.237%	73.299%
σ		0.790%	0.135	0.012	0.027	0.073	0.045	1.037%	1.339%
%RSD		1.075	5.152	4.606	10.700	114.100	443.600	1.397	1.827

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:10	0.053	0.086	-0.008	0.024	-0.010	71.357%
2	23:10:18	0.104	0.043	-0.009	-0.025	-0.013	72.435%
3	23:10:26	0.069	0.061	-0.014	-0.038	-0.021	72.396%
x		0.076	0.063	-0.010	-0.013	-0.015	72.063%
σ		0.026	0.022	0.003	0.033	0.006	0.611%
%RSD		34.160	34.480	33.620	251.500	39.400	0.848

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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	23:15:20	72.605%	-0.231	14.380	17.570	0.000	97450.000	29.800	24.790
2	23:15:27	74.230%	-0.305	15.250	16.220	0.000	98540.000	27.690	29.760
3	23:15:35	73.079%	-0.219	15.350	17.780	0.000	98680.000	24.570	27.140
x		73.304%	-0.252	14.990	17.190	0.000	98220.000	27.350	27.230
σ		0.836%	0.047	0.534	0.849	0.000	669.700	2.631	2.488
%RSD		1.140	18.580	3.566	4.940	0.000	0.682	9.619	9.137

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:20	7.607	105.000	0.000	162.300	963.200	938.100	69.347%	-0.539
2	23:15:27	10.220	102.400	0.000	169.900	939.200	935.100	68.811%	-0.199
3	23:15:35	10.880	105.300	0.000	167.400	1005.000	950.000	69.527%	-0.300
x		9.569	104.200	0.000	166.500	969.200	941.100	69.228%	-0.346
σ		1.732	1.607	0.000	3.871	33.430	7.881	0.373%	0.174
%RSD		18.100	1.542	0.000	2.324	3.450	0.837	0.538	50.340

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:20	-0.206	0.649	0.641	59.550	58.740	0.081	0.570	0.604
2	23:15:27	0.064	0.690	0.655	56.640	68.360	0.091	0.346	0.524
3	23:15:35	0.024	0.663	0.694	57.670	58.380	0.032	0.431	0.589
x		-0.039	0.667	0.664	57.950	61.830	0.068	0.449	0.572
σ		0.146	0.021	0.028	1.474	5.657	0.031	0.113	0.043
%RSD		373.600	3.081	4.151	2.543	9.150	46.220	25.160	7.482

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:20	0.447	1.947	2.674	2.373	32.780	51.620	0.000	3.867
2	23:15:27	0.760	1.873	2.287	2.842	33.770	49.230	0.000	3.950
3	23:15:35	0.525	2.154	2.332	2.526	32.740	45.260	0.000	4.194
x		0.577	1.991	2.431	2.580	33.100	48.700	0.000	4.004
σ		0.163	0.146	0.212	0.239	0.580	3.213	0.000	0.170
%RSD		28.160	7.333	8.711	9.267	1.753	6.597	0.000	4.246

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:20	68.523%	0.301	0.363	64.171%	-0.031	-0.031	-0.000	-0.065
2	23:15:27	69.667%	0.336	0.264	64.086%	0.006	-0.038	0.033	-0.065
3	23:15:35	69.484%	0.295	0.357	64.889%	-0.019	-0.038	-0.000	-0.039
x		69.225%	0.311	0.328	64.382%	-0.015	-0.036	0.011	-0.056
σ		0.615%	0.022	0.055	0.442%	0.019	0.004	0.019	0.015
%RSD		0.888	7.007	16.890	0.686	125.400	10.600	175.900	27.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:20	67.489%	-2.788	-0.070	-0.043	0.413	0.702	70.570%	70.430%
2	23:15:27	67.652%	-2.775	-0.160	-0.141	0.976	0.509	70.989%	70.925%
3	23:15:35	68.021%	-2.922	-0.134	-0.094	0.874	0.699	70.456%	71.727%
x		67.721%	-2.828	-0.121	-0.092	0.754	0.637	70.671%	71.027%
σ		0.273%	0.081	0.046	0.049	0.300	0.111	0.281%	0.655%
%RSD		0.402	2.877	38.130	52.780	39.800	17.390	0.397	0.922

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:20	0.061	0.040	1.337	1.124	1.208	68.345%
2	23:15:27	0.038	0.042	1.242	1.156	1.251	67.587%
3	23:15:35	0.038	0.056	1.287	1.019	1.163	67.582%
x		0.046	0.046	1.289	1.100	1.207	67.838%
σ		0.013	0.009	0.048	0.071	0.044	0.439%
%RSD		28.090	18.630	3.713	6.499	3.678	0.647

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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	23:20:25	74.767%	-0.321	16.180	18.400	0.000	97760.000	4.838	3.736
2	23:20:33	75.039%	-0.308	16.020	18.880	0.000	97370.000	4.126	4.825
3	23:20:41	74.212%	-0.319	15.960	18.320	0.000	99670.000	2.824	7.276
x		74.673%	-0.316	16.050	18.530	0.000	98270.000	3.929	5.279
σ		0.421%	0.007	0.111	0.301	0.000	1230.000	1.021	1.813
%RSD		0.564	2.225	0.690	1.625	0.000	1.252	25.990	34.350

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:25	5.689	100.300	0.000	155.100	881.700	886.800	71.316%	-0.637
2	23:20:33	6.290	100.900	0.000	162.100	984.400	899.300	70.051%	-0.446
3	23:20:41	6.332	97.790	0.000	162.700	941.900	917.800	70.662%	-0.307
x		6.103	99.670	0.000	160.000	936.000	901.300	70.677%	-0.463
σ		0.360	1.644	0.000	4.250	51.570	15.590	0.633%	0.166
%RSD		5.896	1.650	0.000	2.657	5.509	1.730	0.895	35.740

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:25	-0.337	0.313	0.129	90.140	79.400	0.032	0.643	0.384
2	23:20:33	0.034	0.263	0.138	93.470	93.750	0.058	0.317	0.403
3	23:20:41	0.410	0.334	0.178	92.780	89.160	0.089	0.400	0.483
x		0.036	0.303	0.148	92.130	87.430	0.060	0.454	0.423
σ		0.373	0.036	0.026	1.762	7.329	0.029	0.170	0.053
%RSD		1048.000	11.980	17.420	1.912	8.382	48.090	37.370	12.470

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:25	0.520	1.462	1.607	2.521	37.190	50.050	0.000	3.945
2	23:20:33	0.472	1.529	1.156	2.571	35.130	57.810	0.000	3.947
3	23:20:41	0.483	1.576	1.128	2.526	38.540	54.730	0.000	4.027
x		0.492	1.522	1.297	2.539	36.950	54.200	0.000	3.973
σ		0.025	0.057	0.269	0.027	1.715	3.908	0.000	0.047
%RSD		5.098	3.740	20.730	1.079	4.640	7.210	0.000	1.182

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:25	68.635%	0.184	0.228	64.602%	-0.001	-0.038	-0.000	-0.051
2	23:20:33	69.794%	0.161	0.153	64.747%	-0.019	-0.031	-0.000	-0.065
3	23:20:41	70.438%	0.292	0.188	64.598%	-0.037	-0.031	-0.000	-0.065
x		69.623%	0.212	0.190	64.649%	-0.019	-0.034	-0.000	-0.061
σ		0.914%	0.070	0.037	0.085%	0.018	0.004	0.000	0.008
%RSD		1.312	33.150	19.730	0.131	97.080	11.050	55.310	13.340

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:25	66.120%	-2.692	-0.180	-0.158	0.469	0.548	70.809%	69.744%
2	23:20:33	67.495%	-2.729	-0.167	-0.175	0.621	0.544	70.153%	70.576%
3	23:20:41	67.691%	-2.819	-0.125	-0.165	0.205	0.697	71.399%	69.833%
x		67.102%	-2.747	-0.157	-0.166	0.431	0.596	70.787%	70.051%
σ		0.856%	0.065	0.029	0.009	0.210	0.087	0.623%	0.457%
%RSD		1.276	2.377	18.370	5.186	48.750	14.550	0.880	0.653

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:25	0.021	0.028	0.405	0.282	0.334	65.917%
2	23:20:33	0.007	0.020	0.406	0.317	0.380	65.685%
3	23:20:41	0.035	0.038	0.468	0.401	0.399	66.149%
x		0.021	0.029	0.426	0.333	0.371	65.917%
σ		0.014	0.009	0.036	0.061	0.033	0.232%
%RSD		66.860	31.010	8.492	18.220	8.977	0.352

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:32	77.568%	-0.288	12.500	15.070	0.000	69320.000	109.700	115.100
2	23:25:40	75.554%	-0.269	13.180	15.630	0.000	72110.000	126.100	119.300
3	23:25:47	78.745%	-0.201	12.520	13.740	0.000	70670.000	110.200	105.500
x		77.289%	-0.253	12.730	14.810	0.000	70700.000	115.300	113.300
σ		1.614%	0.046	0.383	0.970	0.000	1397.000	9.327	7.101
%RSD		2.088	18.010	3.009	6.547	0.000	1.976	8.088	6.267

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:32	10.240	106.200	0.000	124.600	1131.000	1063.000	72.021%	-0.269
2	23:25:40	10.000	104.000	0.000	136.200	1161.000	1083.000	69.350%	-0.156
3	23:25:47	10.210	127.000	0.000	128.900	1111.000	1109.000	70.134%	-0.162
x		10.150	112.400	0.000	129.900	1134.000	1085.000	70.502%	-0.196
σ		0.130	12.670	0.000	5.887	25.050	22.950	1.373%	0.064
%RSD		1.277	11.270	0.000	4.531	2.209	2.115	1.947	32.610

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:32	-0.495	1.750	3.558	110.500	116.100	0.063	1.732	1.128
2	23:25:40	-0.128	1.868	3.642	114.200	116.700	0.117	1.141	1.178
3	23:25:47	-0.222	2.070	3.615	113.500	124.300	0.095	1.133	1.222
x		-0.282	1.896	3.605	112.700	119.000	0.092	1.335	1.176
σ		0.191	0.162	0.043	1.992	4.554	0.027	0.344	0.047
%RSD		67.800	8.547	1.188	1.767	3.827	29.740	25.730	4.018

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:32	1.431	5.398	4.318	2.238	7.736	25.780	0.000	3.908
2	23:25:40	1.132	3.342	4.379	2.177	8.156	19.500	0.000	4.169
3	23:25:47	0.995	3.744	4.553	2.293	6.653	30.240	0.000	3.987
x		1.186	4.161	4.417	2.236	7.515	25.170	0.000	4.021
σ		0.223	1.090	0.122	0.058	0.775	5.393	0.000	0.134
%RSD		18.790	26.190	2.760	2.595	10.320	21.420	0.000	3.333

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:32	68.220%	0.324	0.147	63.748%	-0.025	-0.018	-0.000	-0.065
2	23:25:40	70.027%	0.178	0.211	65.034%	-0.025	-0.032	-0.000	-0.012
3	23:25:47	69.775%	0.142	0.201	64.729%	-0.025	-0.038	-0.000	-0.026
x		69.341%	0.215	0.187	64.503%	-0.025	-0.029	-0.000	-0.034
σ		0.979%	0.096	0.034	0.672%	0.000	0.010	0.000	0.027
%RSD		1.411	44.880	18.460	1.041	0.617	34.870	123.700	79.670

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:32	66.598%	-2.873	-0.200	-0.319	1.140	0.736	71.019%	69.365%
2	23:25:40	68.481%	-2.866	-0.233	-0.299	0.763	0.504	71.519%	71.030%
3	23:25:47	68.936%	-2.781	-0.252	-0.264	0.818	0.823	70.049%	70.115%
x		68.005%	-2.840	-0.228	-0.294	0.907	0.688	70.862%	70.170%
σ		1.239%	0.051	0.026	0.028	0.204	0.165	0.748%	0.834%
%RSD		1.822	1.802	11.510	9.476	22.450	24.020	1.055	1.188

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:32	0.188	0.183	3.942	3.234	3.750	65.210%
2	23:25:40	0.227	0.198	4.065	3.409	3.748	66.056%
3	23:25:47	0.167	0.181	4.147	3.640	3.920	65.724%
x		0.194	0.188	4.052	3.428	3.806	65.663%
σ		0.030	0.009	0.103	0.204	0.099	0.426%
%RSD		15.660	4.927	2.548	5.955	2.588	0.649

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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	23:30:40	75.756%	-0.270	13.390	15.140	0.000	78460.000	85.200	81.680
2	23:30:48	77.648%	-0.354	11.800	14.870	0.000	76560.000	83.570	81.370
3	23:30:55	75.749%	-0.296	14.010	14.320	0.000	79030.000	83.080	77.170
x		76.385%	-0.306	13.070	14.770	0.000	78020.000	83.950	80.070
σ		1.094%	0.043	1.137	0.416	0.000	1296.000	1.112	2.517
%RSD		1.433	14.030	8.702	2.818	0.000	1.662	1.325	3.144
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:40	5.358	101.300	0.000	139.000	1198.000	1097.000	71.801%	-0.083
2	23:30:48	5.233	97.150	0.000	143.400	1227.000	1134.000	71.027%	-0.216
3	23:30:55	5.127	97.720	0.000	135.600	1254.000	1156.000	70.663%	-0.119
x		5.239	98.720	0.000	139.400	1227.000	1129.000	71.163%	-0.139
σ		0.116	2.238	0.000	3.915	28.050	30.000	0.581%	0.069
%RSD		2.209	2.268	0.000	2.809	2.287	2.658	0.817	49.420
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:40	0.558	0.565	1.230	57.000	67.240	0.104	0.768	0.952
2	23:30:48	-0.095	0.671	1.417	57.310	55.660	0.073	0.744	0.912
3	23:30:55	0.561	0.631	1.333	57.610	51.790	0.089	0.881	1.039
x		0.341	0.623	1.327	57.310	58.230	0.089	0.798	0.968
σ		0.378	0.054	0.093	0.306	8.038	0.016	0.073	0.064
%RSD		110.600	8.606	7.038	0.534	13.800	17.650	9.129	6.660
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:40	1.051	1.004	0.956	2.397	25.460	51.650	0.000	4.299
2	23:30:48	1.011	1.151	1.373	2.421	25.190	48.080	0.000	4.313
3	23:30:55	1.228	1.224	1.019	2.548	26.220	48.070	0.000	4.264
x		1.096	1.126	1.116	2.455	25.620	49.270	0.000	4.292
σ		0.116	0.112	0.225	0.081	0.530	2.068	0.000	0.025
%RSD		10.540	9.962	20.170	3.318	2.070	4.197	0.000	0.586
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:40	69.112%	0.260	0.203	64.491%	-0.025	-0.025	-0.000	-0.065
2	23:30:48	71.047%	0.099	0.185	65.174%	-0.031	-0.038	-0.000	-0.039
3	23:30:55	70.582%	0.193	0.253	66.118%	-0.037	-0.044	-0.000	-0.066
x		70.247%	0.184	0.214	65.261%	-0.031	-0.036	-0.000	-0.056
σ		1.010%	0.080	0.035	0.817%	0.006	0.010	0.000	0.015
%RSD		1.438	43.720	16.420	1.251	19.600	28.010	32.080	27.060
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:40	66.848%	-3.051	-0.210	-0.222	0.829	0.768	70.809%	69.918%
2	23:30:48	68.472%	-2.851	-0.198	-0.287	0.766	0.695	70.926%	72.131%
3	23:30:55	69.093%	-2.911	-0.270	-0.254	0.505	0.531	71.974%	70.817%
x		68.138%	-2.938	-0.226	-0.254	0.700	0.664	71.236%	70.955%
σ		1.159%	0.103	0.039	0.032	0.172	0.122	0.642%	1.113%
%RSD		1.701	3.494	17.170	12.760	24.550	18.290	0.901	1.568
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:30:40	0.091	0.093	0.114	0.135	0.134	66.480%		
2	23:30:48	0.052	0.097	0.140	0.113	0.124	67.460%		
3	23:30:55	0.084	0.066	0.122	0.163	0.150	67.836%		
x		0.076	0.085	0.125	0.137	0.136	67.259%		
σ		0.021	0.017	0.013	0.026	0.013	0.700%		
%RSD		27.200	20.020	10.720	18.650	9.560	1.041		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:49	53.032%	0.464	436.500	720.900	0.000	2539000.000	135.500	135.100
2	23:35:57	54.102%	0.239	432.000	703.700	0.000	2526000.000	130.500	141.500
3	23:36:05	53.044%	0.235	435.400	731.900	0.000	2584000.000	133.500	140.000
x		53.393%	0.313	434.600	718.900	0.000	2550000.000	133.200	138.900
σ		0.614%	0.131	2.364	14.230	0.000	30550.000	2.540	3.356
%RSD		1.150	42.000	0.544	1.979	0.000	1.198	1.907	2.417

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:49	145.900	2797.000	0.000	4358.000	22980.000	21420.000	62.298%	10.840
2	23:35:57	145.700	2841.000	0.000	4498.000	23580.000	22010.000	61.185%	12.350
3	23:36:05	152.900	2917.000	0.000	4572.000	24000.000	22910.000	60.622%	11.000
x		148.100	2852.000	0.000	4476.000	23520.000	22110.000	61.368%	11.400
σ		4.097	60.880	0.000	108.600	514.000	752.800	0.853%	0.833
%RSD		2.766	2.135	0.000	2.427	2.185	3.404	1.390	7.306

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:49	1.337	1.254	2.894	1825.000	1860.000	0.917	9.510	11.540
2	23:35:57	0.508	1.273	3.201	1867.000	1851.000	0.982	9.085	11.200
3	23:36:05	1.060	1.380	3.072	1912.000	1911.000	0.999	8.735	11.650
x		0.968	1.302	3.056	1868.000	1874.000	0.966	9.110	11.460
σ		0.422	0.068	0.154	43.820	32.260	0.043	0.388	0.235
%RSD		43.580	5.202	5.047	2.346	1.721	4.462	4.264	2.051

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:49	9.358	25.320	21.730	73.720	1136.000	1957.000	0.000	105.200
2	23:35:57	10.540	25.330	23.060	74.110	1131.000	1899.000	0.000	101.500
3	23:36:05	10.340	25.460	24.020	74.310	1171.000	1956.000	0.000	103.700
x		10.080	25.370	22.940	74.050	1146.000	1937.000	0.000	103.500
σ		0.633	0.078	1.150	0.303	22.000	33.610	0.000	1.882
%RSD		6.276	0.308	5.015	0.409	1.920	1.735	0.000	1.819

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:49	60.319%	7.327	7.670	54.678%	-0.002	-0.029	0.039	0.092
2	23:35:57	62.942%	7.512	8.914	55.231%	-0.037	-0.044	0.038	0.043
3	23:36:05	61.985%	8.148	8.062	55.203%	-0.016	-0.030	0.038	0.057
x		61.749%	7.663	8.215	55.037%	-0.018	-0.034	0.038	0.064
σ		1.327%	0.431	0.636	0.312%	0.018	0.009	0.000	0.025
%RSD		2.149	5.621	7.738	0.566	97.560	25.240	1.122	38.970

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:49	58.708%	1.884	6.818	7.158	18.340	18.380	64.491%	66.275%
2	23:35:57	59.757%	1.990	6.868	6.685	17.360	17.780	66.427%	65.413%
3	23:36:05	60.356%	2.157	6.645	6.864	18.460	19.230	65.849%	66.178%
x		59.607%	2.011	6.777	6.902	18.050	18.460	65.589%	65.955%
σ		0.834%	0.138	0.117	0.239	0.603	0.725	0.994%	0.472%
%RSD		1.400	6.850	1.732	3.459	3.343	3.928	1.515	0.716

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:49	0.490	0.446	10.430	9.450	9.956	59.585%
2	23:35:57	0.555	0.512	10.700	10.070	10.180	59.377%
3	23:36:05	0.609	0.461	11.230	10.090	10.370	59.646%
x		0.551	0.473	10.790	9.869	10.170	59.536%
σ		0.059	0.034	0.410	0.363	0.208	0.141%
%RSD		10.760	7.291	3.800	3.673	2.045	0.237

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:56	54.300%	0.106	408.300	549.500	0.000	2587000.000	732.100	747.400
2	23:41:03	53.139%	0.119	425.500	571.600	0.000	2625000.000	767.300	761.700
3	23:41:11	53.054%	-0.033	433.700	591.700	0.000	2642000.000	767.600	765.300
x		53.498%	0.064	422.500	570.900	0.000	2618000.000	755.700	758.100
σ		0.696%	0.084	12.950	21.120	0.000	28170.000	20.390	9.488
%RSD		1.301	131.500	3.065	3.699	0.000	1.076	2.699	1.252
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:56	211.700	2787.000	0.000	4617.000	24790.000	23410.000	62.011%	3.983
2	23:41:03	221.900	2869.000	0.000	4628.000	25210.000	23920.000	61.474%	3.971
3	23:41:11	231.500	2933.000	0.000	4652.000	25530.000	24400.000	61.358%	3.925
x		221.700	2863.000	0.000	4632.000	25180.000	23910.000	61.614%	3.960
σ		9.897	73.050	0.000	17.640	374.900	492.300	0.348%	0.031
%RSD		4.464	2.552	0.000	0.381	1.489	2.059	0.565	0.771
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:56	0.471	7.126	12.100	753.600	897.400	0.969	3.432	1.662
2	23:41:03	-0.012	6.732	12.110	738.100	796.100	1.087	3.551	1.610
3	23:41:11	0.163	7.270	12.390	762.300	836.000	0.975	4.207	1.789
x		0.207	7.043	12.200	751.300	843.200	1.010	3.730	1.687
σ		0.245	0.279	0.166	12.260	50.980	0.066	0.417	0.092
%RSD		118.100	3.956	1.359	1.632	6.047	6.572	11.190	5.450
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:56	1.176	2.683	1.818	68.520	910.100	1665.000	0.000	105.700
2	23:41:03	1.121	2.166	2.177	66.900	894.600	1692.000	0.000	104.300
3	23:41:11	1.603	1.409	2.136	67.380	906.300	1651.000	0.000	104.200
x		1.300	2.086	2.044	67.600	903.700	1669.000	0.000	104.700
σ		0.264	0.641	0.197	0.834	8.088	21.160	0.000	0.838
%RSD		20.300	30.720	9.624	1.233	0.895	1.267	0.000	0.800
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:56	60.211%	0.652	0.828	54.011%	-0.030	-0.029	-0.000	-0.063
2	23:41:03	62.791%	0.914	0.515	54.543%	-0.016	-0.029	-0.000	-0.079
3	23:41:11	62.706%	0.585	0.680	54.776%	-0.030	-0.037	-0.000	-0.063
x		61.902%	0.717	0.674	54.443%	-0.025	-0.032	-0.000	-0.068
σ		1.465%	0.174	0.156	0.392%	0.008	0.004	0.000	0.009
%RSD		2.367	24.260	23.200	0.720	32.430	13.990	47.460	13.050
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:56	58.571%	-2.869	6.452	5.898	19.240	19.210	64.885%	63.960%
2	23:41:03	58.942%	-2.803	6.190	6.409	20.480	20.430	65.053%	64.894%
3	23:41:11	59.494%	-2.889	6.446	6.438	20.940	20.230	65.059%	65.714%
x		59.002%	-2.854	6.363	6.248	20.220	19.960	64.999%	64.856%
σ		0.464%	0.045	0.150	0.304	0.879	0.656	0.099%	0.878%
%RSD		0.787	1.571	2.351	4.860	4.349	3.287	0.152	1.353
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:40:56	0.195	0.212	10.440	9.596	9.836	55.097%		
2	23:41:03	0.216	0.235	10.560	9.633	10.210	55.361%		
3	23:41:11	0.230	0.190	11.100	10.590	10.610	55.939%		
x		0.213	0.212	10.700	9.938	10.220	55.466%		
σ		0.018	0.022	0.351	0.561	0.385	0.430%		
%RSD		8.216	10.450	3.285	5.642	3.769	0.776		

180-42570-B-1 RAW 4/27/2015 11:47:00 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:06	57.454%	0.072	347.600	477.000	0.000	1923000.000	2038.000	1965.000
2	23:46:14	57.905%	-0.003	337.400	477.500	0.000	1922000.000	2008.000	2028.000
3	23:46:22	57.647%	0.228	358.300	485.200	0.000	1963000.000	2033.000	2056.000
x		57.669%	0.099	347.800	479.900	0.000	1936000.000	2026.000	2017.000
σ		0.226%	0.118	10.410	4.607	0.000	23380.000	16.320	46.530
%RSD		0.393	119.000	2.992	0.960	0.000	1.208	0.805	2.308

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:06	114.800	2594.000	0.000	3938.000	28430.000	27540.000	62.892%	2.439
2	23:46:14	115.600	2573.000	0.000	4004.000	29310.000	27540.000	63.399%	2.204
3	23:46:22	117.700	2637.000	0.000	3953.000	29740.000	28070.000	62.415%	2.463
x		116.000	2601.000	0.000	3965.000	29160.000	27720.000	62.902%	2.368
σ		1.486	32.320	0.000	34.410	672.600	306.500	0.492%	0.143
%RSD		1.280	1.242	0.000	0.868	2.307	1.106	0.782	6.044

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:06	0.038	6.560	21.930	1301.000	1315.000	1.353	19.650	12.280
2	23:46:14	-0.094	6.669	21.890	1300.000	1310.000	1.293	20.260	12.960
3	23:46:22	0.288	6.735	22.630	1341.000	1398.000	1.262	20.270	13.320
x		0.077	6.655	22.150	1314.000	1341.000	1.303	20.060	12.860
σ		0.194	0.088	0.415	23.490	49.520	0.046	0.354	0.525
%RSD		251.300	1.328	1.871	1.788	3.693	3.535	1.764	4.084

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:06	12.340	7.221	7.643	58.250	578.200	1313.000	0.000	103.800
2	23:46:14	12.580	8.331	9.431	58.360	579.300	1345.000	0.000	102.800
3	23:46:22	13.400	8.034	8.085	60.390	606.500	1384.000	0.000	103.800
x		12.770	7.862	8.387	59.000	588.000	1348.000	0.000	103.500
σ		0.560	0.575	0.931	1.206	16.050	35.470	0.000	0.561
%RSD		4.380	7.311	11.100	2.044	2.730	2.632	0.000	0.542

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:06	62.651%	3.283	3.413	54.482%	0.013	-0.022	0.039	-0.032
2	23:46:14	62.632%	3.358	3.823	54.923%	-0.037	-0.029	-0.000	-0.063
3	23:46:22	62.210%	3.545	3.482	54.975%	-0.023	-0.022	-0.000	-0.079
x		62.498%	3.396	3.573	54.793%	-0.016	-0.024	0.013	-0.058
σ		0.250%	0.135	0.220	0.271%	0.026	0.004	0.023	0.024
%RSD		0.399	3.971	6.145	0.494	162.300	18.010	175.100	40.870

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:06	58.725%	-2.786	4.712	4.464	17.260	17.380	65.307%	64.131%
2	23:46:14	59.372%	-2.806	4.756	3.797	18.340	15.880	64.942%	65.261%
3	23:46:22	59.924%	-2.825	4.554	4.291	15.500	16.330	64.972%	65.656%
x		59.340%	-2.806	4.674	4.184	17.030	16.530	65.074%	65.016%
σ		0.600%	0.020	0.106	0.346	1.436	0.772	0.203%	0.791%
%RSD		1.011	0.708	2.268	8.265	8.429	4.669	0.311	1.217

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:06	1.846	1.989	4.452	4.324	4.285	56.405%
2	23:46:14	2.212	2.132	4.417	4.097	4.269	56.721%
3	23:46:22	1.971	2.111	4.774	4.535	4.506	56.424%
x		2.010	2.077	4.547	4.319	4.353	56.517%
σ		0.186	0.077	0.197	0.219	0.133	0.177%
%RSD		9.249	3.722	4.329	5.066	3.048	0.314

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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	23:51:13	57.806%	0.068	339.800	471.900	0.000	1927000.000	3180.000	3120.000
2	23:51:20	57.296%	0.197	351.800	481.600	0.000	1956000.000	3154.000	3167.000
3	23:51:28	56.998%	0.183	362.000	490.500	0.000	1973000.000	3229.000	3223.000
x		57.367%	0.149	351.200	481.400	0.000	1952000.000	3187.000	3170.000
σ		0.408%	0.071	11.150	9.273	0.000	23480.000	38.170	51.720
%RSD		0.711	47.330	3.174	1.926	0.000	1.203	1.198	1.631

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:13	230.900	3002.000	0.000	3969.000	29420.000	27860.000	63.158%	3.898
2	23:51:20	240.200	2884.000	0.000	3948.000	29910.000	28540.000	62.863%	4.606
3	23:51:28	239.100	3040.000	0.000	3996.000	30600.000	28710.000	62.726%	4.936
x		236.700	2975.000	0.000	3971.000	29980.000	28370.000	62.916%	4.480
σ		5.054	81.310	0.000	23.840	589.500	453.300	0.221%	0.530
%RSD		2.135	2.733	0.000	0.600	1.967	1.598	0.351	11.840

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:13	-0.846	30.490	85.520	1837.000	1746.000	1.237	11.100	2.367
2	23:51:20	-0.473	30.660	87.210	1747.000	1828.000	1.235	11.440	1.856
3	23:51:28	0.721	32.090	87.650	1763.000	1772.000	1.114	12.110	1.867
x		-0.199	31.080	86.800	1782.000	1782.000	1.195	11.550	2.030
σ		0.818	0.876	1.125	48.010	42.030	0.070	0.514	0.292
%RSD		410.700	2.819	1.297	2.694	2.358	5.861	4.447	14.400

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:13	1.883	7.018	6.087	58.540	287.700	1060.000	0.000	103.100
2	23:51:20	2.326	6.143	6.360	57.730	287.800	1017.000	0.000	105.300
3	23:51:28	2.333	7.499	7.001	58.920	282.000	1073.000	0.000	104.100
x		2.181	6.887	6.483	58.400	285.800	1050.000	0.000	104.200
σ		0.258	0.687	0.469	0.609	3.310	29.070	0.000	1.099
%RSD		11.810	9.979	7.241	1.042	1.158	2.769	0.000	1.055

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:13	62.791%	2.561	2.867	55.222%	-0.016	-0.022	0.116	0.091
2	23:51:20	62.764%	2.578	2.665	55.483%	-0.037	-0.030	0.076	0.196
3	23:51:28	63.585%	2.797	2.694	56.284%	-0.037	-0.030	0.189	0.072
x		63.046%	2.645	2.742	55.663%	-0.030	-0.027	0.127	0.120
σ		0.467%	0.132	0.109	0.553%	0.012	0.004	0.057	0.067
%RSD		0.740	4.980	3.983	0.994	40.570	16.650	44.770	55.740

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:13	58.918%	-2.619	3.899	3.026	20.380	19.280	65.436%	65.073%
2	23:51:20	59.811%	-2.643	3.905	3.919	19.620	20.980	65.068%	65.941%
3	23:51:28	60.626%	-2.716	4.035	3.783	19.360	19.430	66.798%	66.947%
x		59.785%	-2.659	3.946	3.576	19.790	19.900	65.767%	65.987%
σ		0.855%	0.050	0.077	0.481	0.526	0.939	0.911%	0.938%
%RSD		1.430	1.883	1.942	13.450	2.656	4.717	1.385	1.421

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:13	1.843	1.771	86.130	80.400	82.780	58.101%
2	23:51:20	1.603	1.817	87.510	81.270	83.570	57.850%
3	23:51:28	1.740	1.937	88.530	81.080	83.810	58.551%
x		1.729	1.842	87.390	80.920	83.390	58.167%
σ		0.121	0.086	1.203	0.458	0.536	0.355%
%RSD		6.972	4.649	1.376	0.566	0.642	0.611

CCV 1533080 4/27/2015 11:57:08 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	23:56:16	73.079%	94.170	95.370	101.500	0.000	54820.000	52000.000	51390.000
2	23:56:23	73.372%	94.980	93.900	106.100	0.000	54960.000	51030.000	51320.000
3	23:56:31	75.118%	95.380	92.970	99.830	0.000	53540.000	49820.000	50900.000
x		73.856%	94.842%	94.081%	102.487%	0.000	108.876%	101.902%	102.408%
σ		1.103%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.493	0.650	1.289	3.179	0.000	1.437	2.143	0.519

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:16	527.500	4952.000	0.000	50190.000	47390.000	43930.000	67.882%	95.900
2	23:56:23	540.500	5012.000	0.000	51230.000	47830.000	45290.000	67.291%	94.180
3	23:56:31	518.500	4967.000	0.000	51180.000	47800.000	45570.000	68.007%	94.990
x		105.760%	99.542%	0.000	101.732%	95.348%	89.858%	67.726%	95.028%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.382%	n/a
%RSD		2.093	0.630	0.000	1.159	0.519	1.959	0.565	0.906

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:16	96.820	96.900	445.400	24790.000	23890.000	96.930	95.630	97.950
2	23:56:23	97.430	98.280	451.600	25400.000	24290.000	98.020	95.160	97.790
3	23:56:31	96.410	98.010	457.500	25320.000	23400.000	97.090	95.440	97.630
x		96.886%	97.731%	90.305%	100.674%	95.438%	97.344%	95.409%	97.794%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.527	0.746	1.338	1.313	1.865	0.607	0.250	0.163

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:16	94.150	95.960	96.010	97.450	116.100	114.700	0.000	95.100
2	23:56:23	96.760	100.800	97.440	98.670	118.300	114.100	0.000	98.500
3	23:56:31	96.250	93.830	100.300	98.670	126.200	117.300	0.000	96.960
x		95.717%	96.880%	97.928%	98.263%	120.170%	115.340%	0.000	96.854%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.445	3.714	2.247	0.716	4.426	1.482	0.000	1.762

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:16	66.704%	93.780	93.830	62.699%	93.720	92.800	94.940	96.730
2	23:56:23	66.726%	96.260	95.280	63.715%	92.990	92.250	97.030	99.010
3	23:56:31	66.168%	96.520	97.500	63.714%	93.220	93.110	97.080	98.960
x		66.532%	95.519%	95.537%	63.376%	93.312%	92.721%	96.352%	98.232%
σ		0.316%	n/a	n/a	0.586%	n/a	n/a	n/a	n/a
%RSD		0.475	1.583	1.934	0.925	0.402	0.474	1.268	1.328

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:16	62.336%	92.870	95.730	93.090	93.720	96.750	68.659%	69.327%
2	23:56:23	62.815%	93.920	96.500	93.680	95.120	96.460	69.731%	69.147%
3	23:56:31	63.011%	94.440	96.160	95.100	101.100	95.250	69.812%	69.592%
x		62.721%	93.742%	96.130%	93.954%	96.648%	96.155%	69.401%	69.355%
σ		0.347%	n/a	n/a	n/a	n/a	n/a	0.643%	0.224%
%RSD		0.554	0.854	0.406	1.101	4.060	0.828	0.927	0.323

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:16	91.490	90.530	92.250	92.740	91.880	65.603%
2	23:56:23	91.500	90.930	93.170	92.890	92.390	64.992%
3	23:56:31	92.640	92.710	94.430	92.960	93.430	64.678%
x		91.876%	91.390%	93.283%	92.864%	92.565%	65.091%
σ		n/a	n/a	n/a	n/a	n/a	0.470%
%RSD		0.717	1.267	1.171	0.120	0.850	0.723

CCB13 4/28/2015 12:06:17 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:23	84.876%	-0.319	2.132	1.974	0.000	273.900	10.860	10.200
2	00:05:31	83.417%	-0.243	0.873	1.444	0.000	272.600	13.940	9.245
3	00:05:39	82.527%	-0.301	1.715	1.611	0.000	269.500	9.769	10.920
x		83.606%	-0.288	1.573	1.676	0.000	272.000	11.520	10.120
σ		1.186%	0.040	0.642	0.271	0.000	2.268	2.160	0.842
%RSD		1.419	13.850	40.780	16.170	0.000	0.834	18.750	8.317

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:23	1.716	11.610	0.000	40.340	8.984	23.850	75.136%	-0.288
2	00:05:31	0.711	8.544	0.000	44.840	38.520	22.330	74.762%	-0.464
3	00:05:39	1.659	7.699	0.000	47.150	17.200	28.650	73.901%	-0.371
x		1.362	9.286	0.000	44.110	21.570	24.940	74.600%	-0.374
σ		0.564	2.060	0.000	3.460	15.240	3.298	0.633%	0.088
%RSD		41.430	22.180	0.000	7.844	70.670	13.220	0.849	23.460

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:23	-0.166	0.069	0.154	11.490	8.637	0.025	0.058	0.116
2	00:05:31	0.019	0.047	0.199	11.970	14.410	0.020	0.349	0.230
3	00:05:39	-0.037	0.057	0.293	11.500	15.780	0.020	0.142	0.155
x		-0.061	0.058	0.215	11.650	12.940	0.022	0.183	0.167
σ		0.095	0.011	0.071	0.276	3.790	0.003	0.150	0.058
%RSD		155.400	18.890	32.850	2.365	29.280	13.210	81.830	34.620

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:23	0.160	0.360	-0.091	-0.092	8.450	8.723	0.000	0.070
2	00:05:31	0.159	0.117	0.024	-0.124	9.955	12.840	0.000	0.069
3	00:05:39	0.097	0.145	-0.171	-0.075	9.397	11.680	0.000	0.068
x		0.139	0.207	-0.079	-0.097	9.267	11.080	0.000	0.069
σ		0.036	0.133	0.098	0.025	0.761	2.122	0.000	0.001
%RSD		26.160	64.070	123.600	25.230	8.208	19.160	0.000	1.668

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:23	73.118%	0.198	0.306	68.360%	0.050	0.111	-0.000	-0.053
2	00:05:31	73.622%	0.122	0.200	69.087%	0.072	0.042	-0.000	-0.079
3	00:05:39	75.419%	0.135	0.196	69.334%	0.065	0.029	0.031	-0.041
x		74.053%	0.152	0.234	68.927%	0.062	0.060	0.010	-0.057
σ		1.209%	0.040	0.062	0.506%	0.011	0.044	0.018	0.019
%RSD		1.633	26.650	26.670	0.734	18.330	72.970	176.100	33.830

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:23	70.065%	-2.815	-0.341	-0.267	0.252	0.002	70.740%	71.293%
2	00:05:31	70.433%	-2.691	-0.317	-0.223	0.000	0.001	72.996%	71.495%
3	00:05:39	71.696%	-2.823	-0.202	-0.250	0.098	0.062	72.990%	72.100%
x		70.731%	-2.776	-0.287	-0.247	0.117	0.022	72.242%	71.629%
σ		0.856%	0.074	0.074	0.022	0.127	0.035	1.300%	0.420%
%RSD		1.210	2.667	25.840	9.007	108.800	160.500	1.800	0.587

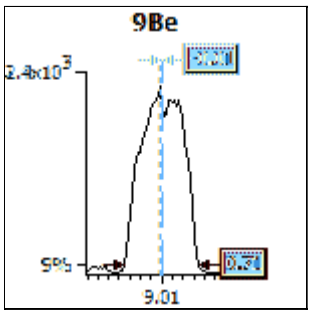
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:23	0.057	0.054	-0.028	0.009	-0.006	67.225%
2	00:05:31	0.047	0.046	-0.022	0.021	-0.004	67.717%
3	00:05:39	0.038	0.079	-0.022	-0.030	-0.010	68.001%
x		0.048	0.060	-0.024	-0.000	-0.007	67.648%
σ		0.010	0.017	0.003	0.027	0.003	0.393%
%RSD		20.050	28.270	12.990	129600.000	45.760	0.581

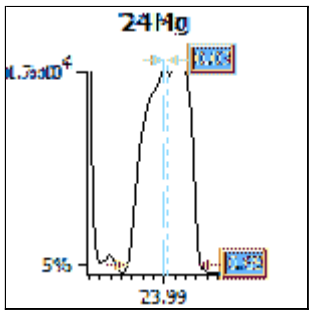
Performance Report

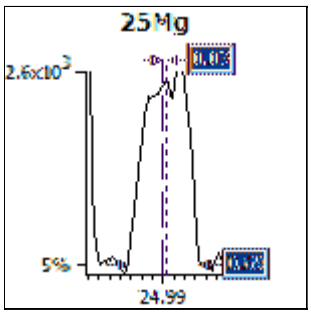
Sample details
Sample name : ITUNE
Acquired at : 4/27/2015 9:05:27 AM
Report name : EPA ILM05.2 / 6020A 2.1 [8/10/2014 1:06:06 PM]

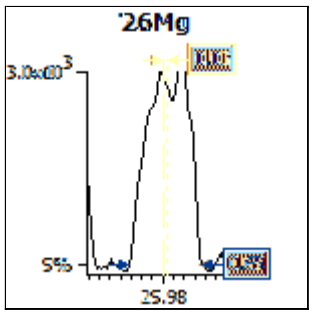
Mass Calibration verification

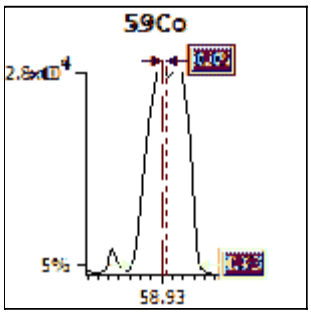
Acquisition parameters
Sweeps : 50
Dwell : 1.0 mSecs
Point spacing : 0.02 amu
Peak width measured at 5% of the peak maximum

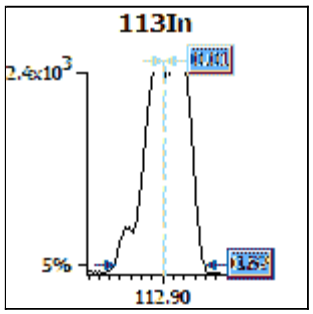


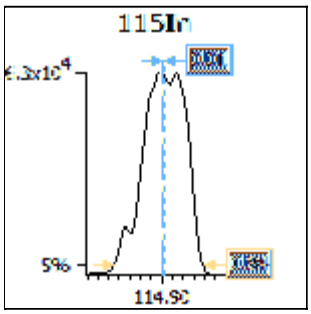


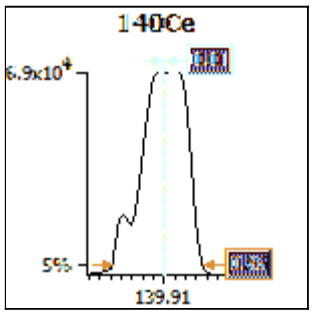


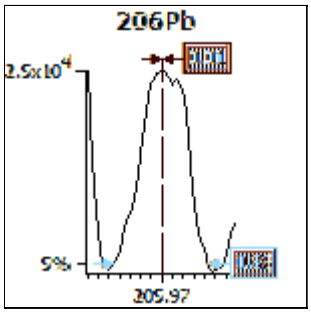


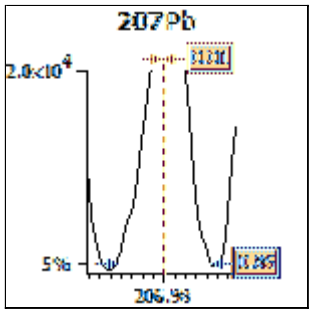


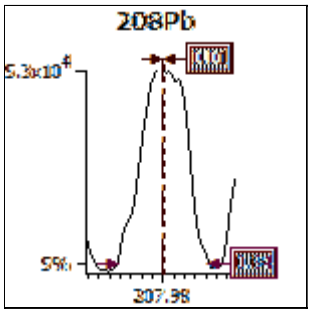












Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.90	0.40	0.10	0.71	-0.01
24Mg	0.90	0.40	0.10	0.69	0.03
25Mg	0.90	0.40	0.10	0.69	0.03
26Mg	0.90	0.40	0.10	0.69	0.03
59Co	0.90	0.40	0.10	0.63	0.05
113In	0.90	0.40	0.10	0.82	0.01
115In	0.90	0.40	0.10	0.84	0.01
140Ce	0.90	0.40	0.10	0.86	0.01
206Pb	0.90	0.40	0.10	0.86	0.01
207Pb	0.90	0.40	0.10	0.86	0.01
208Pb	0.90	0.40	0.10	0.84	0.01

Sample details
Sample name : ITUNE
Acquired at : 4/27/2015 9:05:27 AM
Report name : EPA ILM05.2 / 6020A 2.1 [8/10/2014 1:06:06 PM]

Tune conditions

Major	
Extraction	-157
Lens 1	-0.6
Focus	21.0
D1	-29.8
Pole Bias	-9.0
Hexapole Bias	-10.0
Nebuliser	0.86
Sampling Depth	200

Minor	
Lens 2	-48.6
Lens 3	-182.7
Forward power	1404
Horizontal	50
Vertical	358
D2	-121
DA	-80.0
Cool	14.0
Auxiliary	0.80

Global	
Standard resolution	n/a
High resolution	n/a
Analogue Detector	n/a
PC Detector	n/a

Add. Gases	
CCT1	0.00
CCT2	0.00

Sensitivity and stability results

Acquisition parameters
Sweeps : 180

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	59Co	113In	115In
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%	5.0%	5.0%
	Countrate	-	>100	>500	>150	>150	>500	>500	>10000
1	9:06:14 AM	87	2271	16713	2381	2841	29786	2701	64160
2	9:07:27 AM	83	2260	16695	2393	2872	29966	2787	65269
3	9:08:39 AM	82	2352	16891	2396	2816	29731	2779	64800
4	9:09:51 AM	83	2183	16844	2385	2853	29921	2810	65469
5	9:11:03 AM	81	2206	16587	2415	2787	29950	2859	65025
x		83	2255	16746	2394	2834	29871	2787	64944
σ		2.00	65.66	122.10	13.39	32.99	105.77	57.49	505.72
%RSD		2.404	2.912	0.729	0.559	1.164	0.354	2.062	0.779

Run	Time	140Ce	156Ce O	206Pb	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	5.0%	-	5.0%	5.0%	5.0%	-
	Countrate	>10000	-	>1000	>1000	>5000	-
1	9:06:14 AM	71963	1025	25551	22836	54635	0
2	9:07:27 AM	72289	1059	25819	22687	54226	0
3	9:08:39 AM	72696	1002	26017	22917	54868	0
4	9:09:51 AM	72267	1055	25835	23076	54912	0
5	9:11:03 AM	72476	1037	25684	23014	55085	0
x		72338	1036	25781	22906	54745	0
σ		271.65	23.21	174.90	152.76	331.66	0.16
%RSD		0.376	2.241	0.678	0.667	0.606	163.865

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0600
1	9:06:14 AM	0
2	9:07:27 AM	0
3	9:08:39 AM	0
4	9:09:51 AM	0
5	9:11:03 AM	0
x		0.0143
σ		0.00
%RSD		2.4088

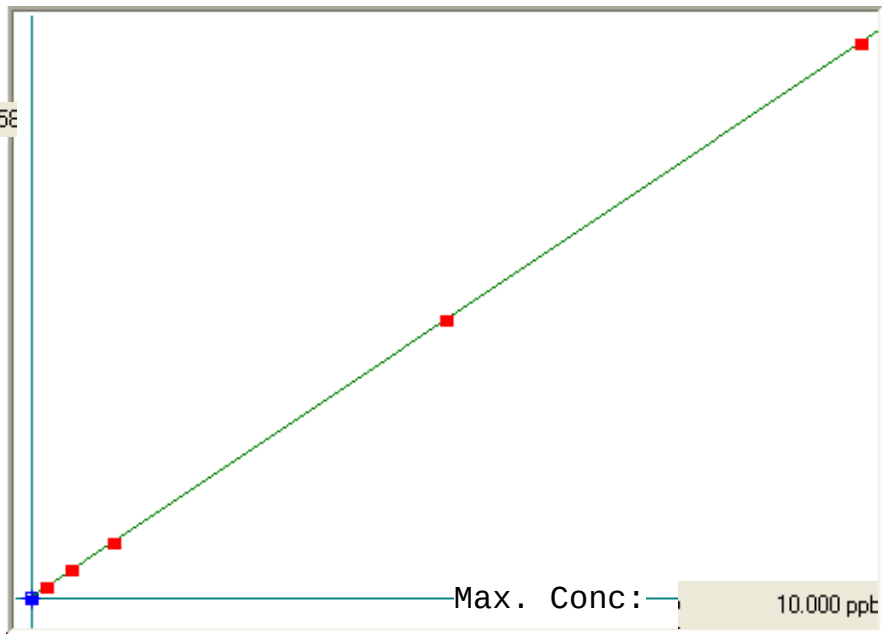
Result : The performance report passed.

METHG

Linear

μ Abs.:

51758



A= 0.0000e+000

B= 1.9329e-004

C= -2.1157e-002

Rho= 0.9999889

Accept= Accepted

Accepted Date=

05/01/15 12:58

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
blank	0.000	-0.016	-0.016	25	0.000	25				
.2ppb	0.200	0.189	-0.011	1086	0.0 %	1086				
.5ppb	0.500	0.507	0.007	2730	0.0 %	2730				
1.0ppb	1.000	1.006	0.006	5314	0.0 %	5314				
5.0ppb	5.000	5.032	0.032	26142	0.0 %	26142				
10.0ppb	10.000	9.983	-0.017	51758	0.0 %	51758				

Rack	Cup	Sample ID	Extended ID	Wt.	Vol.	Cup Action
1	1	MB 180-140		1.0000	1.0000	
1	2	LCS 180-140		1.0000	1.0000	
1	3	180-43178-J-		1.0000	1.0000	
1	4	180-43178-I-		1.0000	1.0000	
1	5	180-43178-I-		1.0000	1.0000	
1	6	180-43511-D		1.0000	1.0000	
1	7	180-43511-D		1.0000	1.0000	
1	8	180-43511-D		1.0000	1.0000	
1	9	180-43511-D		1.0000	1.0000	
1	10	180-43511-D		1.0000	1.0000	
1	11	180-43511-D		1.0000	1.0000	
1	12	180-43511-D		1.0000	1.0000	
1	13	180-43511-D		1.0000	1.0000	
1	14	180-43220-D		1.0000	1.0000	
1	15	180-43458-N		1.0000	1.0000	
1	16	180-43311-P		1.0000	1.0000	
1	17	180-43318-G		1.0000	1.0000	
1	18	180-43318-G		1.0000	1.0000	
1	19	180-43318-G		1.0000	1.0000	
1	20	180-43566-A		1.0000	1.0000	
1	21	MB 180-140		1.0000	1.0000	
1	22	LCS 180-140		1.0000	1.0000	
1	23	180-43249-R		1.0000	1.0000	
1	24	180-43249-R		1.0000	1.0000	
1	25	180-43249-R		1.0000	1.0000	
1	26	180-43249-R		1.0000	1.0000	
1	27	180-43325-F		1.0000	1.0000	
1	28	180-43325-D		1.0000	1.0000	
1	29	180-43325-F		1.0000	1.0000	
1	30	180-43325-D		1.0000	1.0000	
1	31	180-43325-F		1.0000	1.0000	
1	32	180-43325-Q		1.0000	1.0000	
1	33	180-43325-N		1.0000	1.0000	
1	34	180-43325-F		1.0000	1.0000	
1	35	180-43325-E		1.0000	1.0000	
1	36	180-43325-C		1.0000	1.0000	
1	37	180-43325-E		1.0000	1.0000	
1	38	180-43325-C		1.0000	1.0000	
1	39	180-43325-E		1.0000	1.0000	
1	40	180-43325-P		1.0000	1.0000	
1	41	180-43325-M		1.0000	1.0000	

Rack	Cup	Sample ID	Extended ID	Wt.	Vol.	Cup Action
1	42	180-43325-E		1.0000	1.0000	
1	43	MB 180-140		1.0000	1.0000	
1	44	LCS 180-140		1.0000	1.0000	
1	45	LCSD 180-1		1.0000	1.0000	
1	46	LB 180-1397		1.0000	1.0000	
1	47	180-43362-A		1.0000	1.0000	
1	48	180-43362-A		1.0000	1.0000	
1	49	180-43362-A		1.0000	1.0000	
1	50	180-43362-A		1.0000	1.0000	
1	51	MB 180-140		1.0000	1.0000	
1	52	LCS 180-140		1.0000	1.0000	
1	53	LCSD 180-1		1.0000	1.0000	
1	54	180-43574-A		1.0000	1.0000	
1	55	180-43585-A		1.0000	1.0000	
1	56	MB 180-140		1.0000	1.0000	
1	57	LCS 180-140		1.0000	1.0000	
1	58	LB 180-1400		1.0000	1.0000	
1	59	180-43504-A		1.0000	1.0000	
1	60	180-43504-A		1.0000	1.0000	
2	1	180-43504-A		1.0000	1.0000	
2	2	180-43517-A		1.0000	1.0000	
2	3	180-43533-B		1.0000	1.0000	
2	4	180-43540-A		1.0000	1.0000	
2	5			1.0000	1.0000	
2	6			1.0000	1.0000	
2	7			1.0000	1.0000	
2	8			1.0000	1.0000	
2	9			1.0000	1.0000	
2	10			1.0000	1.0000	
2	11			1.0000	1.0000	
2	12			1.0000	1.0000	
2	13			1.0000	1.0000	
2	14			1.0000	1.0000	
2	15			1.0000	1.0000	
2	16			1.0000	1.0000	
2	17			1.0000	1.0000	
2	18			1.0000	1.0000	
2	19			1.0000	1.0000	
2	20			1.0000	1.0000	
2	21			1.0000	1.0000	
2	22			1.0000	1.0000	

R50501C-raw

Method: METHG Operator: Admin Date of Analysis: 01 May 2015 12:08:51

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs.	Method	Chapter
1569	Std	blank - 1		01 May 2015 12:46:43	-	ppb	0.0000	25	METHG	R50501C
1570	Std	.2ppb - 1		01 May 2015 12:48:36	-	ppb	0.2000	1086	METHG	R50501C
1571	Std	.5ppb - 1		01 May 2015 12:50:29	-	ppb	0.5000	2730	METHG	R50501C
1572	Std	1.0ppb - 1		01 May 2015 12:52:23	-	ppb	1.0000	5314	METHG	R50501C
1573	Std	5.0ppb - 1		01 May 2015 12:54:17	-	ppb	5.0000	26142	METHG	R50501C
1574	Std	10.0ppb - 1		01 May 2015 12:56:11	-	ppb	10.0000	51758	METHG	R50501C
1575	CK STND	ICV - 1		01 May 2015 12:58:21	97.8% 2.4447	ppb	-	12757	METHG	R50501C
1576	CK STND	ICB - 1		01 May 2015 13:00:41	-0.0919	ppb	-	-366	METHG	R50501C
1577	CK STND	CRA - 1		01 May 2015 13:02:44	96.5% 0.1930	ppb	-	1108	METHG	R50501C
1578	CK STND	CCV - 1		01 May 2015 13:04:35	101.7% 5.0840	ppb	-	26412	METHG	R50501C
1579	CK STND	CCB - 1		01 May 2015 13:06:29	-0.0929	ppb	-	-371	METHG	R50501C
1580	CK STND	CCV - 1		01 May 2015 13:08:41	101.7% 5.0860	ppb	-	26422	METHG	R50501C
1581	CK STND	CCB - 1		01 May 2015 13:10:33	-0.0998	ppb	-	-407	METHG	R50501C
1582	SMPL	MB 180-140252/1-A - 1		01 May 2015 13:21:40	-0.0136	ppb	-	39	METHG	R50501C
1583	SMPL	LCS 180-140252/2-A - 1		01 May 2015 13:23:31	2.4448	ppb	-	12758	METHG	R50501C
1584	SMPL	180-43178-J-1-B - 1		01 May 2015 13:25:23	-0.0880	ppb	-	-346	METHG	R50501C
1585	SMPL	180-43178-I-1-E MS - 1		01 May 2015 13:27:33	0.5367	ppb	-	2886	METHG	R50501C
1586	SMPL	180-43178-I-1-F MSD - 1		01 May 2015 13:29:24	0.4383	ppb	-	2377	METHG	R50501C
1587	SMPL	180-43511-D-1-D - 1		01 May 2015 13:31:23	-0.0998	ppb	-	-407	METHG	R50501C
1588	SMPL	180-43511-D-2-B - 1		01 May 2015 13:33:25	-0.0194	ppb	-	9	METHG	R50501C
1589	SMPL	180-43511-D-3-B - 1		01 May 2015 13:35:17	-0.0161	ppb	-	26	METHG	R50501C
1590	SMPL	180-43511-D-4-B - 1		01 May 2015 13:37:09	-0.0157	ppb	-	28	METHG	R50501C
1591	SMPL	180-43511-D-5-B - 1		01 May 2015 13:39:02	-0.0148	ppb	-	33	METHG	R50501C
1592	CK STND	CCV - 1		01 May 2015 13:40:55	103.2% 5.1619	ppb	-	26815	METHG	R50501C
1593	CK STND	CCB - 1		01 May 2015 13:42:47	-0.0994	ppb	-	-405	METHG	R50501C
1594	SMPL	180-43511-D-6-B - 1		01 May 2015 13:44:57	0.1563	ppb	-	918	METHG	R50501C
1595	SMPL	180-43511-D-7-B - 1		01 May 2015 13:46:50	-0.0250	ppb	-	-20	METHG	R50501C
1596	SMPL	180-43511-D-8-B - 1		01 May 2015 13:48:44	-0.0152	ppb	-	31	METHG	R50501C
1597	SMPL	180-43220-D-3-B - 1		01 May 2015 13:50:36	0.0946	ppb	-	599	METHG	R50501C
1598	SMPL	180-43458-N-13-B - 1		01 May 2015 13:52:27	-0.0183	ppb	-	15	METHG	R50501C
1599	SMPL	180-43311-P-1-B - 1		01 May 2015 13:54:19	0.0063	ppb	-	142	METHG	R50501C
1600	SMPL	180-43318-G-2-B - 1		01 May 2015 13:56:11	-0.0119	ppb	-	48	METHG	R50501C
1601	SMPL	180-43318-G-3-B - 1		01 May 2015 13:58:03	-0.0113	ppb	-	51	METHG	R50501C
1602	SMPL	180-43318-G-4-B - 1		01 May 2015 13:59:55	-0.0101	ppb	-	57	METHG	R50501C
1603	SMPL	180-43566-A-1-A - 1		01 May 2015 14:01:47	-0.0167	ppb	-	23	METHG	R50501C
1604	CK STND	CCV - 1		01 May 2015 14:03:39	100.3% 5.0139	ppb	-	26049	METHG	R50501C
1605	CK STND	CCB - 1		01 May 2015 14:05:31	-0.1049	ppb	-	-433	METHG	R50501C
1606	SMPL	MB 180-140254/1-A - 1		01 May 2015 14:07:41	-0.0200	ppb	-	6	METHG	R50501C
1607	SMPL	LCS 180-140254/2-A - 1		01 May 2015 14:09:33	2.4522	ppb	-	12796	METHG	R50501C
1608	SMPL	180-43249-R-2-D - 1		01 May 2015 14:11:26	-0.0911	ppb	-	-362	METHG	R50501C
1609	SMPL	180-43249-R-2-E MS - 1		01 May 2015 14:13:31	0.9138	ppb	-	4837	METHG	R50501C
1610	SMPL	180-43249-R-2-F MSD - 1		01 May 2015 14:15:25	0.8643	ppb	-	4581	METHG	R50501C
1611	SMPL	180-43249-R-3-B - 1		01 May 2015 14:17:19	-0.0761	ppb	-	-284	METHG	R50501C
1612	SMPL	180-43325-F-1-B - 1		01 May 2015 14:19:14	-0.0179	ppb	-	17	METHG	R50501C
1613	SMPL	180-43325-D-2-B - 1		01 May 2015 14:21:06	-0.0148	ppb	-	33	METHG	R50501C
1614	SMPL	180-43325-F-3-B - 1		01 May 2015 14:22:58	-0.0196	ppb	-	8	METHG	R50501C
1615	SMPL	180-43325-D-4-B - 1		01 May 2015 14:24:50	-0.0146	ppb	-	34	METHG	R50501C
1616	CK STND	CCV - 1		01 May 2015 14:26:42	101.2% 5.0576	ppb	-	26275	METHG	R50501C
1617	CK STND	CCB - 1		01 May 2015 14:28:35	-0.1014	ppb	-	-415	METHG	R50501C
1618	SMPL	180-43325-F-5-B - 1		01 May 2015 14:30:45	-0.0202	ppb	-	5	METHG	R50501C
1619	SMPL	180-43325-Q-6-B - 1		01 May 2015 14:32:38	-0.0150	ppb	-	32	METHG	R50501C
1620	SMPL	180-43325-N-7-B - 1		01 May 2015 14:34:30	-0.0148	ppb	-	33	METHG	R50501C
1621	SMPL	180-43325-F-8-B - 1		01 May 2015 14:36:23	-0.0132	ppb	-	41	METHG	R50501C
1622	SMPL	180-43325-E-1-D - 1		01 May 2015 14:38:16	-0.0181	ppb	-	16	METHG	R50501C
1623	SMPL	180-43325-C-2-B - 1		01 May 2015 14:40:09	-0.0179	ppb	-	17	METHG	R50501C
1624	SMPL	180-43325-E-3-B - 1		01 May 2015 14:42:02	-0.0177	ppb	-	18	METHG	R50501C
1625	SMPL	180-43325-C-4-B - 1		01 May 2015 14:43:55	-0.0150	ppb	-	32	METHG	R50501C

R50501C-raw

Method: METHG Operator: Admin Date of Analysis: 01 May 2015 12:08:51

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs.	Method	Chapter
1626	SMPL	180-43325-E-5-B - 1		01 May 2015 14:45:47	-0.0156	ppb	-	29	METHG	R50501C
1627	SMPL	180-43325-P-6-B - 1		01 May 2015 14:47:40	-0.0146	ppb	-	34	METHG	R50501C
1628	CK STND	CCV - 1		01 May 2015 14:49:32	101.0% 5.0514	ppb	-	26243	METHG	R50501C
1629	CK STND	CCB - 1		01 May 2015 14:51:24	-0.0921	ppb	-	-367	METHG	R50501C
1630	SMPL	180-43325-M-7-B - 1		01 May 2015 14:53:37	-0.0206	ppb	-	3	METHG	R50501C
1631	SMPL	180-43325-E-8-B - 1		01 May 2015 14:55:29	-0.0101	ppb	-	57	METHG	R50501C
1632	SMPL	MB 180-140255/1-A - 1		01 May 2015 14:57:21	-0.0171	ppb	-	21	METHG	R50501C
1633	SMPL	LCS 180-140255/2-A - 1		01 May 2015 14:59:14	2.3538	ppb	-	12287	METHG	R50501C
1634	SMPL	LCSD 180-140255/3-A - 1		01 May 2015 15:01:06	2.2844	ppb	-	11928	METHG	R50501C
1635	SMPL	LB 180-139775/5-B - 1		01 May 2015 15:03:11	-0.0950	ppb	-	-382	METHG	R50501C
1636	SMPL	180-43362-A-1-T - 1		01 May 2015 15:05:15	-0.0132	ppb	-	41	METHG	R50501C
1637	SMPL	180-43362-A-2-J - 1		01 May 2015 15:07:08	-0.0144	ppb	-	35	METHG	R50501C
1638	SMPL	180-43362-A-3-J - 1		01 May 2015 15:09:01	-0.0132	ppb	-	41	METHG	R50501C
1639	SMPL	180-43362-A-4-J - 1		01 May 2015 15:10:54	-0.0159	ppb	-	27	METHG	R50501C
1640	CK STND	CCV - 1		01 May 2015 15:12:46	101.5% 5.0748	ppb	-	26364	METHG	R50501C
1641	CK STND	CCB - 1		01 May 2015 15:14:39	-0.0917	ppb	-	-365	METHG	R50501C
1642	SMPL	MB 180-140256/1-A - 1		01 May 2015 15:16:50	-0.0229	ppb	-	-9	METHG	R50501C
1643	SMPL	LCS 180-140256/2-A - 1		01 May 2015 15:18:43	2.4423	ppb	-	12745	METHG	R50501C
1644	SMPL	LCSD 180-140256/3-A - 1		01 May 2015 15:20:35	2.2471	ppb	-	11735	METHG	R50501C
1645	SMPL	180-43574-A-1-B - 1		01 May 2015 15:22:39	-0.0014	ppb	-	102	METHG	R50501C
1646	SMPL	180-43585-A-1-C - 1		01 May 2015 15:24:44	-0.0328	ppb	-	-60	METHG	R50501C
1647	SMPL	MB 180-140258/1-A - 1		01 May 2015 15:26:36	-0.0215	ppb	-	-2	METHG	R50501C
1648	SMPL	LCS 180-140258/2-A - 1		01 May 2015 15:28:29	2.2432	ppb	-	11715	METHG	R50501C
1649	SMPL	LB 180-140024/6-C - 1		01 May 2015 15:30:21	-0.0847	ppb	-	-329	METHG	R50501C
1650	SMPL	180-43504-A-1-N - 1		01 May 2015 15:32:28	-0.0130	ppb	-	42	METHG	R50501C
1651	SMPL	180-43504-A-1-O MS - 1		01 May 2015 15:34:21	4.5881	ppb	-	23846	METHG	R50501C
1652	CK STND	CCV - 1		01 May 2015 15:36:15	100.2% 5.0102	ppb	-	26030	METHG	R50501C
1653	CK STND	CCB - 1		01 May 2015 15:38:22	-0.0938	ppb	-	-376	METHG	R50501C
1654	SMPL	180-43504-A-1-P MSD - 1		01 May 2015 15:40:34	5.2132	ppb	-	27080	METHG	R50501C
1655	SMPL	180-43517-A-1-E - 1		01 May 2015 15:42:27	0.2947	ppb	-	1634	METHG	R50501C
1656	SMPL	180-43533-B-1-C - 1		01 May 2015 15:44:36	-0.0258	ppb	-	-24	METHG	R50501C
1657	SMPL	180-43540-A-1-C - 1		01 May 2015 15:46:31	-0.0200	ppb	-	6	METHG	R50501C
1658	CK STND	CCV - 1		01 May 2015 15:48:24	101.4% 5.0680	ppb	-	26329	METHG	R50501C
1659	CK STND	CCB - 1		01 May 2015 15:50:16	-0.1018	ppb	-	-417	METHG	R50501C

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Batch Number: 139168 Batch Start Date: 04/21/15 13:00 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 04/21/15 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTICPMS 00020	MTAPITTMSA 00023	MTAPITTMSC 00029	
MB 180-139168/1		3005A, 6020A		50 mL	50 mL				
LCS 180-139168/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-43220-D-1	PW-E01	3005A, 6020A	R	50 mL	50 mL				
180-43220-D-2	PW-D02	3005A, 6020A	R	50 mL	50 mL				

Batch Notes	
Batch Comment	Metals D4
First End time	17:00
Lot # of hydrochloric acid	2.5 ml 1533280
Lot # of Nitric Acid	1.0 ml 1513887
Hot Block ID number	#`
Oven, Bath or Block Temperature 1	95
Pipette ID	L1201611U
Person who witnessed spiking	AB
First Start time	13:00
ID number of the thermometer	IP1-14 CF=0.0 F5
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.: 180-43220-1

SDG No.:

Batch Number: 139169 Batch Start Date: 04/21/15 13:00 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 04/21/15 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTICPMS 00020	MTAPITTMSA 00023	MTAPITTMSC 00029	
MB 180-139169/1		3005A, 6020A		50 mL	50 mL				
LCS 180-139169/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-43220-D-3	PW-C02	3005A, 6020A	R	50 mL	50 mL				

Batch Notes	
Batch Comment	Metals D4
First End time	17:00
Lot # of hydrochloric acid	2.5 ml 1533280
Lot # of Nitric Acid	1.0 ml 1513887
Hot Block ID number	#1
Oven, Bath or Block Temperature 1	95
Pipette ID	L1201611U
Person who witnessed spiking	AB
First Start time	13:00
ID number of the thermometer	IP1-14 CF=0.0 F5
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.: 180-43220-1

SDG No.:

Batch Number: 140252 Batch Start Date: 05/01/15 10:20 Batch Analyst: Freeman, Michele L

Batch Method: 7470A Batch End Date: 05/01/15 12:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MHgworkingCal 01035			
MB 180-140252/1		7470A, 7470A		50 mL	50 mL				
LCS 180-140252/2		7470A, 7470A		50 mL	50 mL	1.25 mL			
180-43220-D-3	PW-C02	7470A, 7470A	T	50 mL	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	3mL 1550822 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	HB2
Potassium Persulfate Lot Number	4mL 1550823
Potassium Permanganate Lot Number	7.5mL 1556593 HG-DISP-KMNO4
Pipette ID	L1201611U
Stannous Chloride Lot Number	1556837
Person who witnessed spiking	MLF
Temperature	95C
ID number of the thermometer	IP29-14 0.0 A1
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.: 180-43220-1

SDG No.:

Batch Number: 140288 Batch Start Date: 05/01/15 10:20 Batch Analyst: Freeman, Michele L

Batch Method: 7470A Batch End Date: 05/01/15 12:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MHgworkingCal 01035	MHgWorkingicv 01006		
ICV 180-140288/7		7470A, 7470A		50 mL	50 mL		1.25 mL		
ICB 180-140288/8		7470A, 7470A		50 mL	50 mL				
CRA 180-140288/9		7470A, 7470A		50 mL	50 mL	0.1 mL			
CCV 180-140288/10		7470A, 7470A		50 mL	50 mL	2.5 mL			
CCB 180-140288/11		7470A, 7470A		50 mL	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	3mL 1550822 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	HB4
Potassium Persulfate Lot Number	4mL 1550823 HG-DISP-KS4
Potassium Permanganate Lot Number	7.5mL 1556593 HG-DISP-KMNO4
Pipette ID	L1201611U
Stannous Chloride Lot Number	1556837
Person who witnessed spiking	MLF
Temperature	95C
ID number of the thermometer	IP31-14 0.0 A1
Digestion Tube/Cup Lot #	ENV.EXPRESS 1501179

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: 180-43220-1

SDG No.:

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
PW-E01	180-43220-1
PW-D02	180-43220-2
PW-C02	180-43220-3

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PW-E01 Lab Sample ID: 180-43220-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG ID.:

Matrix: Water Date Sampled: 04/16/2015 14:15

Reporting Basis: WET Date Received: 04/18/2015 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	3.5	10	2.5	ug/L	J		1	9014
	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-E01 Lab Sample ID: 180-43220-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG ID.:

Matrix: Water Date Sampled: 04/16/2015 14:15

Reporting Basis: WET Date Received: 04/18/2015 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Duplicate	2.1	1.0	0.14	mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PW-D02 Lab Sample ID: 180-43220-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG ID.:

Matrix: Water Date Sampled: 04/17/2015 10:50

Reporting Basis: WET Date Received: 04/18/2015 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	4.4	10	2.5	ug/L	J		1	9014
	Hardness as calcium carbonate	1400	50	15	mg/L			1	SM 2340C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PW-D02 Lab Sample ID: 180-43220-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG ID.:

Matrix: Water Date Sampled: 04/17/2015 10:50

Reporting Basis: WET Date Received: 04/18/2015 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Duplicate	1.8	1.0	0.14	mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PW-C02 Lab Sample ID: 180-43220-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG ID.:

Matrix: Water Date Sampled: 04/17/2015 13:15

Reporting Basis: WET Date Received: 04/18/2015 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Hardness as calcium carbonate	920	50	15	mg/L			1	SM 2340C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PW-C02 Lab Sample ID: 180-43220-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG ID.:

Matrix: Water Date Sampled: 04/17/2015 13:15

Reporting Basis: WET Date Received: 04/18/2015 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Duplicate	1.7	1.0	0.14	mg/L			1	SM 5310C

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Analyst: PGJ Batch Start Date: 04/29/2015

Reporting Units: ug/L Analytical Batch No.: 140061

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
9	ICV	13:25	Cyanide, Total	207	200	103	90-110		WCN0.2ICV_00327
10	ICB	13:28	Cyanide, Total	ND					
11	CCV	13:30	Cyanide, Total	102	100	102	90-110		WCN0.1L3_00042
12	CCB	13:32	Cyanide, Total	ND					
23	CCV	13:56	Cyanide, Total	103	100	103	90-110		WCN0.1L3_00042
24	CCB	13:58	Cyanide, Total	ND					

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Analyst: CMR Batch Start Date: 05/01/2015

Reporting Units: ug/L Analytical Batch No.: 141187

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
9	ICV	14:25	Cyanide, Total	203	200	101	90-110		WCN0.2ICV_00328
10	ICB	14:27	Cyanide, Total	ND					
11	CCV	14:29	Cyanide, Total	96.8	100	97	90-110		WCN0.1L3_00043
12	CCB	14:32	Cyanide, Total	ND					
22	CCV	14:51	Cyanide, Total	98.0	100	98	90-110		WCN0.1L3_00043
23	CCB	14:53	Cyanide, Total	ND					

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Analyst: CAK Batch Start Date: 05/02/2015

Reporting Units: mg/L Analytical Batch No.: 140330

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	CCV	08:07	Hardness as calcium carbonate	50.0	50.0	100	90-110		WHdCaCO3P_00006
14	CCB	08:10	Hardness as calcium carbonate	ND					

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Analyst: CLL Batch Start Date: 05/06/2015

Reporting Units: mg/L Analytical Batch No.: 140690

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	05:52	Dissolved Organic Carbon - Duplicate	40.1	40.0	100	90-110		ICV 40 PPM_00624
3	ICB	06:06	Dissolved Organic Carbon - Duplicate	ND					
12	CCV	08:05	Dissolved Organic Carbon - Duplicate	10.2	10.0	102	90-110		10 PPM TOC/CC_00491
13	CCB	08:18	Dissolved Organic Carbon - Duplicate	ND					

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 140061	Date: 04/29/2015 13:41	Prep Batch: 139985	Date: 04/29/2015 12:00				
9014	MB 180-139985/4-A	Cyanide, Total	ND		ug/L	10	1
Batch ID: 141187	Date: 05/01/2015 14:40	Prep Batch: 140242	Date: 05/01/2015 08:10				
9014	MB 180-140242/4-A	Cyanide, Total	ND		ug/L	10	1
Batch ID: 140330	Date: 05/02/2015 07:41						
SM 2340C	MB 180-140330/2	Hardness as calcium carbonate	ND		mg/L	5.0	1
Batch ID: 140690	Date: 05/06/2015 06:45						
SM 5310C	MB 180-140690/6	Dissolved Organic Carbon - Duplicate	ND		mg/L	1.0	1

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140061	Date: 04/29/2015 13:38		Prep Batch: 139985			Date: 04/29/2015 12:00					
						LCS Source: WCNLCS_00017					
9014	LCS 180-139985/3-A	Cyanide, Total	201		ug/L	200	101	85-115			
Batch ID: 141187	Date: 05/01/2015 14:38		Prep Batch: 140242			Date: 05/01/2015 08:10					
						LCS Source: WCNLCS_00017					
9014	LCS 180-140242/3-A	Cyanide, Total	196		ug/L	200	98	85-115			
Batch ID: 140330	Date: 05/02/2015 07:39										
						LCS Source: WHdCaCO3P_00006					
SM 2340C	LCS 180-140330/1	Hardness as calcium carbonate	50.0		mg/L	50.0	100	90-110			
Batch ID: 140690	Date: 05/06/2015 06:19										
						LCS Source: LCS 20 PPM_00620					
SM 5310C	LCS 180-140690/4	Dissolved Organic Carbon - Duplicate	20.1		mg/L	20.0	100	80-120	2	20	

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140690	Date: 05/06/2015 06:32										
						LCSD Source: LCS 20 PPM_00620					
SM 5310C	LCSD 180-140690/5	Dissolved Organic Carbon - Duplicate	19.6		mg/L	20.0	98	80-120	2	20	

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

FORM VIIA-IN

7A-IN
LOW LEVEL CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140061	Date: 04/29/2015 13:34		Prep Batch: 139985			Date: 04/29/2015 12:00					
						LCS Source: WCN0.5L1_00492					
9014	LLCS 180-139985/1-A	Cyanide, Total	50.3		ug/L	50.0	101	90-110			
Batch ID: 141187	Date: 05/01/2015 14:34		Prep Batch: 140242			Date: 05/01/2015 08:10					
						LCS Source: WCN0.5L1_00493					
9014	LLCS 180-140242/1-A	Cyanide, Total	49.4		ug/L	50.0	99	90-110			

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

FORM VIIA-IN

7A-IN
HIGH LEVEL CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140061	Date: 04/29/2015 13:36		Prep Batch: 139985			Date: 04/29/2015 12:00					
						LCS Source: WCN10Pi_00483					
9014	HLCS 180-139985/2-A	Cyanide, Total	237		ug/L	250	95	90-110			
Batch ID: 141187	Date: 05/01/2015 14:36		Prep Batch: 140242			Date: 05/01/2015 08:10					
						LCS Source: WCN10Pi_00485					
9014	HLCS 180-140242/2-A	Cyanide, Total	248		ug/L	250	99	90-110			

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

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-43220-1

SDG Number:

Matrix: Water Instrument ID: SEAL2

Method: 9014 MDL Date: 10/15/2014 12:58

Prep Method: 9010C

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Cyanide, Total		10	2.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-43220-1

SDG Number:

Matrix: Water Instrument ID: SEAL2

Method: 9014 XMDL Date: 10/15/2014 12:59

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Cyanide, Total		10	2.5

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-43220-1

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: 180-43220-1

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: 180-43220-1

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: 180-43220-1

SDG Number:

Matrix: Water Instrument ID: TOC1030

Method: SM 5310C XMDL Date: 01/31/2010 13:17

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Duplicate		1	0.1401

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Prep Method: 9010C

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LLCS 180-139985/1-A	04/29/2015 12:00	139985		50	50
HLCS 180-139985/2-A	04/29/2015 12:00	139985		50	50
LCS 180-139985/3-A	04/29/2015 12:00	139985		50	50
MB 180-139985/4-A	04/29/2015 12:00	139985		50	50
180-43220-1	04/29/2015 12:00	139985		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Prep Method: 9010C

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LLCS 180-140242/1-A	05/01/2015 08:10	140242		50	50
HLCS 180-140242/2-A	05/01/2015 08:10	140242		50	50
LCS 180-140242/3-A	05/01/2015 08:10	140242		50	50
MB 180-140242/4-A	05/01/2015 08:10	140242		50	50
180-43220-2	05/01/2015 08:10	140242		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: SEAL2 Analysis Method: 9014

Start Date: 04/29/2015 13:08 End Date: 04/29/2015 14:17

Lab Sample Id	D/F	Type	Time	Analytes
				CN
ZZZZZZ			13:08	
ZZZZZZ			13:10	
ZZZZZZ			13:13	
ZZZZZZ			13:15	
ZZZZZZ			13:17	
ZZZZZZ			13:19	
ZZZZZZ			13:21	
ZZZZZZ			13:23	
ICV 180-140061/9	1		13:25	X
ICB 180-140061/10	1		13:28	X
CCV 180-140061/11	1		13:30	X
CCB 180-140061/12	1		13:32	X
LLCS 180-139985/1-A	1	T	13:34	X
HLCS 180-139985/2-A	1	T	13:36	X
LCS 180-139985/3-A	1	T	13:38	X
MB 180-139985/4-A	1	T	13:41	X
ZZZZZZ			13:43	
ZZZZZZ			13:45	
ZZZZZZ			13:47	
ZZZZZZ			13:49	
180-43220-1	1	T	13:51	X
ZZZZZZ			13:53	
CCV 180-140061/23	1		13:56	X
CCB 180-140061/24	1		13:58	X
ZZZZZZ			14:00	
ZZZZZZ			14:02	
ZZZZZZ			14:04	
ZZZZZZ			14:06	
ZZZZZZ			14:08	
ZZZZZZ			14:10	
ZZZZZZ			14:12	
ZZZZZZ			14:13	
CCV 180-140061/33			14:15	
CCB 180-140061/34			14:17	

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: SEAL2 Analysis Method: 9014

Start Date: 05/01/2015 14:08 End Date: 05/01/2015 14:53

Lab Sample Id	D/F	Type	Time	Analytes																								
				CN																								
ZZZZZZ			14:08																									
ZZZZZZ			14:10																									
ZZZZZZ			14:12																									
ZZZZZZ			14:14																									
ZZZZZZ			14:17																									
ZZZZZZ			14:19																									
ZZZZZZ			14:21																									
ZZZZZZ			14:23																									
ICV 180-141187/9	1		14:25	X																								
ICB 180-141187/10	1		14:27	X																								
CCV 180-141187/11	1		14:29	X																								
CCB 180-141187/12	1		14:32	X																								
LLCS 180-140242/1-A	1	T	14:34	X																								
HLCS 180-140242/2-A	1	T	14:36	X																								
LCS 180-140242/3-A	1	T	14:38	X																								
MB 180-140242/4-A	1	T	14:40	X																								
180-43220-2	1	T	14:42	X																								
ZZZZZZ			14:44																									
ZZZZZZ			14:46																									
ZZZZZZ			14:48																									
ZZZZZZ			14:49																									
CCV 180-141187/22	1		14:51	X																								
CCB 180-141187/23	1		14:53	X																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: SM 2340C

Start Date: 05/02/2015 07:39 End Date: 05/02/2015 08:17

Lab Sample Id	D/F	Type	Time	Analytes																								
				HardCC																								
LCS 180-140330/1	1	T	07:39	X																								
MB 180-140330/2	1	T	07:41	X																								
ZZZZZZ			07:43																									
ZZZZZZ			07:46																									
ZZZZZZ			07:48																									
180-43220-1	1	T	07:51	X																								
180-43220-2	1	T	07:53	X																								
180-43220-3	1	T	07:55	X																								
ZZZZZZ			07:58																									
ZZZZZZ			08:00																									
ZZZZZZ			08:03																									
ZZZZZZ			08:05																									
CCV 180-140330/13	1		08:07	X																								
CCB 180-140330/14	1		08:10	X																								
ZZZZZZ			08:12																									
CCV 180-140330/16			08:15																									
CCB 180-140330/17			08:17																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Instrument ID: TOC1030 Analysis Method: SM 5310C

Start Date: 05/06/2015 05:39 End Date: 05/06/2015 08:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				DOCD																								
ZZZZZZ			05:39																									
ICV 180-140690/2	1		05:52	X																								
ICB 180-140690/3	1		06:06	X																								
LCS 180-140690/4	1	D	06:19	X																								
LCSD 180-140690/5	1	D	06:32	X																								
MB 180-140690/6	1	D	06:45	X																								
180-43220-1	1	D	06:59	X																								
180-43220-2	1	D	07:12	X																								
180-43220-3	1	D	07:25	X																								
ZZZZZZ			07:39																									
ZZZZZZ			07:52																									
CCV 180-140690/12	1		08:05	X																								
CCB 180-140690/13	1		08:18	X																								

Prep Types:
D = Dissolved

AQ2 Report

Serial Number: SEAL 2
Report Requested By: Test America
Date & Time: 04/29/2015 14:36:51
Tray Number: 1
Tray Name: 15.04.29 (11-52)

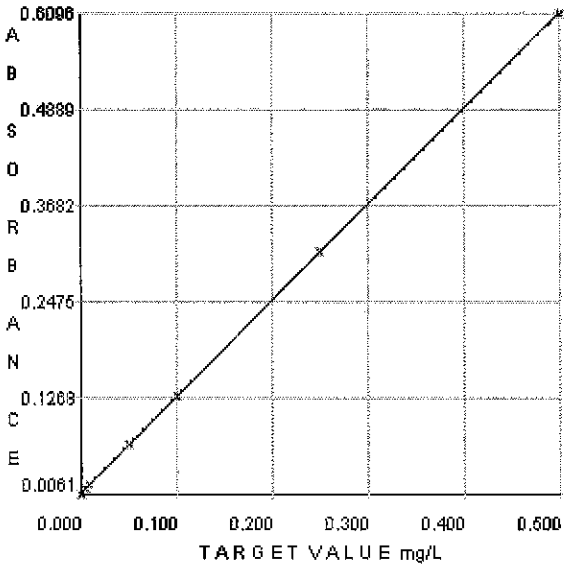
CYANIDE

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0061	-0.0010	0.0000	
S90	0.0134	0.0050	0.0050	0.7792
S91	0.0172	0.0083	0.0100	-17.4834
S92	0.0687	0.0509	0.0500	1.7609
S93	0.1300	0.1017	0.1000	1.6566
S94	0.3103	0.2511	0.2500	0.4406
S95	0.6096	0.4991	0.5000	-0.1871
S0	0.0061	-0.0010	0.0000	

Polynomial Order: 1
Correlation Coefficient: 1.0000
Carryover: -0.0
Date & Time: 04/29/2015 13:23:51

Calibration Graph



Reagents

Name	Batch	Prepared By	Expiry Date
CN - Phos Buff	1390860	Test America	11/03/2015 21:00:00
CN - Chl-T	1545808	Test America	04/30/2015 22:00:00
CN - PyrBrbA	1428101	Test America	06/04/2015 22:00:00

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0061		0.006082				04/29/2015 13:08:48
	S90	STANDARD 90	0.0134		0.013362				04/29/2015 13:10:58
	S91	STANDARD 91	0.0172		0.017240				04/29/2015 13:13:06
	S92	STANDARD 92	0.0687		0.068690				04/29/2015 13:15:14
	S93	STANDARD 93	0.1300		0.129973				04/29/2015 13:17:25
	S94	STANDARD 94	0.3103		0.310342				04/29/2015 13:19:35
	S95	STANDARD 95	0.6096		0.609616				04/29/2015 13:21:43
	S0	STANDARD 0	0.0061		0.006068				04/29/2015 13:23:51
1	C15	ICV	0.2065	mg/L	0.256513				04/29/2015 13:25:59
2	C17	ICB	-0.0006	mg/L	0.006608				04/29/2015 13:28:08
	C11	C C V	0.1022	mg/L	0.130616				04/29/2015 13:30:16
	C12	C C B	-0.0014	mg/L	0.005587				04/29/2015 13:32:25
3	U1	LLCS 180-1399851-A	0.0503	mg/L	0.067945				04/29/2015 13:34:34
4	U2	HLCS 180-1399852-A	0.2374	mg/L	0.293760				04/29/2015 13:36:43
5	U3	LCS 180-1399853-A	0.2014	mg/L	0.250341				04/29/2015 13:38:51

6	U4	MB 180-1399854-A	-0.0005	mg/L	0.006733	04/29/2015 13:41:00
7	U5	180-43178-I-1-C	-0.0009	mg/L	0.006172	04/29/2015 13:43:11
8	U6	180-43178-I-1-D DU	-0.0008	mg/L	0.006301	04/29/2015 13:45:21
9	U7	180-43178-H-1-C MS	0.0319	mg/L	0.045759	04/29/2015 13:47:30
10	U8	180-43178-H-1-D MSD	0.0594	mg/L	0.079031	04/29/2015 13:49:39
11	U9	180-43220-C-1-A	0.0035	mg/L	0.011551	04/29/2015 13:51:48
12	U10	180-43224-Q-1-A	-0.0017	mg/L	0.005170	04/29/2015 13:53:57
	C11	C C V	0.1025	mg/L	0.131027	04/29/2015 13:56:06
	C12	C C B	-0.0009	mg/L	0.006166	04/29/2015 13:58:15
13	U11	180-43281-A-2-A	0.1216	mg/L	0.154010	04/29/2015 14:00:24
14	U12	180-43281-A-3-A	0.0582	mg/L	0.077575	04/29/2015 14:02:33
15	U13	180-43281-A-4-A	0.0706	mg/L	0.092546	04/29/2015 14:04:43
16	U14	180-43281-A-5-A	0.0068	mg/L	0.015483	04/29/2015 14:06:54
17	U15	180-43297-I-5-A	-0.0006	mg/L	0.006578	04/29/2015 14:08:41
18	U16	180-43327-H-1-A	0.0244	mg/L	0.036715	04/29/2015 14:10:29
19	U17	180-43327-H-2-A	0.0265	mg/L	0.039211	04/29/2015 14:12:08
20	U18	180-43327-H-3-A	0.0132	mg/L	0.023231	04/29/2015 14:13:48
	C11	C C V	0.0992	mg/L	0.127016	04/29/2015 14:15:27
	C12	C C B	-0.0009	mg/L	0.006158	04/29/2015 14:17:07

AQ2 Report

Serial Number: SEAL 2
Report Requested By: Test America
Date & Time: 05/11/2015 12:29:13
Tray Number: 1
Tray Name: 15.05.01 (13-41)

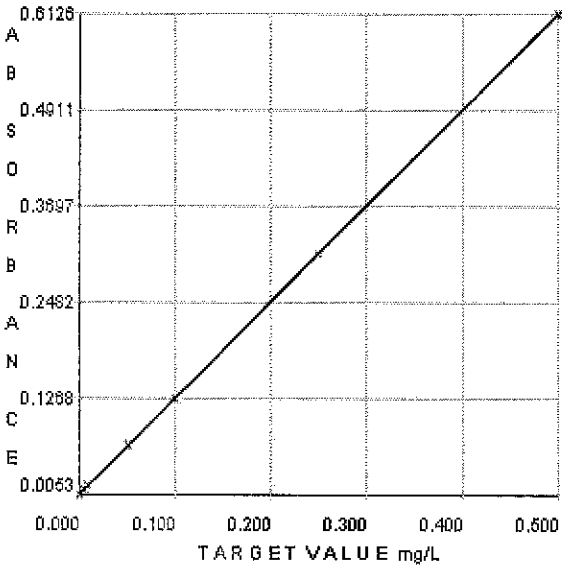
CYANIDE

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0053	-0.0010	0.0000	
S90	0.0123	0.0048	0.0050	-4.7628
S91	0.0178	0.0094	0.0100	-6.4041
S92	0.0685	0.0511	0.0500	2.2201
S93	0.1287	0.1007	0.1000	0.6789
S94	0.3105	0.2506	0.2500	0.2216
S95	0.6126	0.4995	0.5000	-0.1017
S0	0.0058	-0.0006	0.0000	

Polynomial Order: 1
Correlation Coefficient: 1.0000
Carryover: 0.1
Date & Time: 05/01/2015 14:23:32

Calibration Graph



Reagents

Name	Batch	Prepared By	Expiry Date
CN - Phos Buff	1390860	Test America	11/03/2015 21:00:00
CN - Chl-T	1563254	Test America	05/14/2015 22:00:00
CN - PyrBrbA	1428101	Test America	06/04/2015 22:00:00

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0053		0.005324				05/01/2015 14:08:28
	S90	STANDARD 90	0.0123		0.012262				05/01/2015 14:10:39
	S91	STANDARD 91	0.0178		0.017841				05/01/2015 14:12:47
	S92	STANDARD 92	0.0685		0.068502				05/01/2015 14:14:55
	S93	STANDARD 93	0.1287		0.128650				05/01/2015 14:17:05
	S94	STANDARD 94	0.3105		0.310512				05/01/2015 14:19:16
	S95	STANDARD 95	0.6126		0.612580				05/01/2015 14:21:23
	S0	STANDARD 0	0.0058		0.005798				05/01/2015 14:23:32
1	C15	ICV	0.2028	mg/L	0.252582				05/01/2015 14:25:40
2	C17	ICB	-0.0005	mg/L	0.005863				05/01/2015 14:27:48
	C11	C C V	0.0968	mg/L	0.123966				05/01/2015 14:29:57
	C12	C C B	-0.0009	mg/L	0.005395				05/01/2015 14:32:06
3	U1	LLCS 180-1402421-A	0.0494	mg/L	0.066445				05/01/2015 14:34:14
4	U2	HLCS 180-1402422-A	0.2475	mg/L	0.306794				05/01/2015 14:36:23
5	U3	LCS 180-1402423-A	0.1957	mg/L	0.243917				05/01/2015 14:38:32

6	U4	MB 180-1402424-A	-0.0002	mg/L	0.006274	05/01/2015 14:40:42
7	U5	180-43220-C-2-A	0.0044	mg/L	0.011781	05/01/2015 14:42:53
8	U6	180-43249-N-2-A	0.0003	mg/L	0.006829	05/01/2015 14:44:40
9	U7	180-43249-N-2-B MS	0.1026	mg/L	0.131039	05/01/2015 14:46:28
10	U8	180-43249-N-2-C MSD	0.1047	mg/L	0.133521	05/01/2015 14:48:08
11	U9	180-43249-N-3-A	-0.0004	mg/L	0.006059	05/01/2015 14:49:47
	C11	C C V	0.0980	mg/L	0.125339	05/01/2015 14:51:27
	C12	C C B	-0.0007	mg/L	0.005650	05/01/2015 14:53:06

TestAmerica Pittsburgh

5310C %RPD Replicate Calculation

File#050615DOC

Units: mg/L TOC

Batch#	Sample Workorder#	Result 1	Result 2	Average	RPD
140690	ICV	40.454	39.725	40.090	1.82
140690	ICB	0.000	0.000	0.000	~~#DIV/0!~~ ND cw 5-6-15
140690	LCS	20.027	20.125	20.076	0.49
140690	LCSD	19.800	19.489	19.645	1.58
140690	MB	0.000	0.000	0.000	~~#DIV/0!~~ ND cw 5-6-15
140690	180-43220-1	2.026	2.202	2.114	8.33
140690	43220-2	1.783	1.863	1.823	4.39
140690	43220-3	1.702	1.766	1.734	3.69
140690	180-43409-1	2.707	2.839	2.773	4.76
140690	43409-2	6.464	7.019	6.742	8.23
140690	CCV	10.389	10.026	10.208	3.56
140690	CCB	0.074	0.024	0.049	~~102.04~~ ND cw 5-6-15
				#DIV/0!	#DIV/0!
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OI CORPORATION

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USA

L# 050615DOC

Date Prepared: 05/06/2015 By: TOC

Date Approved: By:

SM5310C DOC

L# 440690

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	1	BLANK	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1 : 1	00000000	TOC	2,519	0.169	0.071	92	3.64	Pass
2	2	ICV 40 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk Standard	1 : 1	00000000	TOC	265,109	96.216	40.089	3,362	1.27	Fail
3	3	ICB	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk Standard	1 : 1	00000000	TOC	1,843	0.000	0.000	70	3.80	Fail
4	4	LCS 20 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk Standard	1 : 1	00000000	TOC	134,484	48.184	20.076	456	0.34	Fail
5	5	LCSD 20 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk Standard	1 : 1	00000000	TOC	131,663	47.147	19.645	440	1.09	Fail
6	6	MB	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk Standard	1 : 1	00000000	TOC	1,319	0.000	0.000	5	0.37	Fail
7	7	180-43220-b-1-a	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1 : 1	00000000	TOC	15,856	5.074	2.114	808	5.10	Pass
8	8	180-43220-b-2-a	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1 : 1	00000000	TOC	13,958	4.376	1.823	371	2.66	Pass
9	9	180-43220-b-3-a	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1 : 1	00000000	TOC	13,376	4.162	1.734	295	2.21	Pass
10	10	180-43409-b-1-a	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1 : 1	00000000	TOC	20,160	6.656	2.773	605	3.00	Pass
11	11	180-43409-b-2-a	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1 : 1	00000000	TOC	46,058	16.179	6.741	2,560	5.56	Pass
12	12	CCV 10 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk Standard	1 : 1	00000000	TOC	70,070	24.498	10.208	1675	2.39	Fail
13	13	CCB	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk Standard	1 : 1	00000000	TOC	3,769	0.118	0.049	230	6.11	Fail

Denotes Excluded Replicates
Denotes First Failed Samples

OI Corporation
151 Graham Rd
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USA

Date Prepared: 05/06/2015 By:

Date Approved: By:

TOC

Sample Results

Spl #: 1 Sample ID : BLANK Type : Sample Date: 05/06/2015 Status: Pass
Vial #: 1 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:39 am	-	-	-	2,454	0.146	0.061
2	5:45 am	-	-	-	2,584	0.193	0.081
	Avg.	-	-	-	2,519	0.169	0.071
	Std.Dev.						
	% RSD.				3.64		

Spl #: 2 Sample ID : ICV 40 PPM Type : Chk Standarc Date: 05/06/2015 Status: Fail
Vial #: 2 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:52 am	-	-	-	267,487	97.091	40.454
2	5:59 am	-	-	-	262,732	95.342	39.725
	Avg.	-	-	-	265,109	96.216	40.089
	Std.Dev.						
	% RSD.				1.27		

Spl #: 3 Sample ID : ICB Type : Chk Standarc Date: 05/06/2015 Status: Fail
Vial #: 3 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:06 am	-	-	-	1,793	0.000	0.000
2	6:12 am	-	-	-	1,893	0.000	0.000
	Avg.	-	-	-	1,843	0.000	0.000
	Std.Dev.						
	% RSD.				3.80		

Denotes Excluded Replicates
Denotes First Failed Samples

Spl #: 4 Sample ID : LCS 20 PPM Type : Chk Standarc Date: 05/06/2015 Status: Fail
Vial #: 4 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:19 am	-	-	-	134,161	48.065	20.027
2	6:26 am	-	-	-	134,806	48.302	20.125
	Avg.	-	-	-	134,484	48.184	20.076
	Std.Dev.						
	% RSD.				0.34		

Spl #: 5 Sample ID : LCSD 20 PPM Type : Chk Standarc Date: 05/06/2015 Status: Fail
Vial #: 5 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:32 am	-	-	-	132,681	47.521	19.800
2	6:39 am	-	-	-	130,646	46.772	19.489
	Avg.	-	-	-	131,663	47.147	19.645
	Std.Dev.						
	% RSD.				1.09		

Spl #: 6 Sample ID : MB Type : Chk Standarc Date: 05/06/2015 Status: Fail
Vial #: 6 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:45 am	-	-	-	1,322	0.000	0.000
2	6:51 am	-	-	-	1,315	0.000	0.000
	Avg.	-	-	-	1,319	0.000	0.000
	Std.Dev.						
	% RSD.				0.37		

O-I CORPORATION

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Date Prepared: 05/06/2015 By: TOC

Date Approved: By:

Spl #: 7 Sample ID : 180-43220-b-1-a Type : Sample Date: 05/06/2015 Status: Pass
Vial #: 7 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:59 am	-	-	-	15,284	4.863	2.026
2	7:05 am	-	-	-	16,427	5.284	2.202
	Avg.	-	-	-	15,856	5.074	2.114
	Std.Dev.						
	% RSD.				5.10		

Spl #: 8 Sample ID : 180-43220-b-2-a Type : Sample Date: 05/06/2015 Status: Pass
Vial #: 8 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:12 am	-	-	-	13,696	4.279	1.783
2	7:18 am	-	-	-	14,220	4.472	1.863
	Avg.	-	-	-	13,958	4.376	1.823
	Std.Dev.						
	% RSD.				2.66		

Spl #: 9 Sample ID : 180-43220-b-3-a Type : Sample Date: 05/06/2015 Status: Pass
Vial #: 9 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:25 am	-	-	-	13,167	4.085	1.702
2	7:31 am	-	-	-	13,585	4.239	1.766
	Avg.	-	-	-	13,376	4.162	1.734
	Std.Dev.						
	% RSD.				2.21		

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Date Prepared: 05/06/2015 By: TOC

Date Approved: By:

Spl #: 10 Sample ID : 180-43409-b-1-a Type : Sample Date: 05/06/2015 Status: Pass
Vial #: 10 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:39 am	-	-	-	19,732	6.499	2.707
2	7:45 am	-	-	-	20,588	6.814	2.839
	Avg.	-	-	-	20,160	6.656	2.773
	Std.Dev.						
	% RSD.				3.00		

Spl #: 11 Sample ID : 180-43409-b-2-a Type : Sample Date: 05/06/2015 Status: Pass
Vial #: 11 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:52 am	-	-	-	44,248	15.514	6.464
2	7:58 am	-	-	-	47,868	16.845	7.019
	Avg.	-	-	-	46,058	16.179	6.741
	Std.Dev.						
	% RSD.				5.56		

Spl #: 12 Sample ID : CCV 10 PPM Type : Chk Standarc Date: 05/06/2015 Status: Fail
Vial #: 12 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:05 am	-	-	-	71,254	24.933	10.389
2	8:11 am	-	-	-	68,885	24.063	10.026
	Avg.	-	-	-	70,070	24.498	10.208
	Std.Dev.						
	% RSD.				2.39		

Denotes Excluded Replicates
Denotes First Failed Samples

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Date Prepared: 05/06/2015 By: TOC

Date Approved: By:

Spl #: 13 Sample ID : CCB Type : Chk Standarc Date: 05/06/2015 Status: Fail

Vial #: 13 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:18 am	-	-	-	3,932	0.178	0.074
2	8:24 am	-	-	-	3,606	0.059	0.024
	Avg.	-	-	-	3,769	0.118	0.049
	Std.Dev.						
	% RSD.				6.11		

Denotes Excluded Replicates

Denotes First Failed Samples

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Date Prepared: 05/06/2015 **By:** TOC

Date Approved: **By:**

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
TIC	01:30	03:00
TOC	01:30	03:00

Temp

	React	Detect
TIC	70	70
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 Mode

Primary Mode:	TOC
User for ALL Modes:	Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RF (ugC/K-cts)	Yes	0.1000	0.3000	Continue
	Yes	0.995	1.000	Continue
Offset (area) (cts)	No	-	-	-
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

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

Denotes Excluded Replicates

Denotes First Failed Samples

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Date Prepared: 05/06/2015 By:

Date Approved: By:

Calibration Details

Calibration Mode:	TOC
Date Calibrated:	05/03/2015
Time Calibrated:	1:03 pm
Calibrated By:	toc
RF (ugC/k-cts):	0.3677
R2:	0.9998
R:	0.9999
QC Blank(cts):	3,643
Offset (cts):	3451
Offset (ugC):	-1.269
Reagent Blank (cts):	2,058
Units of Measure:	PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM)	1,000.000
# of Reagent Blanks:	3
EFC Enabled:	No
Total Flowrate w/EFC:	100 ml/min
Check Standards:	Subtract RW
Samples:	Substract RB
Regression type:	Weighted Linear
	weighting factor => 1 / mass

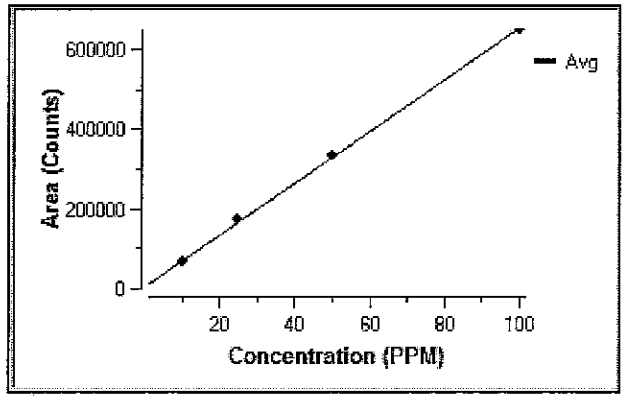
Calculations:

$$Concentration = \frac{\frac{RF}{1000} \times Area}{volume}$$

Samples: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RB}$

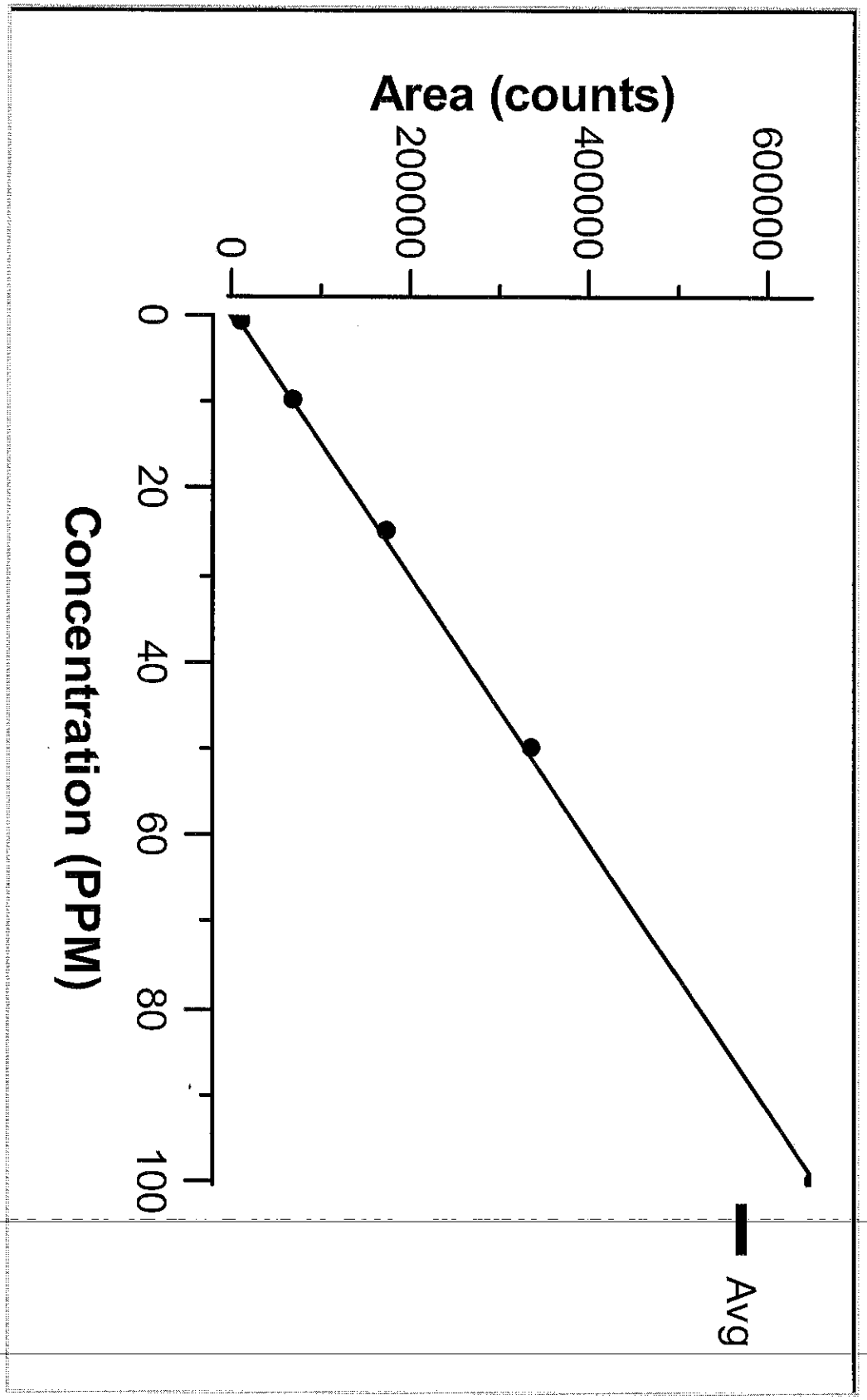
CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RW}$

QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$$y = m \times x + b$$

$y \Rightarrow Area$ $\quad m \Rightarrow \frac{1000}{RF \times volume}$ $\quad b \Rightarrow 0$


Area (counts)
600000
400000
200000
0
0
20
40
60
80
100
Concentration (PPM)
Avg

User ID:toc Name:Total Organic Carbon
Title:Mr Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 40-TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM
Modified By: toc
Date Created: 2013/07/18; 11:10 AM
Last Modified: 2015/05/03; 12:51 PM
Last Calibrated: 2015/05/03; 12:51 PM

RF(ugC/k-cnt): 0.3677
R2: 0.9998
Reagent Blank(cts): 2,058
Offset Area(cts): 3,451
Offset Mass(ugC): -1.27

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	3,448	59	1.71	2015-05-03; 11:33AM
1	1.000	2.400	2	9,950	199	2.00	2015-05-03; 11:51AM
2	10.000	2.400	2	68,703	150	0.22	2015-05-03; 12:04PM
3	25.000	2.400	2	171,189	863	0.50	2015-05-03; 12:18PM
4	50.000	2.400	2	331,515	646	0.19	2015-05-03; 12:31PM
5	100.000	2.400	2	650,148	931	0.14	2015-05-03; 12:45PM

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USA

Date Prepared: 05/04/2015 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	6,431	0.000	0.000	176	2.73	Pass
3	2	TOC-RW	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	00000000	TOC	3,448	0.000	0.000	59	1.71	
4	3	TOC-Std#1-1.000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	00000000	TOC	9,950	2.400	1.000	199	2.00	
5	4	TOC-Std#2-10.000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	00000000	TOC	68,703	24.000	10.000	150	0.22	
6	5	TOC-Std#3-25.000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	00000000	TOC	171,189	60.000	25.000	863	0.50	
7	6	TOC-Std#4-50.000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	00000000	TOC	331,515	120.000	50.000	646	0.19	
8	7	TOC-Std#5-100.000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	00000000	TOC	650,148	240.000	100.000	931	0.14	

050315TOCCAL

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Date Prepared: 05/04/2015 By: TOC

Date Approved: By:

Sample Results

Spl #: 1 Sample ID : BLANK Type : Sample Date: 05/03/2015 Status: Pass
Vial #: 1 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:44 am	-	-	-	6,555	0.000	0.000
2	10:51 am	-	-	-	6,307	0.000	0.000
	Avg.	-	-	-	6,431	0.000	0.000
	Std.Dev.						
	% RSD.				2.73		

Spl #: 3 Sample ID : TOC-RW Type : Std Date: 05/03/2015 Status:
Vial #: 2 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:33 am	-	-	-	3,406	0.000	0.000
2	11:40 am	-	-	-	3,489	0.000	0.000
	Avg.	-	-	-	3,448	0.000	0.000
	Std.Dev.						
	% RSD.				1.71		

Spl #: 4 Sample ID : TOC-Std#1-1.000 PPM Type : Std Date: 05/03/2015 Status:
Vial #: 3 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:51 am	-	-	-	10,090	2.400	1.000
2	11:57 am	-	-	-	9,809	2.400	1.000
	Avg.	-	-	-	9,950	2.400	1.000
	Std.Dev.						
	% RSD.				2.00		

Denotes Excluded Replicates
Denotes First Failed Samples

Spl #: 5 Sample ID : TOC-Std#2-10.000 PPM Type : Std Date: 05/03/2015 Status:
Vial #: 4 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:04 pm	-	-	-	68,597	24.000	10.000
2	12:11 pm	-	-	-	68,809	24.000	10.000
Avg.		-	-	-	68,703	24.000	10.000
Std.Dev.							
% RSD.					0.22		

Spl #: 6 Sample ID : TOC-Std#3-25.000 PPM Type : Std Date: 05/03/2015 Status:
Vial #: 5 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:18 pm	-	-	-	170,579	60.000	25.000
2	12:24 pm	-	-	-	171,799	60.000	25.000
Avg.		-	-	-	171,189	60.000	25.000
Std.Dev.							
% RSD.					0.50		

Spl #: 7 Sample ID : TOC-Std#4-50.000 PPM Type : Std Date: 05/03/2015 Status:
Vial #: 6 Method : TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:31 pm	-	-	-	331,972	120.000	50.000
2	12:37 pm	-	-	-	331,058	120.000	50.000
Avg.		-	-	-	331,515	120.000	50.000
Std.Dev.							
% RSD.					0.19		

Denotes Excluded Replicates
Denotes First Failed Samples

O-I-CORPORATION

OI Corporation
151 Graham Rd
College Station, TX
77845
USA

Date Prepared: 05/04/2015 By: TOC

Date Approved: By:

Spl #:	8	**Sample ID :**	TOC-Std#5-100.000 PPM	**Type :**	Std	**Date:**	05/03/2015	**Status:**	
Vial #:	7	**Method :**	TOC JULY 2013 - Jul 18, 2013	**Dilution**	1 : 1	**Customer ID:**	00000000		

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:45 pm	-	-	-	649,489	240.000	100.000
2	12:51 pm	-	-	-	650,806	240.000	100.000
	Avg.	-	-	-	650,148	240.000	100.000
	Std.Dev.						
	% RSD.				0.14		

Denotes Excluded Replicates

Denotes First Failed Samples

O·I·CORPORATION

OI Corporation
151 Graham Rd
College Station, TX
77845
USA

Date Prepared: 05/04/2015 By: TOC

Date Approved: By:

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

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

Times

	React	Detect
TIC	01:30	03:00
TOC	01:30	03:00

Temp

	React	Detect
TIC	70	70
TOC	98	98

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 Mode

Primary Mode:	TOC
User for ALL Modes:	Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RF (ugC/K-cts)	Yes	0.1000	0.3000	Continue
	Yes	0.995	1.000	Continue
Offset (area) (cts)	No	-	-	-
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

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

Denotes Excluded Replicates

Denotes First Failed Samples

OI Corporation
151 Graham Rd
College Station, TX
77845
USA

Date Prepared: 05/04/2015 **By:**

Date Approved: **By:**

Calibration Details

Calibration Mode:	TOC
Date Calibrated:	05/02/2015
Time Calibrated:	2:46 pm
Calibrated By:	toc
RF (ugC/k-cts):	0.3720
R2:	0.9993
R:	0.9997
QC Blank(cts):	11,040
Offset (cts):	15758
Offset (ugC):	-5.863
Reagent Blank (cts):	10,448
Units of Measure:	PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM)	1,000.000
# of Reagent Blanks:	3
EFC Enabled:	No
Total Flowrate w/EFC:	100 ml/min
Check Standards:	Subtract RW
Samples:	Substract RB
Regression type:	Weighted Linear
	weighting factor => 1 / mass

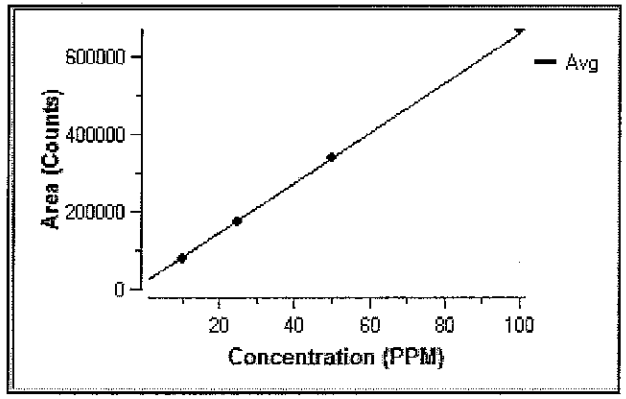
Calculations:

$$Concentration = \frac{\frac{RF}{1000} \times Area}{volume}$$

Samples: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RB}$

CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RW}$

QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$$y = m \times x + b$$

$y \Rightarrow Area$ $\quad m \Rightarrow \frac{1000}{RF \times volume}$ $\quad b \Rightarrow 0$

O·I·CORPORATION

OI Corporation
151 Graham Rd
College Station, TX
77845
USA

Date Prepared: 05/04/2015 By: TOC

Date Approved: By:

Calibration Details

Calibration Mode:	TOC
Date Calibrated:	05/03/2015
Time Calibrated:	12:51 pm
Calibrated By:	toc
RF (ugC/k-cts):	0.3677
R2:	0.9998
R:	0.9999
QC Blank(cts):	0
Offset (cts):	3451
Offset (ugC):	-1.269
Reagent Blank (cts):	2,058
Units of Measure:	PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM)	1,000.000
# of Reagent Blanks:	3
EFC Enabled:	No
Total Flowrate w/EFC:	100 ml/min
Check Standards:	Subtract RW
Samples:	Substract RB
Regression type:	Weighted Linear
	weighting factor => 1 / mass

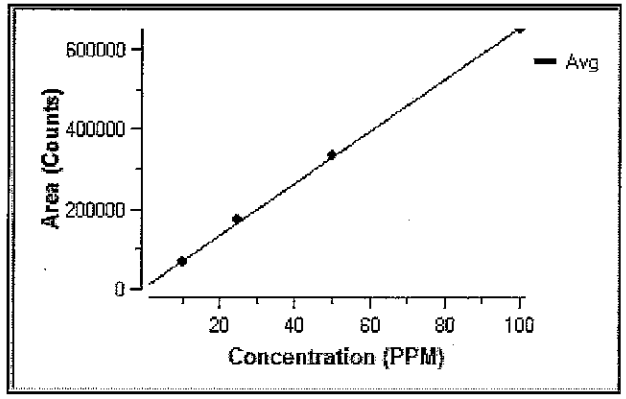
Calculations:

$$Concentration = \frac{\frac{RF}{1000} \times Area}{volume}$$

Samples: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RB}$

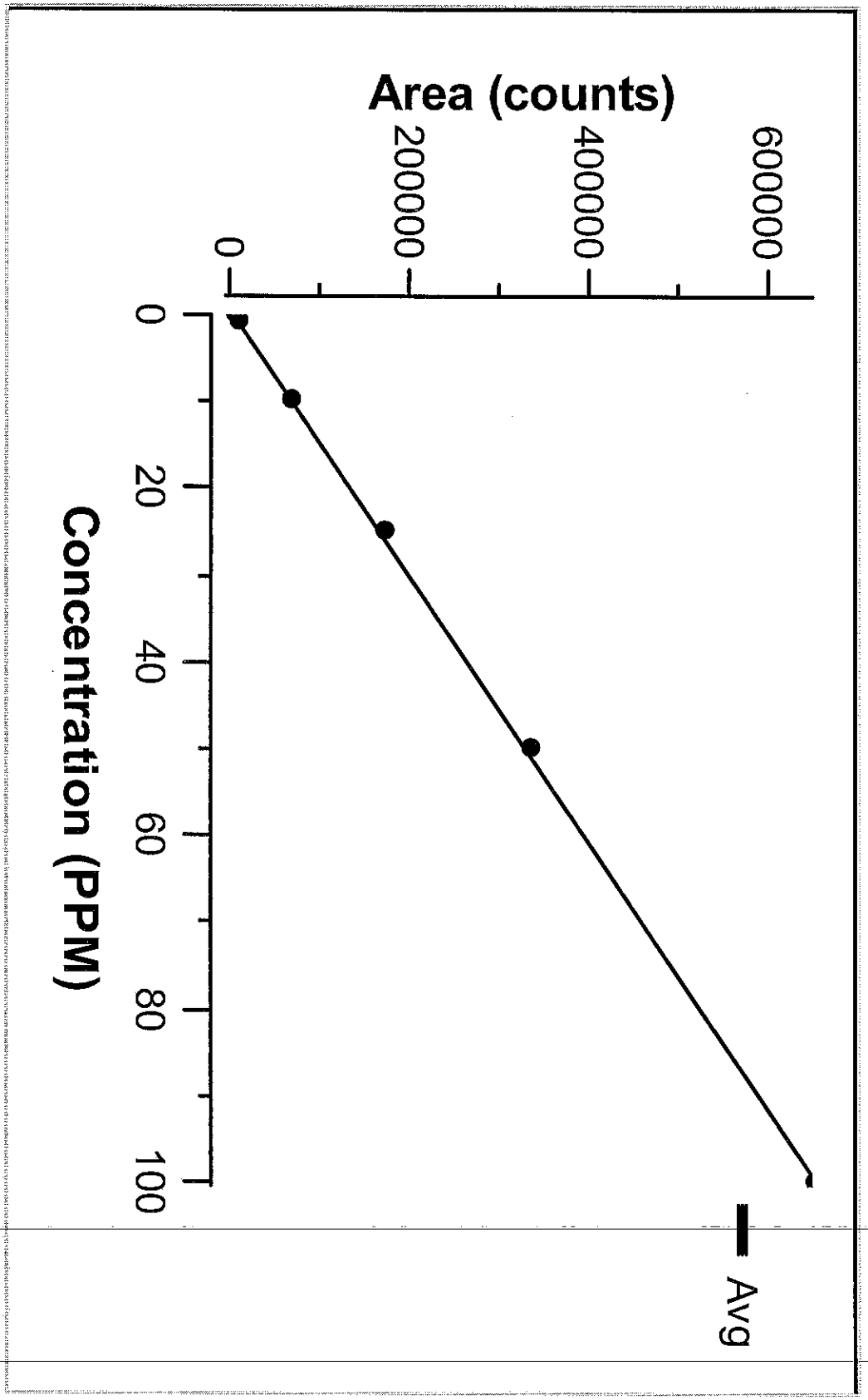
CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RW}$

QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$$y = m \times x + b$$

$y \Rightarrow Area$ $\quad m \Rightarrow \frac{1000}{RF \times volume}$ $\quad b \Rightarrow 0$


Area (counts)
600000
400000
200000
0
0
20
40
60
80
100
Concentration (PPM)
Avg

User ID:toc Name:Total Organic Carbon
Title:Mr Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 40-TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM
Modified By: toc
Date Created: 2013/07/18; 11:10 AM
Last Modified: 2015/05/03; 12:51 PM
Last Calibrated: 2015/05/03; 12:51 PM

RF(ugC/k-cnt): 0.3677
R2: 0.9998
Reagent Blank(cts): 2,058
Offset Area(cts): 3,451
Offset Mass(ugC): -1.27

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	3,448	59	1.71	2015-05-03; 11:33AM
1	1.000	2.400	2	9,950	199	2.00	2015-05-03; 11:51AM
2	10.000	2.400	2	68,703	150	0.22	2015-05-03; 12:04PM
3	25.000	2.400	2	171,189	863	0.50	2015-05-03; 12:18PM
4	50.000	2.400	2	331,515	646	0.19	2015-05-03; 12:31PM
5	100.000	2.400	2	650,148	931	0.14	2015-05-03; 12:45PM

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Batch Number: 139985 Batch Start Date: 04/29/15 10:40 Batch Analyst: Johnson, Paul

Batch Method: 9010C Batch End Date: 04/29/15 12:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	SulfideCheck	ChlorineCheck	WCN0.5L1 00492	WCN10Pi 00483
LLCS 180-139985/1		9010C, 9014		50 mL	50 mL			5 mL	
HLCS 180-139985/2		9010C, 9014		50 mL	50 mL				1.25 mL
LCS 180-139985/3		9010C, 9014		50 mL	50 mL				
MB 180-139985/4		9010C, 9014		50 mL	50 mL				
180-43220-C-1	PW-E01	9010C, 9014	T	50 mL	50 mL	N	N		

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCNLCS 00017					
LLCS 180-139985/1		9010C, 9014							
HLCS 180-139985/2		9010C, 9014							
LCS 180-139985/3		9010C, 9014		1 mL					
MB 180-139985/4		9010C, 9014							
180-43220-C-1	PW-E01	9010C, 9014	T						

Batch Notes	
Distillation Temperature	150 Degrees C
KI-Starch Paper Lot #	1276531
Lead Acetate Lot #	1276537
Magnesium Chloride Dispenser ID	42145
Magnesium Chloride Lot Number	1508124
NaOH Dispenser ID	10J62292
Sodium Hydroxide Reagent ID Number	1427994
Pipette ID	D1203165U
Sulfamic Acid Reagent ID Number	955307
Sulfuric Acid Dispenser ID	21014
Sulfuric Acid Reagent ID Number	1516133

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.: 180-43220-1

SDG No.:

Batch Number: 139985 Batch Start Date: 04/29/15 10:40 Batch Analyst: Johnson, Paul

Batch Method: 9010C Batch End Date: 04/29/15 12:10

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Batch Number: 140061 Batch Start Date: 04/29/15 13:08 Batch Analyst: Johnson, Paul

Batch Method: 9014 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	WCN0.1L3 00042	WCN0.2ICV 00327			
ICV 180-140061/9		9014		1 mL		1 mL			
CCV 180-140061/11		9014		1 mL	1 mL				
CCV 180-140061/23		9014		1 mL	1 mL				

Batch Notes	
Buffer Reagent ID Number	1390860
Chloramine-T Reagent ID Number	1545808
NaOH Lot #	1427994
Pipette ID	D1203165U
Pyridine-Barbituric Acid Reagent ID	1428101

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Batch Number: 140242 Batch Start Date: 05/01/15 08:10 Batch Analyst: Loheyde, Cheryl

Batch Method: 9010C Batch End Date: 05/01/15 09:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	SulfideCheck	ChlorineCheck	WCN0.5L1 00493	WCN10Pi 00485
LLCS 180-140242/1		9010C, 9014		50 mL	50 mL			5 mL	
HLCS 180-140242/2		9010C, 9014		50 mL	50 mL				1.25 mL
LCS 180-140242/3		9010C, 9014		50 mL	50 mL				
MB 180-140242/4		9010C, 9014		50 mL	50 mL				
180-43220-C-2	PW-D02	9010C, 9014	T	50 mL	50 mL	N	N		

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCNLCS 00017					
LLCS 180-140242/1		9010C, 9014							
HLCS 180-140242/2		9010C, 9014							
LCS 180-140242/3		9010C, 9014		1 mL					
MB 180-140242/4		9010C, 9014							
180-43220-C-2	PW-D02	9010C, 9014	T						

Batch Notes	
Distillation Temperature	150 Degrees C
KI-Starch Paper Lot #	1276531
Lead Acetate Lot #	1276537
Magnesium Chloride Dispenser ID	42145
Magnesium Chloride Lot Number	1508124
NaOH Dispenser ID	10J62292
Sodium Hydroxide Reagent ID Number	1427994
Pipette ID	D1203165U
Sulfamic Acid Reagent ID Number	955307
Sulfuric Acid Dispenser ID	21014
Sulfuric Acid Reagent ID Number	1516133

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.: 180-43220-1

SDG No.:

Batch Number: 140242 Batch Start Date: 05/01/15 08:10 Batch Analyst: Loheyde, Cheryl

Batch Method: 9010C Batch End Date: 05/01/15 09:30

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.: 180-43220-1

SDG No.:

Batch Number: 141187 Batch Start Date: 05/01/15 14:08 Batch Analyst: Reagle, Carl

Batch Method: 9014 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	WCN0.1L3 00043	WCN0.2ICV 00328			
ICV 180-141187/9		9014		1 mL		1 mL			
CCV 180-141187/11		9014		1 mL	1 mL				
CCV 180-141187/22		9014		1 mL	1 mL				

Batch Notes	
Buffer Reagent ID Number	1390860
Chloramine-T Reagent ID Number	1555251
NaOH Lot #	1427994
Pipette ID	D1203165U
Pyridine-Barbituric Acid Reagent ID	1428101

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43220-1

SDG No.:

Batch Number: 140330 Batch Start Date: 05/02/15 07:39 Batch Analyst: Kieda, Chuck

Batch Method: SM 2340C Batch End Date: 05/02/15 08:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	AdjustedpH	BuretStart1	BuretStop1
LCS 180-140330/1		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	2.5 mL
MB 180-140330/2		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	0.0 mL
180-43220-D-1	PW-E01	SM 2340C	T	5 mL	50 mL	<2 SU	10-11	0.0 mL	8.3 mL
180-43220-D-2	PW-D02	SM 2340C	T	5 mL	50 mL	<2 SU	10-11	0.0 mL	7.1 mL
180-43220-D-3	PW-C02	SM 2340C	T	5 mL	50 mL	<2 SU	10-11	0.0 mL	4.6 mL
CCV 180-140330/13		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	2.5 mL
CCB 180-140330/14		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	0.0 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	TitrantVolume1	CalcMsg	WHdCaCO3P 00006			
LCS 180-140330/1		SM 2340C		2.5 mL	OK	2.5 mL			
MB 180-140330/2		SM 2340C		0 mL	OK				
180-43220-D-1	PW-E01	SM 2340C	T	8.3 mL	OK				
180-43220-D-2	PW-D02	SM 2340C	T	7.1 mL	OK				
180-43220-D-3	PW-C02	SM 2340C	T	4.6 mL	OK				
CCV 180-140330/13		SM 2340C		2.5 mL	OK	2.5 mL			
CCB 180-140330/14		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, 08G08043
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.: 180-43220-1

SDG No.:

Batch Number: 140330 Batch Start Date: 05/02/15 07:39 Batch Analyst: Kieda, Chuck

Batch Method: SM 2340C Batch End Date: 05/02/15 08:20

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.: 180-43220-1

SDG No.:

Batch Number: 140690 Batch Start Date: 05/06/15 05:39 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 5310C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	10 PPM TOC/CC 00491	ICV 40 PPM 00624	LCS 20 PPM 00620
ICV 180-140690/2		SM 5310C		40 mL	40 mL			40 mL	
LCS 180-140690/4		SM 5310C		40 mL	40 mL				40 mL
LCSD 180-140690/5		SM 5310C		40 mL	40 mL				40 mL
180-43220-B-1-A	PW-E01	SM 5310C	D			<2 SU			
180-43220-B-2-A	PW-D02	SM 5310C	D			<2 SU			
180-43220-B-3-A	PW-C02	SM 5310C	D			<2 SU			
CCV 180-140690/12		SM 5310C		40 mL	40 mL		40 mL		

Batch Notes	
Batch Comment	PH STRIPS LOT# HC004149
Lot # of Phosphoric Acid	1559513
Sodium Persulfate Reagent ID Number	1559518

Basis	Basis Description
D	Dissolved

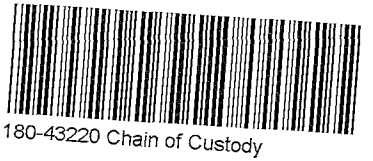
The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

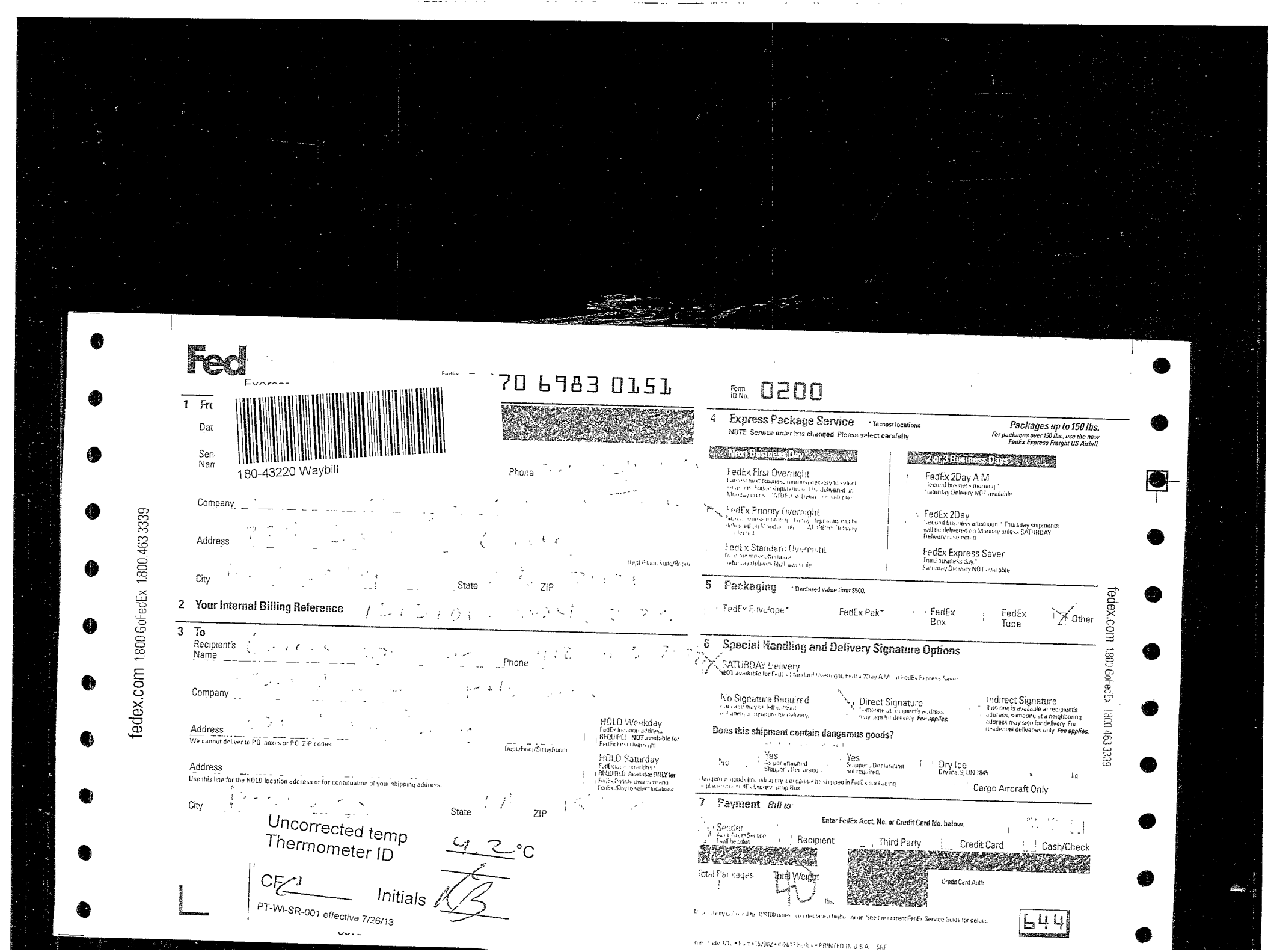
Client:	Project Manager:	Parameters/Method Numbers for Analysis	Chain of Custody Record
EA Engineering Science, and Technology, Inc.	**Frank Barranco**		Laboratory: **TestAmerica - Pittsburgh**
	Phone: 410-329-5137		**301 Alpha Drive**
225 Schilling Circle, Suite 400	Field Contact:		**Pittsburgh, PA 15238**
Hunt Valley, MD 21031	**John Morris**		
	Phone: (401) 439-1031		**phone: 412.963.2428**
Project Name: Sparrows Point	TestAmerica Quote #: 18013274		**fax: 412.963.2468**
Project#: 15131.01			
Page 1 of 1	**Site Water**		**ATTN: Carrie Gamber**

Date	Time	Water	Sediment	Sample Identification	No. of Containers	PPL SVOCs/PAHs (SW846 8270C)	PPL Metals (SW846 6020A)	Mercury (SW846 7471B)	Cyanide (SW846 9014)	Hardness (SW846 6010C/SM 2340B)	Dissolved Organic Carbon (SM 5310C)	Remarks
4/16/15	14:15	✓		PW - E01	2	✓						SEE PROJECT SPECIFIC ANALYTE LIST
		✓		PW - E01	1		✓	✓		✓		~~SVOCs~~ (bis(2-ethylhexyl)phthalate only)
		✓		PW - E01	1				✓			
↓	↓	✓		PW - E01	2						✓	
4/17/15	10:50	✓		PW - D02	2	✓						
		✓		PW - D02	1		✓	✓		✓		
		✓		PW - D02	1				✓			
	↓	✓		PW - D02	2						✓	
	13:15	✓		PW - C02	2	✓	~~✓~~	~~✓~~	~~✓~~	✓	✓	
		✓		PW - C02	1		✓	✓		✓		
		✓		PW - C02	1				✓			
↓	↓	✓		PW - C02	2						✓	

BTM 4/17/15



Sampled by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	
John T. Morris	4/17/15 16:00	Debbie Watson	4-18-15 9:00	POREWATER SPARROW'S POINT
Relinquished by: (Signature)	Date/Time	Received by Laboratory: (Signature)	Date/Time	
John T. Morris	4/17/15 16:00			



Fed Express

70 6983 0151

Form ID No. 0200

1 Fr

Dat

Sen
Nam

180-43220 Waybill

Phone

Company

Address

Dept/Floor, Suite/Room

City State ZIP

2 Your Internal Billing Reference

3 To

Recipient's Name Phone

Company

Address

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept/Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City State ZIP

HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight

HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations

Uncorrected temp
Thermometer ID

4.2 °C

CF

Initials

PT-WI-SR-001 effective 7/26/13

4 Express Package Service * To most locations

NOTE Service order has changed. Please select carefully

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

FedEx First Overnight
Earliest next business morning delivery to select locations. FedEx First Overnight envelopes and packages are delivered ahead of schedule, but SATURDAY Delivery is not available.

FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.

FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube X Other

6 Special Handling and Delivery Signature Options

SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver

No Signature Required
Package may be left without obtaining a signature for delivery.

Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.

Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

No

Yes
As per attached Shipper's Declaration

Yes
Shipper's Declaration not required.

Dry Ice
Dry Ice, 9, UN 1845 x kg

Dangerous goods including dry ice cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Sender
FedEx Acct. No. or Credit Card No. must be provided

Recipient

Third Party

Credit Card

Cash/Check

Total Pkgs

Total Weight 40 lbs.

Credit Card Auth

644

fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 180-43220-1

Login Number: 43220
List Number: 1
Creator: Watson, Debbie

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.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
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	