TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-22660-1

Job Description: RVAAP - ECC

For:
Environmental Chemical Corp.
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Marlborough, MA 01752

Attention: Mr. Jackson Kiker

Approved for release.
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CASE NARRATIVE

Client: Environmental Chemical Corp.

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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.

TestAmerica utilizes USEPA approved methods and DOD QSM, where applicable, in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

All parameters for which TestAmerica North Canton has certification were evaluated to the limit of detection (LOD) and include qualified results where applicable. Parameters not certified under QSM, if any, were evaluated to the detection limit (DL) and include qualified results where applicable.

The sample(s) that contain constituents flagged with U are undetected. The result associated with this flag is the limit of detection (LOD).

RECEIPT

The samples were received on 04/02/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.5, 0.8, 0.9 and 1.3C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 068SB-0057M-0001-SO (240-22660-30) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B DoD. The samples were prepared on 03/29/2013 and analyzed on 04/05/2013.

4-Bromofluorobenzene (Surr) and Toluene-d8 (Surr) failed the surrogate recovery criteria low for 068SB-0057M-0001-SO (240-22660-30). Refer to the QC report for details.

Acetone and Methylene Chloride were detected in method blank MB 240-80741/30 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Refer to the QC report for details.

1,1,2,2-Tetrachloroethane, Acetone, Bromomethane and Methylene Chloride failed the recovery criteria high for MRL 240-80741/28. Acetone and Methylene Chloride failed the recovery criteria high for MRL 240-80741/5. Refer to the QC report for details.

The Method Reporting Limit (MRL) opener for DoD had Acetone and Methylene Chloride fail high for the percent recoveries.

Surrogate recovery for the following samples were outside control limits: 068SB-0057M-0001-SO (240-22660-30). Re-extraction and/or re-analysis were performed with concurring results. The original analysis has been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) analyses for batch 80741 on these samples 068SB-0057M-0001-SO (240-22660-30).

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

TOTAL METALS (ICPMS)

Samples 079SB-0076M-0001-SO (240-22660-1), 079SB-0077M-0001-SO (240-22660-2), 079SB-0079M-0001-SO (240-22660-3), 079SB-0080M-0001-SO (240-22660-4), 079SB-0081M-0001-SO (240-22660-5), 079SB-0082M-0001,0002-SO (240-22660-6), 079SB-0083M-0001-SO (240-22660-7), 079SB-0084M-0001-SO (240-22660-8), 079SB-0085M-0001-SO (240-22660-9), 079SB-0086M-0001-SO (240-22660-10), 079SB-0087M-0001-SO (240-22660-11), 079SB-0088M-0001-SO (240-22660-12), 079SB-0089M-0001-SO (240-22660-13), 079SB-0090M-0001-SO (240-22660-14), 079SB-0091M-0001,0002-SO (240-22660-15), 079SB-0092M-0001-SO (240-22660-16), 079SB-0093M-0001-SO (240-22660-17), 079SB-0095M-0001-SO (240-22660-18), 079SB-0096-0001-SO (240-22660-19), 079SB-0107M-0001-SO (240-22660-20), 079SB-0108M-0001-SO (240-22660-21), 079SB-0110M-0001-SO (240-22660-22), 079SB-0111M-0001-SO (240-22660-23), 079SB-0112M-0001-SO (240-22660-24), 079SB-0113M-0001-SO (240-22660-25), 079SB-0114M-0001-SO (240-22660-26), 079SB-0116M-0001-SO (240-22660-27) and 079SB-0117M-0001-SO (240-22660-28) were analyzed for total metals (ICPMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 6020 DoD. Sample 079SB-0096-0001-SO (240-22660-19) did not go through the ISM process. The samples began the drying process on 04/11/2013 and 04/12/2013 and were analyzed on 04/30/2013 and 05/01/2013.

ICB, CCB, and ICSA samples are evaluated using the lowest LOD and DL criteria in LIMS. Using this criteria, an individual element may occasionally be flagged as out of control. If the element has a higher LOD or DL, the data is evaluated to the higher limit and determined to be acceptable.

Several analytes were detected in method blank MB 180-68898/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

Calcium was detected in method blank MB 180-68991/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

Aluminum and Iron failed the recovery criteria high for the MS of sample 079SB-0091M-0001,0002-SOMS (240-22660-15) in batch 180-70561.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

MERCURY WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SB-0076M-0001-SO (240-22660-1), 079SB-0077M-0001-SO (240-22660-2), 079SB-0079M-0001-SO (240-22660-3), 079SB-0080M-0001-SO (240-22660-4), 079SB-0081M-0001-SO (240-22660-5), 079SB-0082M-0001,0002-SO (240-22660-6), 079SB-0083M-0001-SO (240-22660-7), 079SB-0084M-0001-SO (240-22660-8), 079SB-0085M-0001-SO (240-22660-9), 079SB-0086M-0001-SO (240-22660-10), 079SB-0087M-0001-SO (240-22660-11), 079SB-0088M-0001-SO (240-22660-12), 079SB-0089M-0001-SO (240-22660-13), 079SB-0090M-0001-SO (240-22660-14), 079SB-0091M-0001,0002-SO (240-22660-15), 079SB-0092M-0001-SO (240-22660-16), 079SB-0093M-0001-SO (240-22660-17), 079SB-0095M-0001-SO (240-22660-18), 079SB-0107M-0001-SO (240-22660-20), 079SB-0108M-0001-SO (240-22660-21), 079SB-0110M-0001-SO (240-22660-22), 079SB-0111M-0001-SO (240-22660-23), 079SB-0112M-0001-SO (240-22660-24), 079SB-0113M-0001-SO (240-22660-25), 079SB-0114M-0001-SO (240-22660-26), 079SB-0116M-0001-SO (240-22660-27) and 079SB-0117M-0001-SO (240-22660-28) were analyzed for mercury with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance ISM, February 2012 and EPA SW-846 Method 7471A DOD. The samples began the drying process on 04/02/2013, were prepared on 04/10/2013, 04/11/2013 and 04/15/2013 and analyzed on 04/11/2013, 04/12/2013 and 04/16/2013.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

MERCURY

Sample 079SB-0096-0001-SO (240-22660-19) was analyzed for mercury in accordance with EPA SW-846 Method 7471A DOD. The samples were prepared on 04/11/2013 and analyzed on 04/12/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples 079SB-0076M-0001-SO (240-22660-1), 079SB-0077M-0001-SO (240-22660-2), 079SB-0079M-0001-SO (240-22660-3), 079SB-0080M-0001-SO (240-22660-4), 079SB-0081M-0001-SO (240-22660-5), 079SB-0082M-0001,0002-SO (240-22660-6), 079SB-0083M-0001-SO (240-22660-7), 079SB-0084M-0001-SO (240-22660-8), 079SB-0085M-0001-SO (240-22660-9), 079SB-0086M-0001-SO (240-22660-10), 079SB-0087M-0001-SO (240-22660-11), 079SB-0088M-0001-SO (240-22660-12), 079SB-0089M-0001-SO (240-22660-13), 079SB-0090M-0001-SO (240-22660-14), 079SB-0091M-0001,0002-SO (240-22660-15), 079SB-0092M-0001-SO (240-22660-16), 079SB-0093M-0001-SO (240-22660-17), 079SB-0095M-0001-SO (240-22660-18), 079SB-0096-0001-SO (240-22660-19), 079SB-0107M-0001-SO (240-22660-20), 079SB-0108M-0001-SO (240-22660-21), 079SB-0110M-0001-SO (240-22660-22), 079SB-0111M-0001-SO (240-22660-23), 079SB-0112M-0001-SO (240-22660-24), 079SB-0113M-0001-SO (240-22660-25), 079SB-0114M-0001-SO (240-22660-26), 079SB-0116M-0001-SO (240-22660-27), 079SB-0117M-0001-SO (240-22660-28) and 068SB-0057M-0001-SO (240-22660-30) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 04/08/2013.

No other difficulties were encountered during the % solids analyses. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-22660-1	079SB-0076M-0001-SO	Solid	03/22/2013 1637	04/02/2013 0854
240-22660-2	079SB-0077M-0001-SO	Solid	03/22/2013 1637	04/02/2013 0854
240-22660-3	079SB-0079M-0001-SO	Solid	03/22/2013 1642	04/02/2013 0854
240-22660-4	079SB-0080M-0001-SO	Solid	03/22/2013 1642	04/02/2013 0854
240-22660-5	079SB-0081M-0001-SO	Solid	03/22/2013 1550	04/02/2013 0854
240-22660-6	079SB-0082M-0001,0002-SO	Solid	03/22/2013 1559	04/02/2013 0854
240-22660-6MS	079SB-0082M-0001,0002-SO	Solid	03/22/2013 1559	04/02/2013 0854
240-22660-6DU	079SB-0082M-0001,0002-SO	Solid	03/22/2013 1559	04/02/2013 0854
240-22660-7	079SB-0083M-0001-SO	Solid	03/22/2013 1633	04/02/2013 0854
240-22660-8	079SB-0084M-0001-SO	Solid	03/22/2013 1645	04/02/2013 0854
240-22660-9	079SB-0085M-0001-SO	Solid	03/22/2013 1622	04/02/2013 0854
240-22660-10	079SB-0086M-0001-SO	Solid	03/23/2013 1400	04/02/2013 0854
240-22660-11	079SB-0087M-0001-SO	Solid	03/23/2013 1400	04/02/2013 0854
240-22660-12	079SB-0088M-0001-SO	Solid	03/23/2013 1409	04/02/2013 0854
240-22660-13	079SB-0089M-0001-SO	Solid	03/23/2013 1409	04/02/2013 0854
240-22660-14	079SB-0090M-0001-SO	Solid	03/23/2013 1334	04/02/2013 0854
240-22660-15	079SB-0091M-0001,0002-SO	Solid	03/23/2013 1319	04/02/2013 0854
240-22660-15MS	079SB-0091M-0001,0002-SO	Solid	03/23/2013 1319	04/02/2013 0854
240-22660-15DU	079SB-0091M-0001,0002-SO	Solid	03/23/2013 1319	04/02/2013 0854
240-22660-16	079SB-0092M-0001-SO	Solid	03/23/2013 1356	04/02/2013 0854
240-22660-17	079SB-0093M-0001-SO	Solid	03/23/2013 1406	04/02/2013 0854
240-22660-18	079SB-0095M-0001-SO	Solid	03/23/2013 1256	04/02/2013 0854
240-22660-19	079SB-0096-0001-SO	Solid	03/23/2013 1335	04/02/2013 0854
240-22660-20	079SB-0107M-0001-SO	Solid	03/23/2013 1120	04/02/2013 0854
240-22660-21	079SB-0108M-0001-SO	Solid	03/23/2013 1120	04/02/2013 0854
240-22660-22	079SB-0110M-0001-SO	Solid	03/23/2013 1137	04/02/2013 0854
240-22660-23	079SB-0111M-0001-SO	Solid	03/23/2013 1137	04/02/2013 0854
240-22660-24	079SB-0112M-0001-SO	Solid	03/23/2013 0856	04/02/2013 0854
240-22660-25	079SB-0113M-0001-SO	Solid	03/23/2013 0925	04/02/2013 0854
240-22660-26	079SB-0114M-0001-SO	Solid	03/23/2013 1031	04/02/2013 0854
240-22660-27	079SB-0116M-0001-SO	Solid	03/23/2013 1055	04/02/2013 0854
240-22660-28	079SB-0117M-0001-SO	Solid	03/23/2013 1116	04/02/2013 0854
240-22660-30	068SB-0057M-0001-SO	Solid	03/29/2013 1126	04/02/2013 0854

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-1	**079SB-0076M-0001-SO**					
Silver		0.026	J Q	0.098	mg/Kg	6020/DOD
Aluminum		8400		2.9	mg/Kg	6020/DOD
Arsenic		8.8		0.098	mg/Kg	6020/DOD
Barium		50	Q	0.98	mg/Kg	6020/DOD
Beryllium		0.41	Q	0.098	mg/Kg	6020/DOD
Calcium		730		9.8	mg/Kg	6020/DOD
Cadmium		0.11	Q	0.098	mg/Kg	6020/DOD
Chromium		12		0.20	mg/Kg	6020/DOD
Cobalt		7.3	Q	0.049	mg/Kg	6020/DOD
Copper		15	Q	0.20	mg/Kg	6020/DOD
Iron		20000		4.9	mg/Kg	6020/DOD
Magnesium		2000		9.8	mg/Kg	6020/DOD
Manganese		240	Q	0.49	mg/Kg	6020/DOD
Sodium		35		9.8	mg/Kg	6020/DOD
Nickel		15		0.098	mg/Kg	6020/DOD
Lead		12	Q	0.098	mg/Kg	6020/DOD
Antimony		1.6		0.20	mg/Kg	6020/DOD
Thallium		0.13	Q	0.098	mg/Kg	6020/DOD
Vanadium		15		0.098	mg/Kg	6020/DOD
Zinc		39	Q	0.49	mg/Kg	6020/DOD
Potassium		700		9.8	mg/Kg	6020/DOD
Selenium		0.31	J	0.49	mg/Kg	6020/DOD
Mercury		0.017	J	0.10	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		0.97	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-2	**079SB-0077M-0001-SO**					
Silver		0.027	J Q	0.10	mg/Kg	6020/DOD
Aluminum		8400		3.0	mg/Kg	6020/DOD
Arsenic		9.1		0.10	mg/Kg	6020/DOD
Barium		50	Q	1.0	mg/Kg	6020/DOD
Beryllium		0.42	Q	0.10	mg/Kg	6020/DOD
Calcium		730		10	mg/Kg	6020/DOD
Cadmium		0.11	Q	0.10	mg/Kg	6020/DOD
Chromium		11		0.20	mg/Kg	6020/DOD
Cobalt		7.9	Q	0.050	mg/Kg	6020/DOD
Copper		14	Q	0.20	mg/Kg	6020/DOD
Iron		20000		5.0	mg/Kg	6020/DOD
Magnesium		2000		10	mg/Kg	6020/DOD
Manganese		250	Q	0.50	mg/Kg	6020/DOD
Sodium		37		10	mg/Kg	6020/DOD
Nickel		16		0.10	mg/Kg	6020/DOD
Lead		12	Q	0.10	mg/Kg	6020/DOD
Antimony		0.49		0.20	mg/Kg	6020/DOD
Thallium		0.13	Q	0.10	mg/Kg	6020/DOD
Vanadium		15		0.10	mg/Kg	6020/DOD
Zinc		39	Q	0.50	mg/Kg	6020/DOD
Potassium		720		10	mg/Kg	6020/DOD
Selenium		0.25	J	0.50	mg/Kg	6020/DOD
Mercury		0.018	J	0.094	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		0.94	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-3	**079SB-0079M-0001-SO**					
Silver		0.025	J Q	0.10	mg/Kg	6020/DOD
Aluminum		7900		3.0	mg/Kg	6020/DOD
Arsenic		9.1		0.10	mg/Kg	6020/DOD
Barium		56	Q	1.0	mg/Kg	6020/DOD
Beryllium		0.51	Q	0.10	mg/Kg	6020/DOD
Calcium		910		10	mg/Kg	6020/DOD
Cadmium		0.15	Q	0.10	mg/Kg	6020/DOD
Chromium		14		0.20	mg/Kg	6020/DOD
Cobalt		12	Q	0.051	mg/Kg	6020/DOD
Copper		19	Q	0.20	mg/Kg	6020/DOD
Iron		23000		5.1	mg/Kg	6020/DOD
Magnesium		2800		10	mg/Kg	6020/DOD
Manganese		470	Q	0.51	mg/Kg	6020/DOD
Sodium		44		10	mg/Kg	6020/DOD
Nickel		27		0.10	mg/Kg	6020/DOD
Lead		13	Q	0.10	mg/Kg	6020/DOD
Antimony		0.56		0.20	mg/Kg	6020/DOD
Thallium		0.12	Q	0.10	mg/Kg	6020/DOD
Vanadium		13		0.10	mg/Kg	6020/DOD
Zinc		52	Q	0.51	mg/Kg	6020/DOD
Potassium		880		10	mg/Kg	6020/DOD
Selenium		0.29	J	0.51	mg/Kg	6020/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		0.76	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-4	**079SB-0080M-0001-SO**					
Silver		0.020	J Q	0.10	mg/Kg	6020/DOD
Aluminum		7400		3.0	mg/Kg	6020/DOD
Arsenic		10		0.10	mg/Kg	6020/DOD
Barium		42	Q	1.0	mg/Kg	6020/DOD
Beryllium		0.47	Q	0.10	mg/Kg	6020/DOD
Calcium		890		10	mg/Kg	6020/DOD
Cadmium		0.15	Q	0.10	mg/Kg	6020/DOD
Chromium		12		0.20	mg/Kg	6020/DOD
Cobalt		11	Q	0.051	mg/Kg	6020/DOD
Copper		19	Q	0.20	mg/Kg	6020/DOD
Iron		21000		5.1	mg/Kg	6020/DOD
Magnesium		2600		10	mg/Kg	6020/DOD
Manganese		400	Q	0.51	mg/Kg	6020/DOD
Sodium		42		10	mg/Kg	6020/DOD
Nickel		23		0.10	mg/Kg	6020/DOD
Lead		12	Q	0.10	mg/Kg	6020/DOD
Antimony		0.23		0.20	mg/Kg	6020/DOD
Thallium		0.11	Q	0.10	mg/Kg	6020/DOD
Vanadium		12		0.10	mg/Kg	6020/DOD
Zinc		53	Q	0.51	mg/Kg	6020/DOD
Potassium		820		10	mg/Kg	6020/DOD
Selenium		0.27	J	0.51	mg/Kg	6020/DOD
Percent Solids		98		0.10	%	Moisture
Percent Moisture		1.7	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-5	**079SB-0081M-0001-SO**					
Silver		0.023	J Q	0.10	mg/Kg	6020/DOD
Aluminum		9100		3.0	mg/Kg	6020/DOD
Arsenic		11		0.10	mg/Kg	6020/DOD
Barium		50	Q	1.0	mg/Kg	6020/DOD
Beryllium		0.50	Q	0.10	mg/Kg	6020/DOD
Calcium		1200		10	mg/Kg	6020/DOD
Cadmium		0.15	Q	0.10	mg/Kg	6020/DOD
Chromium		14		0.20	mg/Kg	6020/DOD
Cobalt		9.9	Q	0.051	mg/Kg	6020/DOD
Copper		18	Q	0.20	mg/Kg	6020/DOD
Iron		24000		5.1	mg/Kg	6020/DOD
Magnesium		3000		10	mg/Kg	6020/DOD
Manganese		290	Q	0.51	mg/Kg	6020/DOD
Sodium		43		10	mg/Kg	6020/DOD
Nickel		25		0.10	mg/Kg	6020/DOD
Lead		12	Q	0.10	mg/Kg	6020/DOD
Antimony		0.060	J	0.20	mg/Kg	6020/DOD
Thallium		0.13	Q	0.10	mg/Kg	6020/DOD
Vanadium		14		0.10	mg/Kg	6020/DOD
Zinc		57	Q	0.51	mg/Kg	6020/DOD
Potassium		960		10	mg/Kg	6020/DOD
Selenium		0.26	J	0.51	mg/Kg	6020/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		0.79	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-6	**079SB-0082M-0001,0002-SO**					
Silver		0.014	J Q	0.097	mg/Kg	6020/DOD
Aluminum		7100	J	2.9	mg/Kg	6020/DOD
Arsenic		9.0		0.097	mg/Kg	6020/DOD
Barium		24	Q	0.97	mg/Kg	6020/DOD
Beryllium		0.31	Q	0.097	mg/Kg	6020/DOD
Calcium		250		9.7	mg/Kg	6020/DOD
Cadmium		0.12	Q	0.097	mg/Kg	6020/DOD
Chromium		9.2		0.19	mg/Kg	6020/DOD
Cobalt		6.1	Q	0.049	mg/Kg	6020/DOD
Copper		17	Q	0.19	mg/Kg	6020/DOD
Iron		17000	J	4.9	mg/Kg	6020/DOD
Magnesium		1600		9.7	mg/Kg	6020/DOD
Manganese		220	Q	0.49	mg/Kg	6020/DOD
Sodium		26		9.7	mg/Kg	6020/DOD
Nickel		13		0.097	mg/Kg	6020/DOD
Lead		12	Q	0.097	mg/Kg	6020/DOD
Antimony		0.24	J	0.19	mg/Kg	6020/DOD
Thallium		0.10	Q	0.097	mg/Kg	6020/DOD
Vanadium		11		0.097	mg/Kg	6020/DOD
Zinc		45	Q	0.49	mg/Kg	6020/DOD
Potassium		610		9.7	mg/Kg	6020/DOD
Selenium		0.26	J	0.49	mg/Kg	6020/DOD
Mercury		0.016	J	0.11	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.0	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-7	**079SB-0083M-0001-SO**					
Silver		0.026	J Q	0.099	mg/Kg	6020/DOD
Aluminum		9200		3.0	mg/Kg	6020/DOD
Arsenic		7.5		0.099	mg/Kg	6020/DOD
Barium		66	Q	0.99	mg/Kg	6020/DOD
Beryllium		0.52	Q	0.099	mg/Kg	6020/DOD
Calcium		630		9.9	mg/Kg	6020/DOD
Cadmium		0.11	Q	0.099	mg/Kg	6020/DOD
Chromium		14		0.20	mg/Kg	6020/DOD
Cobalt		9.2	Q	0.050	mg/Kg	6020/DOD
Copper		14	Q	0.20	mg/Kg	6020/DOD
Iron		22000		5.0	mg/Kg	6020/DOD
Magnesium		2400		9.9	mg/Kg	6020/DOD
Manganese		340	Q	0.50	mg/Kg	6020/DOD
Sodium		49		9.9	mg/Kg	6020/DOD
Nickel		21		0.099	mg/Kg	6020/DOD
Lead		11	Q	0.099	mg/Kg	6020/DOD
Antimony		0.17	J	0.20	mg/Kg	6020/DOD
Thallium		0.13	Q	0.099	mg/Kg	6020/DOD
Vanadium		16		0.099	mg/Kg	6020/DOD
Zinc		42	Q	0.50	mg/Kg	6020/DOD
Potassium		730		9.9	mg/Kg	6020/DOD
Selenium		0.25	J	0.50	mg/Kg	6020/DOD
Mercury		0.019	J	0.097	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.5	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-8	**079SB-0084M-0001-SO**					
Silver		0.040	J Q	0.10	mg/Kg	6020/DOD
Aluminum		10000		3.0	mg/Kg	6020/DOD
Arsenic		8.4		0.10	mg/Kg	6020/DOD
Barium		75	Q	1.0	mg/Kg	6020/DOD
Beryllium		0.57	Q	0.10	mg/Kg	6020/DOD
Calcium		1300		10	mg/Kg	6020/DOD
Cadmium		0.16	Q	0.10	mg/Kg	6020/DOD
Chromium		16		0.20	mg/Kg	6020/DOD
Cobalt		11	Q	0.050	mg/Kg	6020/DOD
Copper		17	Q	0.20	mg/Kg	6020/DOD
Iron		24000		5.0	mg/Kg	6020/DOD
Magnesium		3100		10	mg/Kg	6020/DOD
Manganese		370	Q	0.50	mg/Kg	6020/DOD
Sodium		48		10	mg/Kg	6020/DOD
Nickel		26		0.10	mg/Kg	6020/DOD
Lead		13	Q	0.10	mg/Kg	6020/DOD
Antimony		0.15	J	0.20	mg/Kg	6020/DOD
Thallium		0.15	Q	0.10	mg/Kg	6020/DOD
Vanadium		17		0.10	mg/Kg	6020/DOD
Zinc		45	Q	0.50	mg/Kg	6020/DOD
Potassium		990		10	mg/Kg	6020/DOD
Selenium		0.33	J	0.50	mg/Kg	6020/DOD
Mercury		0.014	J	0.10	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.5	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-9	**079SB-0085M-0001-SO**					
Silver		0.023	J Q	0.097	mg/Kg	6020/DOD
Aluminum		8500		2.9	mg/Kg	6020/DOD
Arsenic		10		0.097	mg/Kg	6020/DOD
Barium		58	Q	0.97	mg/Kg	6020/DOD
Beryllium		0.47	Q	0.097	mg/Kg	6020/DOD
Calcium		820		9.7	mg/Kg	6020/DOD
Cadmium		0.12	Q	0.097	mg/Kg	6020/DOD
Chromium		12		0.19	mg/Kg	6020/DOD
Cobalt		9.6	Q	0.049	mg/Kg	6020/DOD
Copper		18	Q	0.19	mg/Kg	6020/DOD
Iron		22000		4.9	mg/Kg	6020/DOD
Magnesium		2600		9.7	mg/Kg	6020/DOD
Manganese		310	Q	0.49	mg/Kg	6020/DOD
Sodium		42		9.7	mg/Kg	6020/DOD
Nickel		21		0.097	mg/Kg	6020/DOD
Lead		14	Q	0.097	mg/Kg	6020/DOD
Antimony		1.7		0.19	mg/Kg	6020/DOD
Thallium		0.12	Q	0.097	mg/Kg	6020/DOD
Vanadium		15		0.097	mg/Kg	6020/DOD
Zinc		44	Q	0.49	mg/Kg	6020/DOD
Potassium		780		9.7	mg/Kg	6020/DOD
Selenium		0.29	J	0.49	mg/Kg	6020/DOD
Mercury		0.028	J	0.10	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.2	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-10	**079SB-0086M-0001-SO**					
Silver		0.021	J Q	0.10	mg/Kg	6020/DOD
Aluminum		8400		3.0	mg/Kg	6020/DOD
Arsenic		4.6		0.10	mg/Kg	6020/DOD
Barium		51	Q	1.0	mg/Kg	6020/DOD
Beryllium		0.47	Q	0.10	mg/Kg	6020/DOD
Calcium		1200		10	mg/Kg	6020/DOD
Cadmium		0.13	Q	0.10	mg/Kg	6020/DOD
Chromium		14		0.20	mg/Kg	6020/DOD
Cobalt		9.1	Q	0.050	mg/Kg	6020/DOD
Copper		12	Q	0.20	mg/Kg	6020/DOD
Iron		17000		5.0	mg/Kg	6020/DOD
Magnesium		2000		10	mg/Kg	6020/DOD
Manganese		310	Q	0.50	mg/Kg	6020/DOD
Sodium		39		10	mg/Kg	6020/DOD
Nickel		18		0.10	mg/Kg	6020/DOD
Lead		12	Q	0.10	mg/Kg	6020/DOD
Thallium		0.12	Q	0.10	mg/Kg	6020/DOD
Vanadium		15		0.10	mg/Kg	6020/DOD
Zinc		35	Q	0.50	mg/Kg	6020/DOD
Potassium		700		10	mg/Kg	6020/DOD
Selenium		0.33	J	0.50	mg/Kg	6020/DOD
Mercury		0.037	J	0.11	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.1	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-11	**079SB-0087M-0001-SO**					
Silver		0.023	J Q	0.098	mg/Kg	6020/DOD
Aluminum		8200		2.9	mg/Kg	6020/DOD
Arsenic		5.2		0.098	mg/Kg	6020/DOD
Barium		51	Q	0.98	mg/Kg	6020/DOD
Beryllium		0.48	Q	0.098	mg/Kg	6020/DOD
Calcium		700		9.8	mg/Kg	6020/DOD
Cadmium		0.12	Q	0.098	mg/Kg	6020/DOD
Chromium		15		0.20	mg/Kg	6020/DOD
Cobalt		8.9	Q	0.049	mg/Kg	6020/DOD
Copper		13	Q	0.20	mg/Kg	6020/DOD
Iron		19000		4.9	mg/Kg	6020/DOD
Magnesium		2000		9.8	mg/Kg	6020/DOD
Manganese		230	Q	0.49	mg/Kg	6020/DOD
Sodium		32		9.8	mg/Kg	6020/DOD
Nickel		19		0.098	mg/Kg	6020/DOD
Lead		13	Q	0.098	mg/Kg	6020/DOD
Thallium		0.12	Q	0.098	mg/Kg	6020/DOD
Vanadium		14		0.098	mg/Kg	6020/DOD
Zinc		36	Q	0.49	mg/Kg	6020/DOD
Potassium		740		9.8	mg/Kg	6020/DOD
Selenium		0.32	J	0.49	mg/Kg	6020/DOD
Mercury		0.031	J	0.091	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.2	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-12	**079SB-0088M-0001-SO**					
Silver		0.024	J Q	0.099	mg/Kg	6020/DOD
Aluminum		8700		3.0	mg/Kg	6020/DOD
Arsenic		7.4		0.099	mg/Kg	6020/DOD
Barium		63	Q	0.99	mg/Kg	6020/DOD
Beryllium		0.53	Q	0.099	mg/Kg	6020/DOD
Calcium		1600		9.9	mg/Kg	6020/DOD
Cadmium		0.15	Q	0.099	mg/Kg	6020/DOD
Chromium		15		0.20	mg/Kg	6020/DOD
Cobalt		10	Q	0.050	mg/Kg	6020/DOD
Copper		15	Q	0.20	mg/Kg	6020/DOD
Iron		23000		5.0	mg/Kg	6020/DOD
Magnesium		2500		9.9	mg/Kg	6020/DOD
Manganese		370	Q	0.50	mg/Kg	6020/DOD
Sodium		51		9.9	mg/Kg	6020/DOD
Nickel		22		0.099	mg/Kg	6020/DOD
Lead		12	Q	0.099	mg/Kg	6020/DOD
Thallium		0.12	Q	0.099	mg/Kg	6020/DOD
Vanadium		15		0.099	mg/Kg	6020/DOD
Zinc		44	Q	0.50	mg/Kg	6020/DOD
Potassium		740		9.9	mg/Kg	6020/DOD
Selenium		0.29	J	0.50	mg/Kg	6020/DOD
Mercury		0.030	J	0.098	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.3	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-13	**079SB-0089M-0001-SO**					
Silver		0.023	J Q	0.099	mg/Kg	6020/DOD
Aluminum		8500		3.0	mg/Kg	6020/DOD
Arsenic		7.5		0.099	mg/Kg	6020/DOD
Barium		78	Q	0.99	mg/Kg	6020/DOD
Beryllium		0.56	Q	0.099	mg/Kg	6020/DOD
Calcium		1700		9.9	mg/Kg	6020/DOD
Cadmium		0.17	Q	0.099	mg/Kg	6020/DOD
Chromium		15		0.20	mg/Kg	6020/DOD
Cobalt		13	Q	0.050	mg/Kg	6020/DOD
Copper		15	Q	0.20	mg/Kg	6020/DOD
Iron		23000		5.0	mg/Kg	6020/DOD
Magnesium		2500		9.9	mg/Kg	6020/DOD
Manganese		450	Q	0.50	mg/Kg	6020/DOD
Sodium		46		9.9	mg/Kg	6020/DOD
Nickel		23		0.099	mg/Kg	6020/DOD
Lead		12	Q	0.099	mg/Kg	6020/DOD
Thallium		0.12	Q	0.099	mg/Kg	6020/DOD
Vanadium		16		0.099	mg/Kg	6020/DOD
Zinc		45	Q	0.50	mg/Kg	6020/DOD
Potassium		740		9.9	mg/Kg	6020/DOD
Selenium		0.29	J	0.50	mg/Kg	6020/DOD
Mercury		0.031	J	0.11	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.2	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-14	**079SB-0090M-0001-SO**					
Silver		0.026	J Q	0.10	mg/Kg	6020/DOD
Aluminum		9300		3.0	mg/Kg	6020/DOD
Arsenic		6.9		0.10	mg/Kg	6020/DOD
Barium		63	Q	1.0	mg/Kg	6020/DOD
Beryllium		0.58	Q	0.10	mg/Kg	6020/DOD
Calcium		750		10	mg/Kg	6020/DOD
Cadmium		0.14	Q	0.10	mg/Kg	6020/DOD
Chromium		16		0.20	mg/Kg	6020/DOD
Cobalt		15	Q	0.050	mg/Kg	6020/DOD
Copper		16	Q	0.20	mg/Kg	6020/DOD
Iron		20000		5.0	mg/Kg	6020/DOD
Magnesium		2600		10	mg/Kg	6020/DOD
Manganese		300	Q	0.50	mg/Kg	6020/DOD
Sodium		62		10	mg/Kg	6020/DOD
Nickel		23		0.10	mg/Kg	6020/DOD
Lead		13	Q	0.10	mg/Kg	6020/DOD
Thallium		0.13	Q	0.10	mg/Kg	6020/DOD
Vanadium		16		0.10	mg/Kg	6020/DOD
Zinc		44	Q	0.50	mg/Kg	6020/DOD
Potassium		790		10	mg/Kg	6020/DOD
Selenium		0.30	J	0.50	mg/Kg	6020/DOD
Mercury		0.030	J	0.10	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.2	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-15	**079SB-0091M-0001,0002-SO**					
Silver		0.032	J Q	0.088	mg/Kg	6020/DOD
Aluminum		9100	J	2.6	mg/Kg	6020/DOD
Arsenic		6.1		0.088	mg/Kg	6020/DOD
Barium		60	Q	0.88	mg/Kg	6020/DOD
Beryllium		0.52	Q	0.088	mg/Kg	6020/DOD
Calcium		2400		8.8	mg/Kg	6020/DOD
Cadmium		0.11	Q	0.088	mg/Kg	6020/DOD
Chromium		16		0.18	mg/Kg	6020/DOD
Cobalt		13	Q	0.044	mg/Kg	6020/DOD
Copper		12	Q	0.18	mg/Kg	6020/DOD
Iron		21000	J	4.4	mg/Kg	6020/DOD
Magnesium		2100		8.8	mg/Kg	6020/DOD
Manganese		540	Q	0.44	mg/Kg	6020/DOD
Sodium		49		8.8	mg/Kg	6020/DOD
Nickel		18		0.088	mg/Kg	6020/DOD
Lead		15	Q	0.088	mg/Kg	6020/DOD
Thallium		0.13	Q	0.088	mg/Kg	6020/DOD
Vanadium		18		0.088	mg/Kg	6020/DOD
Zinc		38	Q	0.44	mg/Kg	6020/DOD
Potassium		750		8.8	mg/Kg	6020/DOD
Selenium		0.37	J	0.44	mg/Kg	6020/DOD
Mercury		0.036	J	0.11	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.2	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-16	**079SB-0092M-0001-SO**					
Silver		0.020	J Q	0.093	mg/Kg	6020/DOD
Aluminum		10000		2.8	mg/Kg	6020/DOD
Arsenic		7.7		0.093	mg/Kg	6020/DOD
Barium		79	Q	0.93	mg/Kg	6020/DOD
Beryllium		0.60	Q	0.093	mg/Kg	6020/DOD
Calcium		1400		9.3	mg/Kg	6020/DOD
Cadmium		0.13	Q	0.093	mg/Kg	6020/DOD
Chromium		17		0.19	mg/Kg	6020/DOD
Cobalt		12	Q	0.046	mg/Kg	6020/DOD
Copper		17	Q	0.19	mg/Kg	6020/DOD
Iron		23000		4.6	mg/Kg	6020/DOD
Magnesium		2900		9.3	mg/Kg	6020/DOD
Manganese		300	Q	0.46	mg/Kg	6020/DOD
Sodium		41		9.3	mg/Kg	6020/DOD
Nickel		25		0.093	mg/Kg	6020/DOD
Lead		13	Q	0.093	mg/Kg	6020/DOD
Thallium		0.14	Q	0.093	mg/Kg	6020/DOD
Vanadium		17		0.093	mg/Kg	6020/DOD
Zinc		45	Q	0.46	mg/Kg	6020/DOD
Potassium		900		9.3	mg/Kg	6020/DOD
Selenium		0.41	J	0.46	mg/Kg	6020/DOD
Mercury		0.032	J	0.11	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.2	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-17	**079SB-0093M-0001-SO**					
Silver		0.018	J Q	0.093	mg/Kg	6020/DOD
Aluminum		9500		2.8	mg/Kg	6020/DOD
Arsenic		7.8		0.093	mg/Kg	6020/DOD
Barium		62	Q	0.93	mg/Kg	6020/DOD
Beryllium		0.56	Q	0.093	mg/Kg	6020/DOD
Calcium		540		9.3	mg/Kg	6020/DOD
Cadmium		0.12	Q	0.093	mg/Kg	6020/DOD
Chromium		15		0.19	mg/Kg	6020/DOD
Cobalt		11	Q	0.046	mg/Kg	6020/DOD
Copper		17	Q	0.19	mg/Kg	6020/DOD
Iron		21000		4.6	mg/Kg	6020/DOD
Magnesium		2600		9.3	mg/Kg	6020/DOD
Manganese		260	Q	0.46	mg/Kg	6020/DOD
Sodium		42		9.3	mg/Kg	6020/DOD
Nickel		23		0.093	mg/Kg	6020/DOD
Lead		13	Q	0.093	mg/Kg	6020/DOD
Antimony		0.17	J	0.19	mg/Kg	6020/DOD
Thallium		0.14	Q	0.093	mg/Kg	6020/DOD
Vanadium		16		0.093	mg/Kg	6020/DOD
Zinc		40	Q	0.46	mg/Kg	6020/DOD
Potassium		880		9.3	mg/Kg	6020/DOD
Selenium		0.41	J	0.46	mg/Kg	6020/DOD
Mercury		0.027	J	0.10	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.2	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-18	**079SB-0095M-0001-SO**					
Silver		0.025	J Q	0.093	mg/Kg	6020/DOD
Aluminum		9200		2.8	mg/Kg	6020/DOD
Arsenic		6.5		0.093	mg/Kg	6020/DOD
Barium		69	Q	0.93	mg/Kg	6020/DOD
Beryllium		0.54	Q	0.093	mg/Kg	6020/DOD
Calcium		1300		9.3	mg/Kg	6020/DOD
Cadmium		0.19	Q	0.093	mg/Kg	6020/DOD
Chromium		15		0.19	mg/Kg	6020/DOD
Cobalt		9.5	Q	0.046	mg/Kg	6020/DOD
Copper		14	Q	0.19	mg/Kg	6020/DOD
Iron		20000		4.6	mg/Kg	6020/DOD
Magnesium		2200		9.3	mg/Kg	6020/DOD
Manganese		250	Q	0.46	mg/Kg	6020/DOD
Sodium		38		9.3	mg/Kg	6020/DOD
Nickel		21		0.093	mg/Kg	6020/DOD
Lead		13	Q	0.093	mg/Kg	6020/DOD
Antimony		0.068	J	0.19	mg/Kg	6020/DOD
Thallium		0.13	Q	0.093	mg/Kg	6020/DOD
Vanadium		16		0.093	mg/Kg	6020/DOD
Zinc		42	Q	0.46	mg/Kg	6020/DOD
Potassium		790		9.3	mg/Kg	6020/DOD
Selenium		0.39	J	0.46	mg/Kg	6020/DOD
Mercury		0.034	J	0.11	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.1	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-19	**079SB-0096-0001-SO**					
Silver		0.020	J Q	0.093	mg/Kg	6020/DOD
Aluminum		8400		2.8	mg/Kg	6020/DOD
Arsenic		5.0		0.093	mg/Kg	6020/DOD
Barium		44	Q	0.93	mg/Kg	6020/DOD
Beryllium		0.39	Q	0.093	mg/Kg	6020/DOD
Calcium		1200		9.3	mg/Kg	6020/DOD
Cadmium		0.11	Q	0.093	mg/Kg	6020/DOD
Chromium		17		0.19	mg/Kg	6020/DOD
Cobalt		6.0	Q	0.047	mg/Kg	6020/DOD
Copper		12	Q	0.19	mg/Kg	6020/DOD
Iron		16000		4.7	mg/Kg	6020/DOD
Magnesium		1800		9.3	mg/Kg	6020/DOD
Manganese		170	Q	0.47	mg/Kg	6020/DOD
Sodium		54		9.3	mg/Kg	6020/DOD
Nickel		16		0.093	mg/Kg	6020/DOD
Lead		12	Q	0.093	mg/Kg	6020/DOD
Antimony		0.044	J	0.19	mg/Kg	6020/DOD
Thallium		0.12	Q	0.093	mg/Kg	6020/DOD
Vanadium		16		0.093	mg/Kg	6020/DOD
Zinc		31	Q	0.47	mg/Kg	6020/DOD
Potassium		760		9.3	mg/Kg	6020/DOD
Selenium		0.31	J	0.47	mg/Kg	6020/DOD
Mercury		0.033	J	0.099	mg/Kg	7471/DOD
Percent Solids		87		0.10	%	Moisture
Percent Moisture		13	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-20	**079SB-0107M-0001-SO**					
Silver		0.025	J Q	0.093	mg/Kg	6020/DOD
Aluminum		10000		2.8	mg/Kg	6020/DOD
Arsenic		8.4		0.093	mg/Kg	6020/DOD
Barium		62	Q	0.93	mg/Kg	6020/DOD
Beryllium		0.53	Q	0.093	mg/Kg	6020/DOD
Calcium		630		9.3	mg/Kg	6020/DOD
Cadmium		0.13	Q	0.093	mg/Kg	6020/DOD
Chromium		15		0.19	mg/Kg	6020/DOD
Cobalt		11	Q	0.047	mg/Kg	6020/DOD
Copper		17	Q	0.19	mg/Kg	6020/DOD
Iron		25000		4.7	mg/Kg	6020/DOD
Magnesium		2500		9.3	mg/Kg	6020/DOD
Manganese		380	Q	0.47	mg/Kg	6020/DOD
Sodium		52		9.3	mg/Kg	6020/DOD
Nickel		22		0.093	mg/Kg	6020/DOD
Lead		13	Q	0.093	mg/Kg	6020/DOD
Antimony		0.051	J	0.19	mg/Kg	6020/DOD
Thallium		0.15	Q	0.093	mg/Kg	6020/DOD
Vanadium		17		0.093	mg/Kg	6020/DOD
Zinc		48	Q	0.47	mg/Kg	6020/DOD
Potassium		860		9.3	mg/Kg	6020/DOD
Selenium		0.35	J	0.47	mg/Kg	6020/DOD
Mercury		0.032	J	0.090	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.4	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-21	**079SB-0108M-0001-SO**					
Silver		0.028	J Q	0.095	mg/Kg	6020/DOD
Aluminum		11000		2.9	mg/Kg	6020/DOD
Arsenic		8.6		0.095	mg/Kg	6020/DOD
Barium		67	Q	0.95	mg/Kg	6020/DOD
Beryllium		0.57	Q	0.095	mg/Kg	6020/DOD
Calcium		660		9.5	mg/Kg	6020/DOD
Cadmium		0.14	Q	0.095	mg/Kg	6020/DOD
Chromium		16		0.19	mg/Kg	6020/DOD
Cobalt		12	Q	0.048	mg/Kg	6020/DOD
Copper		17	Q	0.19	mg/Kg	6020/DOD
Iron		25000		4.8	mg/Kg	6020/DOD
Magnesium		2600		9.5	mg/Kg	6020/DOD
Manganese		350	Q	0.48	mg/Kg	6020/DOD
Sodium		51		9.5	mg/Kg	6020/DOD
Nickel		22		0.095	mg/Kg	6020/DOD
Lead		13	Q	0.095	mg/Kg	6020/DOD
Antimony		0.046	J	0.19	mg/Kg	6020/DOD
Thallium		0.16	Q	0.095	mg/Kg	6020/DOD
Vanadium		19		0.095	mg/Kg	6020/DOD
Zinc		51	Q	0.48	mg/Kg	6020/DOD
Potassium		910		9.5	mg/Kg	6020/DOD
Selenium		0.35	J	0.48	mg/Kg	6020/DOD
Mercury		0.036	J	0.090	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.4	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-22	**079SB-0110M-0001-SO**					
Silver		0.034	J Q	0.083	mg/Kg	6020/DOD
Aluminum		9100		2.5	mg/Kg	6020/DOD
Arsenic		7.9		0.083	mg/Kg	6020/DOD
Barium		60	Q	0.83	mg/Kg	6020/DOD
Beryllium		0.63	Q	0.083	mg/Kg	6020/DOD
Calcium		980		8.3	mg/Kg	6020/DOD
Cadmium		0.20	Q	0.083	mg/Kg	6020/DOD
Chromium		20		0.17	mg/Kg	6020/DOD
Cobalt		12	Q	0.042	mg/Kg	6020/DOD
Copper		17	Q	0.17	mg/Kg	6020/DOD
Iron		25000		4.2	mg/Kg	6020/DOD
Magnesium		3000		8.3	mg/Kg	6020/DOD
Manganese		450	Q	0.42	mg/Kg	6020/DOD
Sodium		63		8.3	mg/Kg	6020/DOD
Nickel		31		0.083	mg/Kg	6020/DOD
Lead		14	Q	0.083	mg/Kg	6020/DOD
Antimony		0.051	J	0.17	mg/Kg	6020/DOD
Thallium		0.14	Q	0.083	mg/Kg	6020/DOD
Vanadium		15		0.083	mg/Kg	6020/DOD
Zinc		71	Q	0.42	mg/Kg	6020/DOD
Potassium		950		8.3	mg/Kg	6020/DOD
Selenium		0.36	J	0.42	mg/Kg	6020/DOD
Mercury		0.038	J	0.11	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.3	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-23	**079SB-0111M-0001-SO**					
Silver		0.026	J Q	0.093	mg/Kg	6020/DOD
Aluminum		7300		2.8	mg/Kg	6020/DOD
Arsenic		5.7		0.093	mg/Kg	6020/DOD
Barium		47	Q	0.93	mg/Kg	6020/DOD
Beryllium		0.50	Q	0.093	mg/Kg	6020/DOD
Calcium		450		9.3	mg/Kg	6020/DOD
Cadmium		0.14	Q	0.093	mg/Kg	6020/DOD
Chromium		17		0.19	mg/Kg	6020/DOD
Cobalt		15	Q	0.047	mg/Kg	6020/DOD
Copper		14	Q	0.19	mg/Kg	6020/DOD
Iron		22000		4.7	mg/Kg	6020/DOD
Magnesium		2100		9.3	mg/Kg	6020/DOD
Manganese		500	Q	0.47	mg/Kg	6020/DOD
Sodium		38		9.3	mg/Kg	6020/DOD
Nickel		31		0.093	mg/Kg	6020/DOD
Lead		11	Q	0.093	mg/Kg	6020/DOD
Antimony		0.045	J	0.19	mg/Kg	6020/DOD
Thallium		0.12	Q	0.093	mg/Kg	6020/DOD
Vanadium		13		0.093	mg/Kg	6020/DOD
Zinc		33	Q	0.47	mg/Kg	6020/DOD
Potassium		840		9.3	mg/Kg	6020/DOD
Selenium		0.30	J	0.47	mg/Kg	6020/DOD
Mercury		0.029	J	0.11	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.1	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-24	**079SB-0112M-0001-SO**					
Silver		0.032	J Q	0.086	mg/Kg	6020/DOD
Aluminum		12000		2.6	mg/Kg	6020/DOD
Arsenic		12		0.086	mg/Kg	6020/DOD
Barium		73	Q	0.86	mg/Kg	6020/DOD
Beryllium		0.60	Q	0.086	mg/Kg	6020/DOD
Calcium		1600		8.6	mg/Kg	6020/DOD
Cadmium		0.16	Q	0.086	mg/Kg	6020/DOD
Chromium		16		0.17	mg/Kg	6020/DOD
Cobalt		12	Q	0.043	mg/Kg	6020/DOD
Copper		20	Q	0.17	mg/Kg	6020/DOD
Iron		27000		4.3	mg/Kg	6020/DOD
Magnesium		3600		8.6	mg/Kg	6020/DOD
Manganese		330	Q	0.43	mg/Kg	6020/DOD
Sodium		73		8.6	mg/Kg	6020/DOD
Nickel		27		0.086	mg/Kg	6020/DOD
Lead		14	Q	0.086	mg/Kg	6020/DOD
Thallium		0.16	Q	0.086	mg/Kg	6020/DOD
Vanadium		18		0.086	mg/Kg	6020/DOD
Zinc		57	Q	0.43	mg/Kg	6020/DOD
Potassium		1100		8.6	mg/Kg	6020/DOD
Selenium		0.37	J	0.43	mg/Kg	6020/DOD
Mercury		0.023	J	0.11	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.3	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-25	**079SB-0113M-0001-SO**					
Silver		0.018	J Q	0.093	mg/Kg	6020/DOD
Aluminum		10000		2.8	mg/Kg	6020/DOD
Arsenic		12		0.093	mg/Kg	6020/DOD
Barium		71	Q	0.93	mg/Kg	6020/DOD
Beryllium		0.54	Q	0.093	mg/Kg	6020/DOD
Calcium		510		9.3	mg/Kg	6020/DOD
Cadmium		0.10	Q	0.093	mg/Kg	6020/DOD
Chromium		15		0.19	mg/Kg	6020/DOD
Cobalt		19	Q	0.046	mg/Kg	6020/DOD
Copper		19	Q	0.19	mg/Kg	6020/DOD
Iron		29000		4.6	mg/Kg	6020/DOD
Magnesium		2600		9.3	mg/Kg	6020/DOD
Manganese		870	Q	0.46	mg/Kg	6020/DOD
Sodium		47		9.3	mg/Kg	6020/DOD
Nickel		20		0.093	mg/Kg	6020/DOD
Lead		13	Q	0.093	mg/Kg	6020/DOD
Thallium		0.16	Q	0.093	mg/Kg	6020/DOD
Vanadium		17		0.093	mg/Kg	6020/DOD
Zinc		49	Q	0.46	mg/Kg	6020/DOD
Potassium		1000		9.3	mg/Kg	6020/DOD
Selenium		0.30	J	0.46	mg/Kg	6020/DOD
Mercury		0.029	J	0.11	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.3	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-26	**079SB-0114M-0001-SO**					
Silver		0.037	J Q	0.097	mg/Kg	6020/DOD
Aluminum		9100		2.9	mg/Kg	6020/DOD
Arsenic		9.4		0.097	mg/Kg	6020/DOD
Barium		61	Q	0.97	mg/Kg	6020/DOD
Beryllium		0.66	Q	0.097	mg/Kg	6020/DOD
Calcium		740		9.7	mg/Kg	6020/DOD
Cadmium		0.16	Q	0.097	mg/Kg	6020/DOD
Chromium		19		0.19	mg/Kg	6020/DOD
Cobalt		15	Q	0.049	mg/Kg	6020/DOD
Copper		16	Q	0.19	mg/Kg	6020/DOD
Iron		25000		4.9	mg/Kg	6020/DOD
Magnesium		2600		9.7	mg/Kg	6020/DOD
Manganese		850	Q	0.49	mg/Kg	6020/DOD
Sodium		49		9.7	mg/Kg	6020/DOD
Nickel		32		0.097	mg/Kg	6020/DOD
Lead		16	Q	0.097	mg/Kg	6020/DOD
Thallium		0.15	Q	0.097	mg/Kg	6020/DOD
Vanadium		17		0.097	mg/Kg	6020/DOD
Zinc		41	Q	0.49	mg/Kg	6020/DOD
Potassium		1000		9.7	mg/Kg	6020/DOD
Selenium		0.35	J	0.49	mg/Kg	6020/DOD
Mercury		0.044	J	0.091	mg/Kg	7471/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.2	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-27	**079SB-0116M-0001-SO**					
Silver		0.027	J Q	0.081	mg/Kg	6020/DOD
Aluminum		13000		2.4	mg/Kg	6020/DOD
Arsenic		7.8		0.081	mg/Kg	6020/DOD
Barium		81	Q	0.81	mg/Kg	6020/DOD
Beryllium		0.56	Q	0.081	mg/Kg	6020/DOD
Calcium		490		8.1	mg/Kg	6020/DOD
Cadmium		0.18	Q	0.081	mg/Kg	6020/DOD
Chromium		16		0.16	mg/Kg	6020/DOD
Cobalt		11	Q	0.040	mg/Kg	6020/DOD
Copper		17	Q	0.16	mg/Kg	6020/DOD
Iron		24000		4.0	mg/Kg	6020/DOD
Magnesium		2300		8.1	mg/Kg	6020/DOD
Manganese		210	Q	0.40	mg/Kg	6020/DOD
Sodium		37		8.1	mg/Kg	6020/DOD
Nickel		20		0.081	mg/Kg	6020/DOD
Lead		13	Q	0.081	mg/Kg	6020/DOD
Thallium		0.16	Q	0.081	mg/Kg	6020/DOD
Vanadium		20		0.081	mg/Kg	6020/DOD
Zinc		72	Q	0.40	mg/Kg	6020/DOD
Potassium		840		8.1	mg/Kg	6020/DOD
Selenium		0.41		0.40	mg/Kg	6020/DOD
Mercury		0.036	J	0.095	mg/Kg	7471/DOD
Percent Solids		98		0.10	%	Moisture
Percent Moisture		1.7	H	0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
240-22660-28	**079SB-0117M-0001-SO**					
Silver		0.034	J Q	0.087	mg/Kg	6020/DOD
Aluminum		8600		2.6	mg/Kg	6020/DOD
Arsenic		9.9		0.087	mg/Kg	6020/DOD
Barium		72	Q	0.87	mg/Kg	6020/DOD
Beryllium		0.63	Q	0.087	mg/Kg	6020/DOD
Calcium		930		8.7	mg/Kg	6020/DOD
Cadmium		0.19	Q	0.087	mg/Kg	6020/DOD
Chromium		19		0.17	mg/Kg	6020/DOD
Cobalt		13	Q	0.043	mg/Kg	6020/DOD
Copper		18	Q	0.17	mg/Kg	6020/DOD
Iron		27000		4.3	mg/Kg	6020/DOD
Magnesium		3100		8.7	mg/Kg	6020/DOD
Manganese		520	Q	0.43	mg/Kg	6020/DOD
Sodium		67		8.7	mg/Kg	6020/DOD
Nickel		35		0.087	mg/Kg	6020/DOD
Lead		13	Q	0.087	mg/Kg	6020/DOD
Thallium		0.14	Q	0.087	mg/Kg	6020/DOD
Vanadium		15		0.087	mg/Kg	6020/DOD
Zinc		70	Q	0.43	mg/Kg	6020/DOD
Potassium		1000		8.7	mg/Kg	6020/DOD
Selenium		0.38	J	0.43	mg/Kg	6020/DOD
Percent Solids		99		0.10	%	Moisture
Percent Moisture		1.2	H	0.10	%	Moisture
240-22660-30	**068SB-0057M-0001-SO**					
Methylene Chloride		1.6	J B	5.1	ug/Kg	8260B/DoD
Percent Solids		78		0.10	%	Moisture
Percent Moisture		22	H	0.10	%	Moisture

METHOD SUMMARY

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B/DoD	
Closed System Purge and Trap	TAL CAN		SW846 5035
Mercury (CVAA)	TAL CAN	SW846 7471/DOD	
Preparation, Mercury	TAL CAN		SW846 7471A
Mercury (CVAA)	TAL CAN	SW846 7471/DOD	
Incremental Sampling Method - Dry, Disaggregate, Split	TAL CAN		EPA Increment, Prep
Preparation, Mercury	TAL CAN		SW846 7471A
Percent Moisture	TAL CAN	EPA Moisture	
Metals (ICP/MS)	TAL PIT	SW846 6020/DOD	
Preparation, Metals	TAL PIT		SW846 3050B

Lab References:

TAL CAN = TestAmerica Canton

TAL PIT = TestAmerica Pittsburgh

Method References:

EPA = US Environmental Protection Agency

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

METHOD / ANALYST SUMMARY

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Method	Analyst	Analyst ID
SW846 8260B/DoD	Macenczak, Steven	SM
SW846 6020/DOD	Reinheimer, Bill	BR
SW846 7471/DOD	Heakin, David	DH
SW846 7471/DOD	Sutherland, Aaron	AS
EPA Moisture	Stiller, Jennifer	JS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **068SB-0057M-0001-SO**

Lab Sample ID: 240-22660-30 Date Sampled: 03/29/2013 1126
Client Matrix: Solid % Moisture: 22.1 Date Received: 04/02/2013 0854

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	240-80741	Instrument ID:	A3UX14
Prep Method:	5035	Prep Batch:	240-80275	Lab File ID:	141823.D
Dilution:	1.0			Initial Weight/Volume:	6.24 g
Analysis Date:	04/05/2013 2029			Final Weight/Volume:	5 mL
Prep Date:	03/29/2013 1934				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	DL	LOQ
Acetone		6.5	U	6.5	21
Benzene		0.51	U	0.24	5.1
Bromochloromethane		1.0	U	0.73	5.1
Bromodichloromethane		0.51	U	0.29	5.1
Bromoform		0.51	U	0.34	5.1
Bromomethane		1.0	U	0.56	5.1
2-Butanone (MEK)		2.1	U	1.4	21
Carbon disulfide		0.51	U	0.45	5.1
Carbon tetrachloride		0.51	U	0.38	5.1
Chlorobenzene		0.51	U	0.34	5.1
Chloroethane		1.0	U	0.88	5.1
Chloroform		0.51	U	0.30	5.1
Chloromethane		0.51	U	0.42	5.1
cis-1,3-Dichloropropene		0.51	U	0.35	5.1
Dibromochloromethane		1.0	U	0.57	5.1
1,2-Dibromoethane		1.0	U	0.51	5.1
1,1-Dichloroethane		0.51	U	0.37	5.1
1,2-Dichloroethane		0.51	U	0.35	5.1
1,1-Dichloroethene		1.0	U	0.53	5.1
1,2-Dichloroethene, Total		1.0	U	0.79	10
1,2-Dichloropropane		1.0	U	0.71	5.1
Ethylbenzene		0.51	U	0.27	5.1
2-Hexanone		1.0	U	0.65	21
Methylene Chloride		1.6	J B	0.69	5.1
4-Methyl-2-pentanone (MIBK)		1.0	U	0.56	21
Styrene		0.51	U	0.15	5.1
1,1,2,2-Tetrachloroethane		0.51	U	0.35	5.1
Tetrachloroethene		1.0	U	0.53	5.1
Toluene		0.51	U	0.28	5.1
trans-1,3-Dichloropropene		1.0	U	0.56	5.1
1,1,1-Trichloroethane		1.0	U	0.58	5.1
1,1,2-Trichloroethane		0.51	U	0.40	5.1
Trichloroethene		0.51	U	0.43	5.1
Vinyl chloride		0.51	U	0.40	5.1
Xylenes, Total		1.5	U	0.69	10

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene (Surr)	67	Q	85 - 120
Dibromofluoromethane (Surr)	75		59 - 138
1,2-Dichloroethane-d4 (Surr)	91		61 - 130
Toluene-d8 (Surr)	76	Q	85 - 115

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0076M-0001-SO**

Lab Sample ID: 240-22660-1 Date Sampled: 03/22/2013 1637
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.02 g
Analysis Date:	04/30/2013 2244			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.026	J Q	0.011	0.098
Aluminum		8400		0.28	2.9
Arsenic		8.8		0.018	0.098
Barium		50	Q	0.010	0.98
Beryllium		0.41	Q	0.0074	0.098
Calcium		730		1.3	9.8
Cadmium		0.11	Q	0.013	0.098
Chromium		12		0.022	0.20
Cobalt		7.3	Q	0.0024	0.049
Copper		15	Q	0.032	0.20
Iron		20000		1.1	4.9
Magnesium		2000		1.1	9.8
Manganese		240	Q	0.016	0.49
Sodium		35		2.6	9.8
Nickel		15		0.011	0.098
Lead		12	Q	0.015	0.098
Antimony		1.6		0.045	0.20
Thallium		0.13	Q	0.010	0.098
Vanadium		15		0.029	0.098
Zinc		39	Q	0.064	0.49
Potassium		700		3.1	9.8
Selenium		0.31	J	0.050	0.49

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81523	Instrument ID:	H1
Prep Method:	7471A	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.60 g
Analysis Date:	04/11/2013 1115			Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.017	J	0.014	0.10

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0077M-0001-SO**

Lab Sample ID: 240-22660-2 Date Sampled: 03/22/2013 1637
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.00 g
Analysis Date:	04/30/2013 2309			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.027	J Q	0.011	0.10
Aluminum		8400		0.28	3.0
Arsenic		9.1		0.018	0.10
Barium		50	Q	0.011	1.0
Beryllium		0.42	Q	0.0075	0.10
Calcium		730		1.3	10
Cadmium		0.11	Q	0.013	0.10
Chromium		11		0.022	0.20
Cobalt		7.9	Q	0.0024	0.050
Copper		14	Q	0.033	0.20
Iron		20000		1.1	5.0
Magnesium		2000		1.1	10
Manganese		250	Q	0.016	0.50
Sodium		37		2.7	10
Nickel		16		0.011	0.10
Lead		12	Q	0.015	0.10
Antimony		0.49		0.046	0.20
Thallium		0.13	Q	0.010	0.10
Vanadium		15		0.030	0.10
Zinc		39	Q	0.065	0.50
Potassium		720		3.2	10
Selenium		0.25	J	0.051	0.50

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81523	Instrument ID:	H1
Prep Method:	7471A	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.64 g
Analysis Date:	04/11/2013 1117			Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.018	J	0.013	0.094

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0079M-0001-SO**

Lab Sample ID: 240-22660-3 Date Sampled: 03/22/2013 1642
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00000.99 g
Analysis Date:	04/30/2013 2317			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.025	J Q	0.012	0.10
Aluminum		7900		0.29	3.0
Arsenic		9.1		0.018	0.10
Barium		56	Q	0.011	1.0
Beryllium		0.51	Q	0.0076	0.10
Calcium		910		1.3	10
Cadmium		0.15	Q	0.013	0.10
Chromium		14		0.023	0.20
Cobalt		12	Q	0.0024	0.051
Copper		19	Q	0.033	0.20
Iron		23000		1.1	5.1
Magnesium		2800		1.1	10
Manganese		470	Q	0.016	0.51
Sodium		44		2.7	10
Nickel		27		0.011	0.10
Lead		13	Q	0.016	0.10
Antimony		0.56		0.046	0.20
Thallium		0.12	Q	0.010	0.10
Vanadium		13		0.030	0.10
Zinc		52	Q	0.065	0.51
Potassium		880		3.2	10
Selenium		0.29	J	0.051	0.51

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81523	Instrument ID:	H1
Prep Method:	7471A	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.59 g
Analysis Date:	04/11/2013 1118			Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.034	U	0.014	0.10

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0080M-0001-SO**

Lab Sample ID: 240-22660-4 Date Sampled: 03/22/2013 1642
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00000.99 g
Analysis Date:	04/30/2013 2325			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.020	J Q	0.012	0.10
Aluminum		7400		0.29	3.0
Arsenic		10		0.018	0.10
Barium		42	Q	0.011	1.0
Beryllium		0.47	Q	0.0076	0.10
Calcium		890		1.3	10
Cadmium		0.15	Q	0.013	0.10
Chromium		12		0.023	0.20
Cobalt		11	Q	0.0024	0.051
Copper		19	Q	0.033	0.20
Iron		21000		1.1	5.1
Magnesium		2600		1.1	10
Manganese		400	Q	0.016	0.51
Sodium		42		2.7	10
Nickel		23		0.011	0.10
Lead		12	Q	0.016	0.10
Antimony		0.23		0.046	0.20
Thallium		0.11	Q	0.010	0.10
Vanadium		12		0.030	0.10
Zinc		53	Q	0.065	0.51
Potassium		820		3.2	10
Selenium		0.27	J	0.051	0.51

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81523	Instrument ID:	H1
Prep Method:	7471A	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.64 g
Analysis Date:	04/11/2013 1120			Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.031	U	0.013	0.094

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0081M-0001-SO**

Lab Sample ID: 240-22660-5 Date Sampled: 03/22/2013 1550
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00000.99 g
Analysis Date:	04/30/2013 2334			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.023	J Q	0.012	0.10
Aluminum		9100		0.29	3.0
Arsenic		11		0.018	0.10
Barium		50	Q	0.011	1.0
Beryllium		0.50	Q	0.0076	0.10
Calcium		1200		1.3	10
Cadmium		0.15	Q	0.013	0.10
Chromium		14		0.023	0.20
Cobalt		9.9	Q	0.0024	0.051
Copper		18	Q	0.033	0.20
Iron		24000		1.1	5.1
Magnesium		3000		1.1	10
Manganese		290	Q	0.016	0.51
Sodium		43		2.7	10
Nickel		25		0.011	0.10
Lead		12	Q	0.016	0.10
Antimony		0.060	J	0.046	0.20
Thallium		0.13	Q	0.010	0.10
Vanadium		14		0.030	0.10
Zinc		57	Q	0.065	0.51
Potassium		960		3.2	10
Selenium		0.26	J	0.051	0.51

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81523	Instrument ID:	H1
Prep Method:	7471A	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.64 g
Analysis Date:	04/11/2013 1121			Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.031	U	0.013	0.094

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0082M-0001,0002-SO**

Lab Sample ID: 240-22660-6 Date Sampled: 03/22/2013 1559
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.03 g
Analysis Date:	04/30/2013 2342			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.014	J Q	0.011	0.097
Aluminum		7100	J	0.28	2.9
Arsenic		9.0		0.018	0.097
Barium		24	Q	0.010	0.97
Beryllium		0.31	Q	0.0073	0.097
Calcium		250		1.3	9.7
Cadmium		0.12	Q	0.013	0.097
Chromium		9.2		0.022	0.19
Cobalt		6.1	Q	0.0023	0.049
Copper		17	Q	0.032	0.19
Iron		17000	J	1.0	4.9
Magnesium		1600		1.0	9.7
Manganese		220	Q	0.015	0.49
Sodium		26		2.6	9.7
Nickel		13		0.011	0.097
Lead		12	Q	0.015	0.097
Antimony		0.24	J	0.045	0.19
Thallium		0.10	Q	0.0099	0.097
Vanadium		11		0.029	0.097
Zinc		45	Q	0.063	0.49
Potassium		610		3.1	9.7
Selenium		0.26	J	0.049	0.49

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81523	Instrument ID:	H1
Prep Method:	7471A	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.54 g
Analysis Date:	04/11/2013 1111			Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.016	J	0.016	0.11

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0083M-0001-SO**

Lab Sample ID: 240-22660-7 Date Sampled: 03/22/2013 1633
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.01 g
Analysis Date:	05/01/2013 0023			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.026	J Q	0.011	0.099
Aluminum		9200		0.28	3.0
Arsenic		7.5		0.018	0.099
Barium		66	Q	0.011	0.99
Beryllium		0.52	Q	0.0074	0.099
Calcium		630		1.3	9.9
Cadmium		0.11	Q	0.013	0.099
Chromium		14		0.022	0.20
Cobalt		9.2	Q	0.0024	0.050
Copper		14	Q	0.033	0.20
Iron		22000		1.1	5.0
Magnesium		2400		1.1	9.9
Manganese		340	Q	0.016	0.50
Sodium		49		2.6	9.9
Nickel		21		0.011	0.099
Lead		11	Q	0.015	0.099
Antimony		0.17	J	0.045	0.20
Thallium		0.13	Q	0.010	0.099
Vanadium		16		0.030	0.099
Zinc		42	Q	0.064	0.50
Potassium		730		3.1	9.9
Selenium		0.25	J	0.050	0.50

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81523	Instrument ID:	H1
Prep Method:	7471A	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.62 g
Analysis Date:	04/11/2013 1122			Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.019	J	0.014	0.097

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0084M-0001-SO**

Lab Sample ID: 240-22660-8 Date Sampled: 03/22/2013 1645
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.00 g
Analysis Date:	05/01/2013 0047			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.040	J Q	0.011	0.10
Aluminum		10000		0.28	3.0
Arsenic		8.4		0.018	0.10
Barium		75	Q	0.011	1.0
Beryllium		0.57	Q	0.0075	0.10
Calcium		1300		1.3	10
Cadmium		0.16	Q	0.013	0.10
Chromium		16		0.022	0.20
Cobalt		11	Q	0.0024	0.050
Copper		17	Q	0.033	0.20
Iron		24000		1.1	5.0
Magnesium		3100		1.1	10
Manganese		370	Q	0.016	0.50
Sodium		48		2.7	10
Nickel		26		0.011	0.10
Lead		13	Q	0.015	0.10
Antimony		0.15	J	0.046	0.20
Thallium		0.15	Q	0.010	0.10
Vanadium		17		0.030	0.10
Zinc		45	Q	0.065	0.50
Potassium		990		3.2	10
Selenium		0.33	J	0.051	0.50

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81523	Instrument ID:	H1
Prep Method:	7471A	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.58 g
Analysis Date:	04/11/2013 1127			Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.014	J	0.014	0.10

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0085M-0001-SO**

Lab Sample ID: 240-22660-9 Date Sampled: 03/22/2013 1622
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.03 g
Analysis Date:	05/01/2013 0056			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.023	J Q	0.011	0.097
Aluminum		8500		0.28	2.9
Arsenic		10		0.018	0.097
Barium		58	Q	0.010	0.97
Beryllium		0.47	Q	0.0073	0.097
Calcium		820		1.3	9.7
Cadmium		0.12	Q	0.013	0.097
Chromium		12		0.022	0.19
Cobalt		9.6	Q	0.0023	0.049
Copper		18	Q	0.032	0.19
Iron		22000		1.0	4.9
Magnesium		2600		1.0	9.7
Manganese		310	Q	0.015	0.49
Sodium		42		2.6	9.7
Nickel		21		0.011	0.097
Lead		14	Q	0.015	0.097
Antimony		1.7		0.045	0.19
Thallium		0.12	Q	0.0099	0.097
Vanadium		15		0.029	0.097
Zinc		44	Q	0.063	0.49
Potassium		780		3.1	9.7
Selenium		0.29	J	0.049	0.49

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.60 g
Analysis Date:	04/12/2013 1230			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.028	J	0.014	0.10

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0086M-0001-SO**

Lab Sample ID: 240-22660-10 Date Sampled: 03/23/2013 1400
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.00 g
Analysis Date:	05/01/2013 0104			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.021	J Q	0.011	0.10
Aluminum		8400		0.28	3.0
Arsenic		4.6		0.018	0.10
Barium		51	Q	0.011	1.0
Beryllium		0.47	Q	0.0075	0.10
Calcium		1200		1.3	10
Cadmium		0.13	Q	0.013	0.10
Chromium		14		0.022	0.20
Cobalt		9.1	Q	0.0024	0.050
Copper		12	Q	0.033	0.20
Iron		17000		1.1	5.0
Magnesium		2000		1.1	10
Manganese		310	Q	0.016	0.50
Sodium		39		2.7	10
Nickel		18		0.011	0.10
Lead		12	Q	0.015	0.10
Antimony		0.10	U	0.046	0.20
Thallium		0.12	Q	0.010	0.10
Vanadium		15		0.030	0.10
Zinc		35	Q	0.065	0.50
Potassium		700		3.2	10
Selenium		0.33	J	0.051	0.50

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.54 g
Analysis Date:	04/12/2013 1215			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.037	J	0.016	0.11

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0087M-0001-SO**

Lab Sample ID: 240-22660-11 Date Sampled: 03/23/2013 1400
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.02 g
Analysis Date:	05/01/2013 0112			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.023	J Q	0.011	0.098
Aluminum		8200		0.28	2.9
Arsenic		5.2		0.018	0.098
Barium		51	Q	0.010	0.98
Beryllium		0.48	Q	0.0074	0.098
Calcium		700		1.3	9.8
Cadmium		0.12	Q	0.013	0.098
Chromium		15		0.022	0.20
Cobalt		8.9	Q	0.0024	0.049
Copper		13	Q	0.032	0.20
Iron		19000		1.1	4.9
Magnesium		2000		1.1	9.8
Manganese		230	Q	0.016	0.49
Sodium		32		2.6	9.8
Nickel		19		0.011	0.098
Lead		13	Q	0.015	0.098
Antimony		0.098	U	0.045	0.20
Thallium		0.12	Q	0.010	0.098
Vanadium		14		0.029	0.098
Zinc		36	Q	0.064	0.49
Potassium		740		3.1	9.8
Selenium		0.32	J	0.050	0.49

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.66 g
Analysis Date:	04/12/2013 1238			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.031	J	0.013	0.091

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0088M-0001-SO**

Lab Sample ID: 240-22660-12 Date Sampled: 03/23/2013 1409
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.01 g
Analysis Date:	05/01/2013 0120			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.024	J Q	0.011	0.099
Aluminum		8700		0.28	3.0
Arsenic		7.4		0.018	0.099
Barium		63	Q	0.011	0.99
Beryllium		0.53	Q	0.0074	0.099
Calcium		1600		1.3	9.9
Cadmium		0.15	Q	0.013	0.099
Chromium		15		0.022	0.20
Cobalt		10	Q	0.0024	0.050
Copper		15	Q	0.033	0.20
Iron		23000		1.1	5.0
Magnesium		2500		1.1	9.9
Manganese		370	Q	0.016	0.50
Sodium		51		2.6	9.9
Nickel		22		0.011	0.099
Lead		12	Q	0.015	0.099
Antimony		0.099	U	0.045	0.20
Thallium		0.12	Q	0.010	0.099
Vanadium		15		0.030	0.099
Zinc		44	Q	0.064	0.50
Potassium		740		3.1	9.9
Selenium		0.29	J	0.050	0.50

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.61 g
Analysis Date:	04/12/2013 1216			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.030	J	0.014	0.098

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0089M-0001-SO**

Lab Sample ID: 240-22660-13 Date Sampled: 03/23/2013 1409
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.01 g
Analysis Date:	05/01/2013 0128			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.023	J Q	0.011	0.099
Aluminum		8500		0.28	3.0
Arsenic		7.5		0.018	0.099
Barium		78	Q	0.011	0.99
Beryllium		0.56	Q	0.0074	0.099
Calcium		1700		1.3	9.9
Cadmium		0.17	Q	0.013	0.099
Chromium		15		0.022	0.20
Cobalt		13	Q	0.0024	0.050
Copper		15	Q	0.033	0.20
Iron		23000		1.1	5.0
Magnesium		2500		1.1	9.9
Manganese		450	Q	0.016	0.50
Sodium		46		2.6	9.9
Nickel		23		0.011	0.099
Lead		12	Q	0.015	0.099
Antimony		0.099	U	0.045	0.20
Thallium		0.12	Q	0.010	0.099
Vanadium		16		0.030	0.099
Zinc		45	Q	0.064	0.50
Potassium		740		3.1	9.9
Selenium		0.29	J	0.050	0.50

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.57 g
Analysis Date:	04/12/2013 1248			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.031	J	0.015	0.11

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0090M-0001-SO**

Lab Sample ID: 240-22660-14 Date Sampled: 03/23/2013 1334
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.00 g
Analysis Date:	05/01/2013 0137			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.026	J Q	0.011	0.10
Aluminum		9300		0.28	3.0
Arsenic		6.9		0.018	0.10
Barium		63	Q	0.011	1.0
Beryllium		0.58	Q	0.0075	0.10
Calcium		750		1.3	10
Cadmium		0.14	Q	0.013	0.10
Chromium		16		0.022	0.20
Cobalt		15	Q	0.0024	0.050
Copper		16	Q	0.033	0.20
Iron		20000		1.1	5.0
Magnesium		2600		1.1	10
Manganese		300	Q	0.016	0.50
Sodium		62		2.7	10
Nickel		23		0.011	0.10
Lead		13	Q	0.015	0.10
Antimony		0.10	U	0.046	0.20
Thallium		0.13	Q	0.010	0.10
Vanadium		16		0.030	0.10
Zinc		44	Q	0.065	0.50
Potassium		790		3.2	10
Selenium		0.30	J	0.051	0.50

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.58 g
Analysis Date:	04/12/2013 1232			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.030	J	0.014	0.10

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0091M-0001,0002-SO**

Lab Sample ID: 240-22660-15 Date Sampled: 03/23/2013 1319
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.14 g
Analysis Date:	05/01/2013 0226			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.032	J Q	0.010	0.088
Aluminum		9100	J	0.25	2.6
Arsenic		6.1		0.016	0.088
Barium		60	Q	0.0094	0.88
Beryllium		0.52	Q	0.0066	0.088
Calcium		2400		1.2	8.8
Cadmium		0.11	Q	0.012	0.088
Chromium		16		0.020	0.18
Cobalt		13	Q	0.0021	0.044
Copper		12	Q	0.029	0.18
Iron		21000	J	0.94	4.4
Magnesium		2100		0.95	8.8
Manganese		540	Q	0.014	0.44
Sodium		49		2.3	8.8
Nickel		18		0.0099	0.088
Lead		15	Q	0.014	0.088
Antimony		0.088	U J	0.040	0.18
Thallium		0.13	Q	0.0089	0.088
Vanadium		18		0.026	0.088
Zinc		38	Q	0.057	0.44
Potassium		750		2.8	8.8
Selenium		0.37	J	0.045	0.44

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.56 g
Analysis Date:	04/12/2013 1157			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.036	J	0.015	0.11

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0092M-0001-SO**

Lab Sample ID: 240-22660-16 Date Sampled: 03/23/2013 1356
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.08 g
Analysis Date:	05/01/2013 0201			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.020	J Q	0.011	0.093
Aluminum		10000		0.26	2.8
Arsenic		7.7		0.017	0.093
Barium		79	Q	0.0099	0.93
Beryllium		0.60	Q	0.0069	0.093
Calcium		1400		1.2	9.3
Cadmium		0.13	Q	0.012	0.093
Chromium		17		0.021	0.19
Cobalt		12	Q	0.0022	0.046
Copper		17	Q	0.031	0.19
Iron		23000		1.0	4.6
Magnesium		2900		1.0	9.3
Manganese		300	Q	0.015	0.46
Sodium		41		2.5	9.3
Nickel		25		0.010	0.093
Lead		13	Q	0.014	0.093
Antimony		0.093	U	0.043	0.19
Thallium		0.14	Q	0.0094	0.093
Vanadium		17		0.028	0.093
Zinc		45	Q	0.060	0.46
Potassium		900		2.9	9.3
Selenium		0.41	J	0.047	0.46

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.56 g
Analysis Date:	04/12/2013 1235			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.032	J	0.015	0.11

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0093M-0001-SO**

Lab Sample ID: 240-22660-17 Date Sampled: 03/23/2013 1406
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.08 g
Analysis Date:	05/01/2013 0307			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.018	J Q	0.011	0.093
Aluminum		9500		0.26	2.8
Arsenic		7.8		0.017	0.093
Barium		62	Q	0.0099	0.93
Beryllium		0.56	Q	0.0069	0.093
Calcium		540		1.2	9.3
Cadmium		0.12	Q	0.012	0.093
Chromium		15		0.021	0.19
Cobalt		11	Q	0.0022	0.046
Copper		17	Q	0.031	0.19
Iron		21000		1.0	4.6
Magnesium		2600		1.0	9.3
Manganese		260	Q	0.015	0.46
Sodium		42		2.5	9.3
Nickel		23		0.010	0.093
Lead		13	Q	0.014	0.093
Antimony		0.17	J	0.043	0.19
Thallium		0.14	Q	0.0094	0.093
Vanadium		16		0.028	0.093
Zinc		40	Q	0.060	0.46
Potassium		880		2.9	9.3
Selenium		0.41	J	0.047	0.46

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.60 g
Analysis Date:	04/12/2013 1212			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.027	J	0.014	0.10

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0095M-0001-SO**

Lab Sample ID: 240-22660-18 Date Sampled: 03/23/2013 1256
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.08 g
Analysis Date:	05/01/2013 0315			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.025	J Q	0.011	0.093
Aluminum		9200		0.26	2.8
Arsenic		6.5		0.017	0.093
Barium		69	Q	0.0099	0.93
Beryllium		0.54	Q	0.0069	0.093
Calcium		1300		1.2	9.3
Cadmium		0.19	Q	0.012	0.093
Chromium		15		0.021	0.19
Cobalt		9.5	Q	0.0022	0.046
Copper		14	Q	0.031	0.19
Iron		20000		1.0	4.6
Magnesium		2200		1.0	9.3
Manganese		250	Q	0.015	0.46
Sodium		38		2.5	9.3
Nickel		21		0.010	0.093
Lead		13	Q	0.014	0.093
Antimony		0.068	J	0.043	0.19
Thallium		0.13	Q	0.0094	0.093
Vanadium		16		0.028	0.093
Zinc		42	Q	0.060	0.46
Potassium		790		2.9	9.3
Selenium		0.39	J	0.047	0.46

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.57 g
Analysis Date:	04/12/2013 1218			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.034	J	0.015	0.11

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0096-0001-SO**

Lab Sample ID: 240-22660-19 Date Sampled: 03/23/2013 1335
Client Matrix: Solid % Moisture: 13.5 Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.24 g
Analysis Date:	05/01/2013 0323			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.020	J Q	0.011	0.093
Aluminum		8400		0.27	2.8
Arsenic		5.0		0.017	0.093
Barium		44	Q	0.010	0.93
Beryllium		0.39	Q	0.0070	0.093
Calcium		1200		1.2	9.3
Cadmium		0.11	Q	0.012	0.093
Chromium		17		0.021	0.19
Cobalt		6.0	Q	0.0022	0.047
Copper		12	Q	0.031	0.19
Iron		16000		1.0	4.7
Magnesium		1800		1.0	9.3
Manganese		170	Q	0.015	0.47
Sodium		54		2.5	9.3
Nickel		16		0.011	0.093
Lead		12	Q	0.014	0.093
Antimony		0.044	J	0.043	0.19
Thallium		0.12	Q	0.0095	0.093
Vanadium		16		0.028	0.093
Zinc		31	Q	0.060	0.47
Potassium		760		2.9	9.3
Selenium		0.31	J	0.047	0.47

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0			Initial Weight/Volume:	0.70 g
Analysis Date:	04/12/2013 1246			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.033	J	0.014	0.099

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0107M-0001-SO**

Lab Sample ID: 240-22660-20 Date Sampled: 03/23/2013 1120
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.07 g
Analysis Date:	05/01/2013 0332			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.025	J Q	0.011	0.093
Aluminum		10000		0.27	2.8
Arsenic		8.4		0.017	0.093
Barium		62	Q	0.010	0.93
Beryllium		0.53	Q	0.0070	0.093
Calcium		630		1.2	9.3
Cadmium		0.13	Q	0.012	0.093
Chromium		15		0.021	0.19
Cobalt		11	Q	0.0022	0.047
Copper		17	Q	0.031	0.19
Iron		25000		1.0	4.7
Magnesium		2500		1.0	9.3
Manganese		380	Q	0.015	0.47
Sodium		52		2.5	9.3
Nickel		22		0.011	0.093
Lead		13	Q	0.014	0.093
Antimony		0.051	J	0.043	0.19
Thallium		0.15	Q	0.0095	0.093
Vanadium		17		0.028	0.093
Zinc		48	Q	0.061	0.47
Potassium		860		2.9	9.3
Selenium		0.35	J	0.048	0.47

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.67 g
Analysis Date:	04/12/2013 1207			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.032	J	0.013	0.090

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0108M-0001-SO**

Lab Sample ID: 240-22660-21 Date Sampled: 03/23/2013 1120
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.05 g
Analysis Date:	05/01/2013 0340			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.028	J Q	0.011	0.095
Aluminum		11000		0.27	2.9
Arsenic		8.6		0.017	0.095
Barium		67	Q	0.010	0.95
Beryllium		0.57	Q	0.0071	0.095
Calcium		660		1.3	9.5
Cadmium		0.14	Q	0.013	0.095
Chromium		16		0.021	0.19
Cobalt		12	Q	0.0023	0.048
Copper		17	Q	0.031	0.19
Iron		25000		1.0	4.8
Magnesium		2600		1.0	9.5
Manganese		350	Q	0.015	0.48
Sodium		51		2.5	9.5
Nickel		22		0.011	0.095
Lead		13	Q	0.015	0.095
Antimony		0.046	J	0.044	0.19
Thallium		0.16	Q	0.0097	0.095
Vanadium		19		0.028	0.095
Zinc		51	Q	0.062	0.48
Potassium		910		3.0	9.5
Selenium		0.35	J	0.048	0.48

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.67 g
Analysis Date:	04/12/2013 1211			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.036	J	0.013	0.090

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0110M-0001-SO**

Lab Sample ID: 240-22660-22 Date Sampled: 03/23/2013 1137
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.20 g
Analysis Date:	05/01/2013 0437			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.034	J Q	0.0095	0.083
Aluminum		9100		0.24	2.5
Arsenic		7.9		0.015	0.083
Barium		60	Q	0.0089	0.83
Beryllium		0.63	Q	0.0063	0.083
Calcium		980		1.1	8.3
Cadmium		0.20	Q	0.011	0.083
Chromium		20		0.019	0.17
Cobalt		12	Q	0.0020	0.042
Copper		17	Q	0.028	0.17
Iron		25000		0.90	4.2
Magnesium		3000		0.90	8.3
Manganese		450	Q	0.013	0.42
Sodium		63		2.2	8.3
Nickel		31		0.0094	0.083
Lead		14	Q	0.013	0.083
Antimony		0.051	J	0.038	0.17
Thallium		0.14	Q	0.0085	0.083
Vanadium		15		0.025	0.083
Zinc		71	Q	0.054	0.42
Potassium		950		2.6	8.3
Selenium		0.36	J	0.042	0.42

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.57 g
Analysis Date:	04/12/2013 1223			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.038	J	0.015	0.11

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0111M-0001-SO**

Lab Sample ID: 240-22660-23 Date Sampled: 03/23/2013 1137
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.07 g
Analysis Date:	05/01/2013 0446			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.026	J Q	0.011	0.093
Aluminum		7300		0.27	2.8
Arsenic		5.7		0.017	0.093
Barium		47	Q	0.010	0.93
Beryllium		0.50	Q	0.0070	0.093
Calcium		450		1.2	9.3
Cadmium		0.14	Q	0.012	0.093
Chromium		17		0.021	0.19
Cobalt		15	Q	0.0022	0.047
Copper		14	Q	0.031	0.19
Iron		22000		1.0	4.7
Magnesium		2100		1.0	9.3
Manganese		500	Q	0.015	0.47
Sodium		38		2.5	9.3
Nickel		31		0.011	0.093
Lead		11	Q	0.014	0.093
Antimony		0.045	J	0.043	0.19
Thallium		0.12	Q	0.0095	0.093
Vanadium		13		0.028	0.093
Zinc		33	Q	0.061	0.47
Potassium		840		2.9	9.3
Selenium		0.30	J	0.048	0.47

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.56 g
Analysis Date:	04/12/2013 1244			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.029	J	0.015	0.11

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0112M-0001-SO**

Lab Sample ID: 240-22660-24 Date Sampled: 03/23/2013 0856
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.16 g
Analysis Date:	05/01/2013 0454			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.032	J Q	0.0098	0.086
Aluminum		12000		0.25	2.6
Arsenic		12		0.016	0.086
Barium		73	Q	0.0092	0.86
Beryllium		0.60	Q	0.0065	0.086
Calcium		1600		1.1	8.6
Cadmium		0.16	Q	0.011	0.086
Chromium		16		0.019	0.17
Cobalt		12	Q	0.0021	0.043
Copper		20	Q	0.028	0.17
Iron		27000		0.93	4.3
Magnesium		3600		0.93	8.6
Manganese		330	Q	0.014	0.43
Sodium		73		2.3	8.6
Nickel		27		0.0097	0.086
Lead		14	Q	0.013	0.086
Antimony		0.086	U	0.040	0.17
Thallium		0.16	Q	0.0088	0.086
Vanadium		18		0.026	0.086
Zinc		57	Q	0.056	0.43
Potassium		1100		2.7	8.6
Selenium		0.37	J	0.044	0.43

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.53 g
Analysis Date:	04/12/2013 1240			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.023	J	0.016	0.11

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0113M-0001-SO**

Lab Sample ID: 240-22660-25 Date Sampled: 03/23/2013 0925
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.08 g
Analysis Date:	05/01/2013 0502			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.018	J Q	0.011	0.093
Aluminum		10000		0.26	2.8
Arsenic		12		0.017	0.093
Barium		71	Q	0.0099	0.93
Beryllium		0.54	Q	0.0069	0.093
Calcium		510		1.2	9.3
Cadmium		0.10	Q	0.012	0.093
Chromium		15		0.021	0.19
Cobalt		19	Q	0.0022	0.046
Copper		19	Q	0.031	0.19
Iron		29000		1.0	4.6
Magnesium		2600		1.0	9.3
Manganese		870	Q	0.015	0.46
Sodium		47		2.5	9.3
Nickel		20		0.010	0.093
Lead		13	Q	0.014	0.093
Antimony		0.093	U	0.043	0.19
Thallium		0.16	Q	0.0094	0.093
Vanadium		17		0.028	0.093
Zinc		49	Q	0.060	0.46
Potassium		1000		2.9	9.3
Selenium		0.30	J	0.047	0.46

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.55 g
Analysis Date:	04/12/2013 1228			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.029	J	0.015	0.11

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0114M-0001-SO**

Lab Sample ID: 240-22660-26 Date Sampled: 03/23/2013 1031
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.03 g
Analysis Date:	05/01/2013 0510			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.037	J Q	0.011	0.097
Aluminum		9100		0.28	2.9
Arsenic		9.4		0.018	0.097
Barium		61	Q	0.010	0.97
Beryllium		0.66	Q	0.0073	0.097
Calcium		740		1.3	9.7
Cadmium		0.16	Q	0.013	0.097
Chromium		19		0.022	0.19
Cobalt		15	Q	0.0023	0.049
Copper		16	Q	0.032	0.19
Iron		25000		1.0	4.9
Magnesium		2600		1.0	9.7
Manganese		850	Q	0.015	0.49
Sodium		49		2.6	9.7
Nickel		32		0.011	0.097
Lead		16	Q	0.015	0.097
Antimony		0.097	U	0.045	0.19
Thallium		0.15	Q	0.0099	0.097
Vanadium		17		0.029	0.097
Zinc		41	Q	0.063	0.49
Potassium		1000		3.1	9.7
Selenium		0.35	J	0.049	0.49

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.66 g
Analysis Date:	04/12/2013 1209			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.044	J	0.013	0.091

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0116M-0001-SO**

Lab Sample ID: 240-22660-27 Date Sampled: 03/23/2013 1055
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.24 g
Analysis Date:	05/01/2013 0519			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.027	J Q	0.0092	0.081
Aluminum		13000		0.23	2.4
Arsenic		7.8		0.015	0.081
Barium		81	Q	0.0086	0.81
Beryllium		0.56	Q	0.0060	0.081
Calcium		490		1.1	8.1
Cadmium		0.18	Q	0.011	0.081
Chromium		16		0.018	0.16
Cobalt		11	Q	0.0019	0.040
Copper		17	Q	0.027	0.16
Iron		24000		0.87	4.0
Magnesium		2300		0.87	8.1
Manganese		210	Q	0.013	0.40
Sodium		37		2.1	8.1
Nickel		20		0.0091	0.081
Lead		13	Q	0.012	0.081
Antimony		0.081	U	0.037	0.16
Thallium		0.16	Q	0.0082	0.081
Vanadium		20		0.024	0.081
Zinc		72	Q	0.052	0.40
Potassium		840		2.5	8.1
Selenium		0.41		0.041	0.40

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-81798	Instrument ID:	H4
Prep Method:	7471A	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.63 g
Analysis Date:	04/12/2013 1221			Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.036	J	0.013	0.095

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Client Sample ID: **079SB-0117M-0001-SO**

Lab Sample ID: 240-22660-28 Date Sampled: 03/23/2013 1116
Client Matrix: Solid Date Received: 04/02/2013 0854

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-70561	Instrument ID:	M
Prep Method:	3050B	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0			Initial Weight/Volume:	00001.15 g
Analysis Date:	05/01/2013 0527			Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Silver		0.034	J Q	0.0099	0.087
Aluminum		8600		0.25	2.6
Arsenic		9.9		0.016	0.087
Barium		72	Q	0.0093	0.87
Beryllium		0.63	Q	0.0065	0.087
Calcium		930		1.2	8.7
Cadmium		0.19	Q	0.011	0.087
Chromium		19		0.019	0.17
Cobalt		13	Q	0.0021	0.043
Copper		18	Q	0.029	0.17
Iron		27000		0.94	4.3
Magnesium		3100		0.94	8.7
Manganese		520	Q	0.014	0.43
Sodium		67		2.3	8.7
Nickel		35		0.0098	0.087
Lead		13	Q	0.013	0.087
Antimony		0.087	U	0.040	0.17
Thallium		0.14	Q	0.0089	0.087
Vanadium		15		0.026	0.087
Zinc		70	Q	0.056	0.43
Potassium		1000		2.7	8.7
Selenium		0.38	J	0.044	0.43

7471/DOD Mercury (CVAA)

Analysis Method:	7471/DOD	Analysis Batch:	240-82289	Instrument ID:	H1
Prep Method:	7471A	Prep Batch:	240-81976	Lab File ID:	041613A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.57 g
Analysis Date:	04/16/2013 1219			Final Weight/Volume:	100 mL
Prep Date:	04/15/2013 1600				
Leach Date:	04/02/2013 1500				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	DL	LOQ
Mercury		0.035	U	0.015	0.11

General Chemistry

Client Sample ID: **079SB-0076M-0001-SO**

Lab Sample ID: 240-22660-1 Date Sampled: 03/22/2013 1637

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	0.97	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0077M-0001-SO**

Lab Sample ID: 240-22660-2 Date Sampled: 03/22/2013 1637

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	0.94	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0079M-0001-SO**

Lab Sample ID: 240-22660-3 Date Sampled: 03/22/2013 1642

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	0.76	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0080M-0001-SO**

Lab Sample ID: 240-22660-4 Date Sampled: 03/22/2013 1642

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	98		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.7	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0081M-0001-SO**

Lab Sample ID: 240-22660-5 Date Sampled: 03/22/2013 1550

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	0.79	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0082M-0001,0002-SO**

Lab Sample ID: 240-22660-6 Date Sampled: 03/22/2013 1559

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.0	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0083M-0001-SO**

Lab Sample ID: 240-22660-7 Date Sampled: 03/22/2013 1633

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.5	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0084M-0001-SO**

Lab Sample ID: 240-22660-8 Date Sampled: 03/22/2013 1645

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.5	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0085M-0001-SO**

Lab Sample ID: 240-22660-9 Date Sampled: 03/22/2013 1622

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.2	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0086M-0001-SO**

Lab Sample ID: 240-22660-10 Date Sampled: 03/23/2013 1400

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.1	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0087M-0001-SO**

Lab Sample ID: 240-22660-11 Date Sampled: 03/23/2013 1400

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.2	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0088M-0001-SO**

Lab Sample ID: 240-22660-12 Date Sampled: 03/23/2013 1409

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.3	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0089M-0001-SO**

Lab Sample ID: 240-22660-13 Date Sampled: 03/23/2013 1409

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.2	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0090M-0001-SO**

Lab Sample ID: 240-22660-14 Date Sampled: 03/23/2013 1334

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.2	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0091M-0001,0002-SO**

Lab Sample ID: 240-22660-15 Date Sampled: 03/23/2013 1319

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.2	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0092M-0001-SO**

Lab Sample ID: 240-22660-16 Date Sampled: 03/23/2013 1356

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.2	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0093M-0001-SO**

Lab Sample ID: 240-22660-17 Date Sampled: 03/23/2013 1406

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.2	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0095M-0001-SO**

Lab Sample ID: 240-22660-18 Date Sampled: 03/23/2013 1256

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.1	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0096-0001-SO**

Lab Sample ID: 240-22660-19 Date Sampled: 03/23/2013 1335

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	87		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	13	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0107M-0001-SO**

Lab Sample ID: 240-22660-20 Date Sampled: 03/23/2013 1120

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.4	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0108M-0001-SO**

Lab Sample ID: 240-22660-21 Date Sampled: 03/23/2013 1120

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.4	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0110M-0001-SO**

Lab Sample ID: 240-22660-22 Date Sampled: 03/23/2013 1137

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.3	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0111M-0001-SO**

Lab Sample ID: 240-22660-23 Date Sampled: 03/23/2013 1137

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.1	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0112M-0001-SO**

Lab Sample ID: 240-22660-24 Date Sampled: 03/23/2013 0856

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.3	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0113M-0001-SO**

Lab Sample ID: 240-22660-25 Date Sampled: 03/23/2013 0925

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.3	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0114M-0001-SO**

Lab Sample ID: 240-22660-26 Date Sampled: 03/23/2013 1031

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.2	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0116M-0001-SO**

Lab Sample ID: 240-22660-27 Date Sampled: 03/23/2013 1055

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	98		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.7	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **079SB-0117M-0001-SO**

Lab Sample ID: 240-22660-28 Date Sampled: 03/23/2013 1116

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	99		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	1.2	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

General Chemistry

Client Sample ID: **068SB-0057M-0001-SO**

Lab Sample ID: 240-22660-30 Date Sampled: 03/29/2013 1126

Client Matrix: Solid Date Received: 04/02/2013 0854

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Percent Solids	78		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N
Percent Moisture	22	H	%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-80985	Analysis Date: 04/08/2013 1114						DryWt Corrected: N

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Surrogate Recovery Report

8260B/DoD Volatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
MRL 240-80741/5		87	97	94	91
MRL 240-80741/28		86	99	90	87

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	50-150
DCA = 1,2-Dichloroethane-d4 (Surr)	50-150
TOL = Toluene-d8 (Surr)	50-150
BFB = 4-Bromofluorobenzene (Surr)	50-150

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Surrogate Recovery Report

8260B/DoD Volatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
240-22660-30	068SB-0057M-0001-SO	75	91	76Q	67Q
MB 240-80741/30		89	101	101	93
LCS 240-80741/6		93	93	95	92

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	59-138
DCA = 1,2-Dichloroethane-d4 (Surr)	61-130
TOL = Toluene-d8 (Surr)	85-115
BFB = 4-Bromofluorobenzene (Surr)	85-120

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Method Blank - Batch: 240-80741

Method: 8260B/DoD
Preparation: N/A

Lab Sample ID:	MB 240-80741/30	Analysis Batch:	240-80741	Instrument ID:	A3UX14
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	141803.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/05/2013 1305	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Acetone	8.60	J	6.3	20
Benzene	0.50	U	0.23	5.0
Bromochloromethane	1.0	U	0.71	5.0
Bromodichloromethane	0.50	U	0.28	5.0
Bromoform	0.50	U	0.33	5.0
Bromomethane	1.0	U	0.54	5.0
2-Butanone (MEK)	2.0	U	1.4	20
Carbon disulfide	0.50	U	0.44	5.0
Carbon tetrachloride	0.50	U	0.37	5.0
Chlorobenzene	0.50	U	0.33	5.0
Chloroethane	1.0	U	0.86	5.0
Chloroform	0.50	U	0.29	5.0
Chloromethane	0.50	U	0.41	5.0
cis-1,3-Dichloropropene	0.50	U	0.34	5.0
Dibromochloromethane	1.0	U	0.55	5.0
1,2-Dibromoethane	1.0	U	0.50	5.0
1,1-Dichloroethane	0.50	U	0.36	5.0
1,2-Dichloroethane	0.50	U	0.34	5.0
1,1-Dichloroethene	1.0	U	0.52	5.0
1,2-Dichloroethene, Total	1.0	U	0.77	10
1,2-Dichloropropane	1.0	U	0.69	5.0
Ethylbenzene	0.50	U	0.26	5.0
2-Hexanone	1.0	U	0.63	20
Methylene Chloride	3.55	J	0.67	5.0
4-Methyl-2-pentanone (MIBK)	1.0	U	0.54	20
Styrene	0.50	U	0.15	5.0
1,1,2,2-Tetrachloroethane	0.50	U	0.34	5.0
Tetrachloroethene	1.0	U	0.52	5.0
Toluene	0.50	U	0.27	5.0
trans-1,3-Dichloropropene	1.0	U	0.54	5.0
1,1,1-Trichloroethane	1.0	U	0.56	5.0
1,1,2-Trichloroethane	0.50	U	0.39	5.0
Trichloroethene	0.50	U	0.42	5.0
Vinyl chloride	0.50	U	0.39	5.0
Xylenes, Total	1.5	U	0.67	10

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene (Surr)	93	85 - 120
Dibromofluoromethane (Surr)	89	59 - 138
1,2-Dichloroethane-d4 (Surr)	101	61 - 130
Toluene-d8 (Surr)	101	85 - 115

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Method Reporting Limit Check - Batch: 240-80741

Method: 8260B/DoD
Preparation: N/A

Lab Sample ID:	MRL 240-80741/5	Analysis Batch:	240-80741	Instrument ID:	A3UX14
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	141800.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/05/2013 1142	Units:	ng/uL	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	0.0100	0.0186	186	70 - 130	^
Benzene	0.00500	0.00533	107	70 - 130	
Bromochloromethane	0.00500	0.00483	97	70 - 130	
Bromodichloromethane	0.00500	0.00429	86	70 - 130	
Bromoform	0.00500	0.00586	117	70 - 130	
Bromomethane	0.00500	0.00623	125	70 - 130	
2-Butanone (MEK)	0.0100	0.0100	100	70 - 130	
Carbon disulfide	0.00500	0.00579	116	70 - 130	
Carbon tetrachloride	0.00500	0.00412	82	70 - 130	
Chlorobenzene	0.00500	0.00529	106	70 - 130	
Chloroethane	0.00500	0.00471	94	70 - 130	
Chloroform	0.00500	0.00523	105	70 - 130	
Chloromethane	0.00500	0.00546	109	70 - 130	
cis-1,3-Dichloropropene	0.00500	0.00429	86	70 - 130	
Dibromochloromethane	0.00500	0.00607	121	70 - 130	
1,1-Dichloroethane	0.00500	0.00507	101	70 - 130	
1,2-Dichloroethane	0.00500	0.00521	104	70 - 130	
1,1-Dichloroethene	0.00500	0.00477	95	70 - 130	
1,2-Dichloropropane	0.00500	0.00523	105	70 - 130	
Ethylbenzene	0.00500	0.00525	105	70 - 130	
2-Hexanone	0.0100	0.0104	104	70 - 130	
Methylene Chloride	0.00500	0.00907	181	70 - 130	^
4-Methyl-2-pentanone (MIBK)	0.0100	0.00982	98	70 - 130	J
Styrene	0.00500	0.00467	93	70 - 130	
1,1,2,2-Tetrachloroethane	0.00500	0.00537	107	70 - 130	
Tetrachloroethene	0.00500	0.00536	107	70 - 130	
Toluene	0.00500	0.00523	105	70 - 130	
trans-1,3-Dichloropropene	0.00500	0.00423	85	70 - 130	
1,1,1-Trichloroethane	0.00500	0.00448	90	70 - 130	
1,1,2-Trichloroethane	0.00500	0.00536	107	70 - 130	
Trichloroethene	0.00500	0.00520	104	70 - 130	
Vinyl chloride	0.00500	0.00558	112	70 - 130	
Xylenes, Total	0.0100	0.0102	102	70 - 130	

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene (Surr)	91	50 - 150
Dibromofluoromethane (Surr)	87	50 - 150
1,2-Dichloroethane-d4 (Surr)	97	50 - 150
Toluene-d8 (Surr)	94	50 - 150

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Control Sample - Batch: 240-80741

Method: 8260B/DoD
Preparation: N/A

Lab Sample ID:	LCS 240-80741/6	Analysis Batch:	240-80741	Instrument ID:	A3UX14
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	141801.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/05/2013 1204	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	100	104	104	20 - 160	
Benzene	50.0	49.6	99	75 - 125	
Bromochloromethane	50.0	49.8	100	70 - 125	
Bromodichloromethane	50.0	43.0	86	70 - 130	
Bromoform	50.0	44.6	89	55 - 135	
Bromomethane	50.0	55.2	110	30 - 160	
2-Butanone (MEK)	100	91.9	92	30 - 160	
Carbon disulfide	50.0	37.1	74	45 - 160	
Carbon tetrachloride	50.0	49.8	100	65 - 135	
Chlorobenzene	50.0	50.2	100	75 - 125	
Chloroethane	50.0	56.8	114	40 - 155	
Chloroform	50.0	51.0	102	70 - 125	
Chloromethane	50.0	47.7	95	50 - 130	
cis-1,3-Dichloropropene	50.0	44.0	88	70 - 125	
Dibromochloromethane	50.0	44.0	88	65 - 130	
1,1-Dichloroethane	50.0	48.7	97	75 - 125	
1,2-Dichloroethane	50.0	49.8	100	70 - 135	
1,1-Dichloroethene	50.0	48.1	96	65 - 135	
1,2-Dichloropropane	50.0	50.6	101	70 - 120	
Ethylbenzene	50.0	51.9	104	75 - 125	
2-Hexanone	100	93.3	93	45 - 145	
Methylene Chloride	50.0	49.8	100	55 - 140	
4-Methyl-2-pentanone (MIBK)	100	95.0	95	45 - 145	
Styrene	50.0	52.8	106	75 - 125	
1,1,2,2-Tetrachloroethane	50.0	53.1	106	55 - 130	
Tetrachloroethene	50.0	51.7	103	65 - 140	
Toluene	50.0	51.0	102	70 - 125	
trans-1,3-Dichloropropene	50.0	46.6	93	65 - 125	
1,1,1-Trichloroethane	50.0	49.5	99	70 - 135	
1,1,2-Trichloroethane	50.0	51.5	103	60 - 125	
Trichloroethene	50.0	48.1	96	75 - 125	
Vinyl chloride	50.0	52.7	105	60 - 125	
Xylenes, Total	150	156	104	75 - 125	

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene (Surr)	92	85 - 120
Dibromofluoromethane (Surr)	93	59 - 138
1,2-Dichloroethane-d4 (Surr)	93	61 - 130
Toluene-d8 (Surr)	95	85 - 115

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Method Reporting Limit Check - Batch: 240-80741

Method: 8260B/DoD
Preparation: N/A

Lab Sample ID:	MRL 240-80741/28	Analysis Batch:	240-80741	Instrument ID:	A3UX14
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	141824.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/05/2013 2051	Units:	ng/uL	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	0.0100	0.0207	207	70 - 130	^
Benzene	0.00500	0.00526	105	70 - 130	
Bromochloromethane	0.00500	0.00520	104	70 - 130	
Bromodichloromethane	0.00500	0.00432	86	70 - 130	
Bromoform	0.00500	0.00637	127	70 - 130	
Bromomethane	0.00500	0.00702	140	70 - 130	^
2-Butanone (MEK)	0.0100	0.0120	120	70 - 130	
Carbon disulfide	0.00500	0.00556	111	70 - 130	
Carbon tetrachloride	0.00500	0.00385	77	70 - 130	
Chlorobenzene	0.00500	0.00532	106	70 - 130	
Chloroethane	0.00500	0.00580	116	70 - 130	
Chloroform	0.00500	0.00494	99	70 - 130	
Chloromethane	0.00500	0.00569	114	70 - 130	
cis-1,3-Dichloropropene	0.00500	0.00403	81	70 - 130	
Dibromochloromethane	0.00500	0.00643	129	70 - 130	
1,1-Dichloroethane	0.00500	0.00483	97	70 - 130	
1,2-Dichloroethane	0.00500	0.00536	107	70 - 130	
1,1-Dichloroethene	0.00500	0.00455	91	70 - 130	
1,2-Dichloropropane	0.00500	0.00523	105	70 - 130	
Ethylbenzene	0.00500	0.00527	105	70 - 130	
2-Hexanone	0.0100	0.0128	128	70 - 130	
Methylene Chloride	0.00500	0.00785	157	70 - 130	^
4-Methyl-2-pentanone (MIBK)	0.0100	0.0118	118	70 - 130	
Styrene	0.00500	0.00517	103	70 - 130	
1,1,2,2-Tetrachloroethane	0.00500	0.00666	133	70 - 130	^
Tetrachloroethene	0.00500	0.00509	102	70 - 130	
Toluene	0.00500	0.00519	104	70 - 130	
trans-1,3-Dichloropropene	0.00500	0.00387	77	70 - 130	
1,1,1-Trichloroethane	0.00500	0.00427	85	70 - 130	
1,1,2-Trichloroethane	0.00500	0.00586	117	70 - 130	
Trichloroethene	0.00500	0.00517	103	70 - 130	
Vinyl chloride	0.00500	0.00605	121	70 - 130	
Xylenes, Total	0.0100	0.0102	102	70 - 130	

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene (Surr)	87	50 - 150
Dibromofluoromethane (Surr)	86	50 - 150
1,2-Dichloroethane-d4 (Surr)	99	50 - 150
Toluene-d8 (Surr)	90	50 - 150

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Method Blank - Batch: 180-68898

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	MB 180-68898/1-A	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.50 g
Analysis Date:	04/30/2013 2131	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Silver	0.020	U Q	0.0076	0.067
Aluminum	0.40	U	0.19	2.0
Arsenic	0.033	U	0.012	0.067
Barium	0.00807	J Q	0.0071	0.67
Beryllium	0.0067	U Q	0.0050	0.067
Calcium	1.44	J	0.88	6.7
Cadmium	0.020	U Q	0.0088	0.067
Chromium	0.027	U	0.015	0.13
Cobalt	0.0067	U Q	0.0016	0.033
Copper	0.040	U Q	0.022	0.13
Iron	1.3	U	0.72	3.3
Magnesium	1.3	U	0.72	6.7
Manganese	0.0112	J Q	0.011	0.33
Sodium	3.3	U	1.8	6.7
Nickel	0.020	U	0.0075	0.067
Lead	0.020	U Q	0.010	0.067
Antimony	0.067	U	0.031	0.13
Thallium	0.013	U Q	0.0068	0.067
Vanadium	0.040	U	0.020	0.067
Zinc	0.0461	J Q	0.043	0.33
Potassium	4.0	U	2.1	6.7
Selenium	0.067	U	0.034	0.33

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Control Sample - Batch: 180-68898

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	LCS 180-68898/2-A	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.03 g
Analysis Date:	04/30/2013 2139	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Silver	4.85	4.42	91	60 - 114	Q
Aluminum	194	186	96	80 - 120	
Arsenic	3.88	3.25	84	73 - 110	
Barium	194	180	93	70 - 110	Q
Beryllium	4.85	4.18	86	79 - 110	Q
Calcium	4850	4310	89	80 - 120	
Cadmium	4.85	4.20	87	74 - 110	Q
Chromium	19.4	18.6	96	70 - 110	
Cobalt	48.5	46.9	97	74 - 110	Q
Copper	24.3	24.1	99	73 - 110	Q
Iron	97.1	94.4	97	80 - 120	
Magnesium	4850	4630	95	80 - 120	
Manganese	48.5	44.2	91	80 - 120	Q
Sodium	4850	4630	95	80 - 120	
Nickel	48.5	47.4	98	75 - 110	
Lead	1.94	1.84	95	75 - 110	Q
Antimony	48.5	42.1	87	68 - 113	
Thallium	4.85	4.54	94	71 - 110	Q
Vanadium	48.5	46.8	96	72 - 110	
Zinc	48.5	40.8	84	72 - 113	Q
Potassium	4850	4590	95	80 - 120	
Selenium	0.971	0.858	88	65 - 110	

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Matrix Spike - Batch: 180-68898

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-6	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.01 g
Analysis Date:	05/01/2013 0006	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Silver	0.014	J	4.95	4.41	89	75 - 125	Q
Aluminum	7100		198	9980	1465	70 - 130	4
Arsenic	9.0		3.96	12.8	96	23 - 131	
Barium	24		198	202	90	10 - 199	Q
Beryllium	0.31		4.95	4.42	83	58 - 112	Q
Calcium	250		4950	4330	82	70 - 130	
Cadmium	0.12		4.95	4.33	85	58 - 110	Q
Chromium	9.2		19.8	28.9	99	10 - 199	
Cobalt	6.1		49.5	50.5	90	55 - 110	Q
Copper	17		24.8	39.5	90	10 - 199	Q
Iron	17000		99.0	17900	528	70 - 130	4
Magnesium	1600		4950	6200	93	70 - 130	
Manganese	220		49.5	257	74	10 - 199	Q 4
Sodium	26		4950	4540	91	70 - 130	
Nickel	13		49.5	57.6	90	10 - 176	
Lead	12		1.98	14.1	98	10 - 199	Q 4
Antimony	0.24		49.5	22.8	46	75 - 125	J
Thallium	0.10		4.95	4.74	94	82 - 110	Q
Vanadium	11		49.5	60.2	99	39 - 129	
Zinc	45		49.5	86.4	84	10 - 199	Q
Potassium	610		4950	5060	90	70 - 130	
Selenium	0.26	J	0.990	0.916	66	39 - 116	

Post Digestion Spike - Batch: 180-68898

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-6	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.03 g
Analysis Date:	05/01/2013 0015	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Silver	0.014	J	4.85	5.11	105	80 - 120	Q
Aluminum	7100		194	6850	-117	80 - 120	
Arsenic	9.0		3.88	12.3	85	80 - 120	
Barium	24		194	216	99	80 - 120	Q
Beryllium	0.31		4.85	4.69	90	80 - 120	Q

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Post Digestion Spike - Batch: 180-68898

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-6	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.03 g
Analysis Date:	05/01/2013 0015	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Calcium	250	4850	4530	88	80 - 120	
Cadmium	0.12	4.85	4.72	95	80 - 120	Q
Chromium	9.2	19.4	28.2	98	80 - 120	
Cobalt	6.1	48.5	55.4	102	80 - 120	Q
Copper	17	24.3	40.9	97	80 - 120	Q
Iron	17000	97.1	16800	-580	80 - 120	
Magnesium	1600	4850	6120	93	80 - 120	
Manganese	220	48.5	261	84	80 - 120	Q
Sodium	26	4850	4750	97	80 - 120	
Nickel	13	48.5	61.0	99	80 - 120	
Lead	12	1.94	14.0	97	80 - 120	Q
Antimony	0.24	48.5	44.8	92	80 - 120	
Thallium	0.10	4.85	5.22	105	80 - 120	Q
Vanadium	11	48.5	59.6	99	80 - 120	
Zinc	45	48.5	86.6	87	80 - 120	Q
Potassium	610	4850	5140	93	80 - 120	
Selenium	0.26 J	0.971	1.14	90	80 - 120	

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Serial Dilution - Batch: 180-68898

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-6	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.03 g
Analysis Date:	04/30/2013 2350	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Silver	0.014	J	0.15	NC	10	U Q
Aluminum	7100		6870	3.0	10	D
Arsenic	9.0		9.02	0.75	10	D
Barium	24		23.2	1.3	10	D Q
Beryllium	0.31		0.337	NC	10	J D Q
Calcium	250		253	1.5	10	D
Cadmium	0.12		0.123	NC	10	J D Q
Chromium	9.2		9.04	2.0	10	D
Cobalt	6.1		5.79	4.9	10	D Q
Copper	17		17.0	1.5	10	D Q
Iron	17000		17000	2.5	10	D
Magnesium	1600		1480	6.5	10	D
Manganese	220		207	6.1	10	D Q
Sodium	26		26.3	NC	10	J D
Nickel	13		12.6	2.4	10	D
Lead	12		11.8	2.4	10	D Q
Antimony	0.24		0.256	NC	10	J D
Thallium	0.10		0.0951	NC	10	J D Q
Vanadium	11		11.1	3.1	10	D
Zinc	45		50.3	13	10	Q V D
Potassium	610		587	3.7	10	D
Selenium	0.26	J	0.49	NC	10	U

Duplicate - Batch: 180-68898

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-6	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.00 g
Analysis Date:	04/30/2013 2358	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Silver	0.014	J	0.0154	6	20	J Q
Aluminum	7100		7150	1	20	
Arsenic	9.0		8.70	3	20	
Barium	24		23.5	0.1	20	Q
Beryllium	0.31		0.337	7	20	Q
Calcium	250		245	2	20	
Cadmium	0.12		0.113	7	20	Q

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Duplicate - Batch: 180-68898

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-6	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68898	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.00 g
Analysis Date:	04/30/2013 2358	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1149				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chromium	9.2	9.19	0.3	20	
Cobalt	6.1	5.98	2	20	Q
Copper	17	17.1	1	20	Q
Iron	17000	17600	1	20	
Magnesium	1600	1620	2	20	
Manganese	220	211	4	20	Q
Sodium	26	24.4	5	20	
Nickel	13	13.0	0.8	20	
Lead	12	11.7	4	20	Q
Antimony	0.24	0.226	5	20	
Thallium	0.10	0.0954	6	20	J Q
Vanadium	11	11.5	0.5	20	
Zinc	45	44.2	0.8	20	Q
Potassium	610	606	0.7	20	
Selenium	0.26 J	0.288	8	20	J

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Method Blank - Batch: 180-68991

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	MB 180-68991/1-A	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.08 g
Analysis Date:	05/01/2013 0145	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Silver	0.028	U Q	0.011	0.093
Aluminum	0.56	U	0.26	2.8
Arsenic	0.046	U	0.017	0.093
Barium	0.019	U Q	0.0099	0.93
Beryllium	0.0093	U Q	0.0069	0.093
Calcium	1.67	J	1.2	9.3
Cadmium	0.028	U Q	0.012	0.093
Chromium	0.037	U	0.021	0.19
Cobalt	0.0093	U Q	0.0022	0.046
Copper	0.056	U Q	0.031	0.19
Iron	1.9	U	1.0	4.6
Magnesium	1.9	U	1.0	9.3
Manganese	0.028	U Q	0.015	0.46
Sodium	4.6	U	2.5	9.3
Nickel	0.028	U	0.010	0.093
Lead	0.028	U Q	0.014	0.093
Antimony	0.093	U	0.043	0.19
Thallium	0.019	U Q	0.0094	0.093
Vanadium	0.056	U	0.028	0.093
Zinc	0.19	U Q	0.060	0.46
Potassium	5.6	U	2.9	9.3
Selenium	0.093	U	0.047	0.46

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Control Sample - Batch: 180-68991

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	LCS 180-68991/2-A	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.21 g
Analysis Date:	05/01/2013 0153	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Silver	4.13	4.00	97	60 - 114	Q
Aluminum	165	168	102	80 - 120	
Arsenic	3.31	2.86	86	73 - 110	
Barium	165	159	96	70 - 110	Q
Beryllium	4.13	3.69	89	79 - 110	Q
Calcium	4130	3870	94	80 - 120	
Cadmium	4.13	3.69	89	74 - 110	Q
Chromium	16.5	16.6	101	70 - 110	
Cobalt	41.3	42.1	102	74 - 110	Q
Copper	20.7	21.4	104	73 - 110	Q
Iron	82.6	83.3	101	80 - 120	
Magnesium	4130	4110	99	80 - 120	
Manganese	41.3	39.4	95	80 - 120	Q
Sodium	4130	4170	101	80 - 120	
Nickel	41.3	42.3	102	75 - 110	
Lead	1.65	1.67	101	75 - 110	Q
Antimony	41.3	36.2	88	68 - 113	
Thallium	4.13	4.13	100	71 - 110	Q
Vanadium	41.3	42.1	102	72 - 110	
Zinc	41.3	35.5	86	72 - 113	Q
Potassium	4130	4110	99	80 - 120	
Selenium	0.826	0.738	89	65 - 110	

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Matrix Spike - Batch: 180-68991

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-15	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.16 g
Analysis Date:	05/01/2013 0251	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Silver	0.032	J	4.31	3.71	85	75 - 125	Q
Aluminum	9100		172	13700	2669	70 - 130	4
Arsenic	6.1		3.45	8.72	76	23 - 131	
Barium	60		172	226	97	10 - 199	Q
Beryllium	0.52		4.31	4.18	85	58 - 112	Q
Calcium	2400		4310	5740	77	70 - 130	
Cadmium	0.11		4.31	3.73	84	58 - 110	Q
Chromium	16		17.2	35.7	115	10 - 199	
Cobalt	13		43.1	53.2	92	55 - 110	Q
Copper	12		21.6	32.0	91	10 - 199	Q
Iron	21000		86.2	22400	1345	70 - 130	4
Magnesium	2100		4310	6330	99	70 - 130	
Manganese	540		43.1	601	147	10 - 199	Q 4
Sodium	49		4310	4080	94	70 - 130	
Nickel	18		43.1	58.3	93	10 - 176	
Lead	15		1.72	17.5	159	10 - 199	Q 4
Antimony	0.088	U	43.1	13.6	31	75 - 125	J
Thallium	0.13		4.31	4.28	96	82 - 110	Q
Vanadium	18		43.1	62.5	102	39 - 129	
Zinc	38		43.1	76.9	90	10 - 199	Q
Potassium	750		4310	4750	93	70 - 130	
Selenium	0.37	J	0.862	0.853	56	39 - 116	

Post Digestion Spike - Batch: 180-68991

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-15	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.14 g
Analysis Date:	05/01/2013 0259	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Silver	0.032	J	4.39	4.64	105	80 - 120	Q
Aluminum	9100		175	8940	-70	80 - 120	
Arsenic	6.1		3.51	9.32	92	80 - 120	
Barium	60		175	234	100	80 - 120	Q
Beryllium	0.52		4.39	4.54	92	80 - 120	Q

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Post Digestion Spike - Batch: 180-68991

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-15	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.14 g
Analysis Date:	05/01/2013 0259	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Calcium	2400		4390	6990	104	80 - 120	
Cadmium	0.11		4.39	4.19	93	80 - 120	Q
Chromium	16		17.5	33.9	103	80 - 120	
Cobalt	13		43.9	59.2	104	80 - 120	Q
Copper	12		21.9	34.5	101	80 - 120	Q
Iron	21000		87.7	21100	-220	80 - 120	
Magnesium	2100		4390	6340	97	80 - 120	
Manganese	540		43.9	577	89	80 - 120	Q
Sodium	49		4390	4540	102	80 - 120	
Nickel	18		43.9	63.4	103	80 - 120	
Lead	15		1.75	16.4	95	80 - 120	Q
Antimony	0.088	U	43.9	39.3	90	80 - 120	
Thallium	0.13		4.39	4.85	107	80 - 120	Q
Vanadium	18		43.9	64.7	106	80 - 120	
Zinc	38		43.9	76.1	87	80 - 120	Q
Potassium	750		4390	5120	100	80 - 120	
Selenium	0.37	J	0.877	1.11	84	80 - 120	

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Serial Dilution - Batch: 180-68991

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-15	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.14 g
Analysis Date:	05/01/2013 0234	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Silver	0.032	J	0.13	NC	10	U Q
Aluminum	9100		9350	3.2	10	D
Arsenic	6.1		6.19	1.6	10	D
Barium	60		60.8	1.7	10	D Q
Beryllium	0.52		0.625	19	10	D Q V
Calcium	2400		2510	3.6	10	D
Cadmium	0.11		0.132	NC	10	J D Q
Chromium	16		15.9	0.28	10	D
Cobalt	13		13.2	1.9	10	D Q
Copper	12		12.7	2.6	10	D Q
Iron	21000		21000	1.0	10	D
Magnesium	2100		2080	0.36	10	D
Manganese	540		530	1.4	10	D Q
Sodium	49		51.9	NC	10	D
Nickel	18		18.2	0.60	10	D
Lead	15		14.7	0.12	10	D Q
Antimony	0.088	U	0.44	NC	10	U
Thallium	0.13		0.132	NC	10	J D Q
Vanadium	18		18.1	1.4	10	D
Zinc	38		43.6	14	10	Q V D
Potassium	750		733	2.4	10	D
Selenium	0.37	J	0.44	NC	10	U

Duplicate - Batch: 180-68991

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-15	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.12 g
Analysis Date:	05/01/2013 0242	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Silver	0.032	J	0.0304	6	20	J Q
Aluminum	9100		9460	4	20	
Arsenic	6.1		6.28	3	20	
Barium	60		67.9	13	20	Q
Beryllium	0.52		0.547	4	20	Q
Calcium	2400		1460	50	20	J
Cadmium	0.11		0.115	4	20	Q

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Duplicate - Batch: 180-68991

Method: 6020/DOD
Preparation: 3050B

Lab Sample ID:	240-22660-15	Analysis Batch:	180-70561	Instrument ID:	M
Client Matrix:	Solid	Prep Batch:	180-68991	Lab File ID:	M30430A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	00001.12 g
Analysis Date:	05/01/2013 0242	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/12/2013 0908				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chromium	16		16.4	3	20	
Cobalt	13		14.0	4	20	Q
Copper	12		13.4	8	20	Q
Iron	21000		21600	1	20	
Magnesium	2100		2140	3	20	
Manganese	540		550	2	20	Q
Sodium	49		49.3	1	20	
Nickel	18		19.2	4	20	
Lead	15		14.9	0.9	20	Q
Antimony	0.088	U	0.089	NC	20	U
Thallium	0.13		0.141	6	20	Q
Vanadium	18		18.4	0.1	20	
Zinc	38		39.7	4	20	Q
Potassium	750		812	8	20	
Selenium	0.37	J	0.343	8	20	J

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Method Blank - Batch: 240-81357

Method: 7471/DOD
Preparation: 7471A

Lab Sample ID:	MB 240-81357/1-A	Analysis Batch:	240-81523	Instrument ID:	H1
Client Matrix:	Solid	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/11/2013 1105	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Mercury	0.033	U	0.014	0.10

Lab Control Sample - Batch: 240-81357

Method: 7471/DOD
Preparation: 7471A

Lab Sample ID:	LCS 240-81357/2-A	Analysis Batch:	240-81523	Instrument ID:	H1
Client Matrix:	Solid	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/11/2013 1110	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.833	0.827	99	80 - 120	

Matrix Spike - Batch: 240-81357

Method: 7471/DOD
Preparation: 7471A

Lab Sample ID:	240-22660-6	Analysis Batch:	240-81523	Instrument ID:	H1
Client Matrix:	Solid	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.54 g
Analysis Date:	04/11/2013 1114	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	04/02/2013 1500				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.016	J	0.185	0.207	112	80 - 120	

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Duplicate - Batch: 240-81357

Method: 7471/DOD
Preparation: 7471A

Lab Sample ID:	240-22660-6	Analysis Batch:	240-81523	Instrument ID:	H1
Client Matrix:	Solid	Prep Batch:	240-81357	Lab File ID:	041113A-HG1.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.54 g
Analysis Date:	04/11/2013 1113	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2013 1415				
Leach Date:	04/02/2013 1500				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.016	J	0.037	NC	20	U

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Method Blank - Batch: 240-81545

Method: 7471/DOD
Preparation: 7471A

Lab Sample ID:	MB 240-81545/1-A	Analysis Batch:	240-81798	Instrument ID:	H4
Client Matrix:	Solid	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/12/2013 1153	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Mercury	0.033	U	0.014	0.10

Lab Control Sample - Batch: 240-81545

Method: 7471/DOD
Preparation: 7471A

Lab Sample ID:	LCS 240-81545/2-A	Analysis Batch:	240-81798	Instrument ID:	H4
Client Matrix:	Solid	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/12/2013 1155	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.833	0.783	94	80 - 120	

Matrix Spike - Batch: 240-81545

Method: 7471/DOD
Preparation: 7471A

Lab Sample ID:	240-22660-15	Analysis Batch:	240-81798	Instrument ID:	H4
Client Matrix:	Solid	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.56 g
Analysis Date:	04/12/2013 1205	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.036	J	0.179	0.213	99	80 - 120	

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Duplicate - Batch: 240-81545

Method: 7471/DOD
Preparation: 7471A

Lab Sample ID:	240-22660-15	Analysis Batch:	240-81798	Instrument ID:	H4
Client Matrix:	Solid	Prep Batch:	240-81545	Lab File ID:	041213B-HG4.PRN
Dilution:	1.0	Leach Batch:	240-80914	Initial Weight/Volume:	0.56 g
Analysis Date:	04/12/2013 1158	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2013 1500				
Leach Date:	04/02/2013 1500				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.036	J	0.0339	6	20	J

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Method Blank - Batch: 240-81976

Method: 7471/DOD
Preparation: 7471A

Lab Sample ID:	MB 240-81976/1-A	Analysis Batch:	240-82289	Instrument ID:	H1
Client Matrix:	Solid	Prep Batch:	240-81976	Lab File ID:	041613A-HG1.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/16/2013 1204	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/15/2013 1600				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Mercury	0.033	U	0.014	0.10

Lab Control Sample - Batch: 240-81976

Method: 7471/DOD
Preparation: 7471A

Lab Sample ID:	LCS 240-81976/2-A	Analysis Batch:	240-82289	Instrument ID:	H1
Client Matrix:	Solid	Prep Batch:	240-81976	Lab File ID:	041613A-HG1.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/16/2013 1206	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/15/2013 1600				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.833	0.837	100	80 - 120	

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Duplicate - Batch: 240-80985 **Method: Moisture**
Preparation: N/A

Lab Sample ID:	240-22660-15	Analysis Batch:	240-80985	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/08/2013 1114	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Solids	99	99	0.02	20	
Percent Moisture	1.2	1.2	2	20	H

Duplicate - Batch: 240-80985 **Method: Moisture**
Preparation: N/A

Lab Sample ID:	240-22660-5	Analysis Batch:	240-80985	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/08/2013 1114	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Solids	99	99	0.02	20	
Percent Moisture	0.79	0.77	3	20	

Duplicate - Batch: 240-80985 **Method: Moisture**
Preparation: N/A

Lab Sample ID:	240-22660-6	Analysis Batch:	240-80985	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/08/2013 1114	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Solids	99	99	0.1	20	
Percent Moisture	1.0	0.89	13	20	H

DATA REPORTING QUALIFIERS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
	J	Estimated: The analyte was positively identified; the quantitation is an estimation
	^	Instrument related QC exceeds the control limits
	Q	One or more quality control criteria failed.
	U	Undetected at the Limit of Detection.
Metals		
	J	Estimated: The analyte was positively identified; the quantitation is an estimation
	J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	Q	One or more quality control criteria failed.
	V	Serial Dilution exceeds the control limits
	D	The reported value is from a dilution.
	U	Undetected at the Limit of Detection.
General Chemistry		
	H	Sample was prepped or analyzed beyond the specified holding time

Client: Environmental Chemical Corp. Job Number: 240-22660-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 240-80275					
240-22660-30	068SB-0057M-0001-SO	T	Solid	5035	
Analysis Batch:240-80741					
LCS 240-80741/6	Lab Control Sample	T	Solid	8260B/DoD	
MB 240-80741/30	Method Blank	T	Solid	8260B/DoD	
240-22660-30	068SB-0057M-0001-SO	T	Solid	8260B/DoD	240-80275

Report Basis
T = Total

Client: Environmental Chemical Corp. Job Number: 240-22660-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 180-68898					
LCS 180-68898/2-A	Lab Control Sample	T	Solid	3050B	
MB 180-68898/1-A	Method Blank	T	Solid	3050B	
240-22660-1	079SB-0076M-0001-SO	T	Solid	3050B	
240-22660-2	079SB-0077M-0001-SO	T	Solid	3050B	
240-22660-3	079SB-0079M-0001-SO	T	Solid	3050B	
240-22660-4	079SB-0080M-0001-SO	T	Solid	3050B	
240-22660-5	079SB-0081M-0001-SO	T	Solid	3050B	
240-22660-6	079SB-0082M-0001,0002-SO	T	Solid	3050B	
240-22660-6DU	Duplicate	T	Solid	3050B	
240-22660-6MS	Matrix Spike	T	Solid	3050B	
240-22660-7	079SB-0083M-0001-SO	T	Solid	3050B	
240-22660-8	079SB-0084M-0001-SO	T	Solid	3050B	
240-22660-9	079SB-0085M-0001-SO	T	Solid	3050B	
240-22660-10	079SB-0086M-0001-SO	T	Solid	3050B	
240-22660-11	079SB-0087M-0001-SO	T	Solid	3050B	
240-22660-12	079SB-0088M-0001-SO	T	Solid	3050B	
240-22660-13	079SB-0089M-0001-SO	T	Solid	3050B	
240-22660-14	079SB-0090M-0001-SO	T	Solid	3050B	
Prep Batch: 180-68991					
LCS 180-68991/2-A	Lab Control Sample	T	Solid	3050B	
MB 180-68991/1-A	Method Blank	T	Solid	3050B	
240-22660-15	079SB-0091M-0001,0002-SO	T	Solid	3050B	
240-22660-15DU	Duplicate	T	Solid	3050B	
240-22660-15MS	Matrix Spike	T	Solid	3050B	
240-22660-16	079SB-0092M-0001-SO	T	Solid	3050B	
240-22660-17	079SB-0093M-0001-SO	T	Solid	3050B	
240-22660-18	079SB-0095M-0001-SO	T	Solid	3050B	
240-22660-19	079SB-0096-0001-SO	T	Solid	3050B	
240-22660-20	079SB-0107M-0001-SO	T	Solid	3050B	
240-22660-21	079SB-0108M-0001-SO	T	Solid	3050B	
240-22660-22	079SB-0110M-0001-SO	T	Solid	3050B	
240-22660-23	079SB-0111M-0001-SO	T	Solid	3050B	
240-22660-24	079SB-0112M-0001-SO	T	Solid	3050B	
240-22660-25	079SB-0113M-0001-SO	T	Solid	3050B	
240-22660-26	079SB-0114M-0001-SO	T	Solid	3050B	
240-22660-27	079SB-0116M-0001-SO	T	Solid	3050B	
240-22660-28	079SB-0117M-0001-SO	T	Solid	3050B	

Client: Environmental Chemical Corp. Job Number: 240-22660-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:180-70561					
LCS 180-68898/2-A	Lab Control Sample	T	Solid	6020/DOD	180-68898
MB 180-68898/1-A	Method Blank	T	Solid	6020/DOD	180-68898
LCS 180-68991/2-A	Lab Control Sample	T	Solid	6020/DOD	180-68991
MB 180-68991/1-A	Method Blank	T	Solid	6020/DOD	180-68991
240-22660-1	079SB-0076M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-2	079SB-0077M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-3	079SB-0079M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-4	079SB-0080M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-5	079SB-0081M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-6	079SB-0082M-0001,0002-SO	T	Solid	6020/DOD	180-68898
240-22660-6DU	Duplicate	T	Solid	6020/DOD	180-68898
240-22660-6MS	Matrix Spike	T	Solid	6020/DOD	180-68898
240-22660-7	079SB-0083M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-8	079SB-0084M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-9	079SB-0085M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-10	079SB-0086M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-11	079SB-0087M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-12	079SB-0088M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-13	079SB-0089M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-14	079SB-0090M-0001-SO	T	Solid	6020/DOD	180-68898
240-22660-15	079SB-0091M-0001,0002-SO	T	Solid	6020/DOD	180-68991
240-22660-15DU	Duplicate	T	Solid	6020/DOD	180-68991
240-22660-15MS	Matrix Spike	T	Solid	6020/DOD	180-68991
240-22660-16	079SB-0092M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-17	079SB-0093M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-18	079SB-0095M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-19	079SB-0096-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-20	079SB-0107M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-21	079SB-0108M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-22	079SB-0110M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-23	079SB-0111M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-24	079SB-0112M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-25	079SB-0113M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-26	079SB-0114M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-27	079SB-0116M-0001-SO	T	Solid	6020/DOD	180-68991
240-22660-28	079SB-0117M-0001-SO	T	Solid	6020/DOD	180-68991

Client: Environmental Chemical Corp. Job Number: 240-22660-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 240-80914					
240-22660-1	079SB-0076M-0001-SO	T	Solid	Increment, Prep	
240-22660-2	079SB-0077M-0001-SO	T	Solid	Increment, Prep	
240-22660-3	079SB-0079M-0001-SO	T	Solid	Increment, Prep	
240-22660-4	079SB-0080M-0001-SO	T	Solid	Increment, Prep	
240-22660-5	079SB-0081M-0001-SO	T	Solid	Increment, Prep	
240-22660-6	079SB-0082M-0001,0002-SO	T	Solid	Increment, Prep	
240-22660-6DU	Duplicate	T	Solid	Increment, Prep	
240-22660-6MS	Matrix Spike	T	Solid	Increment, Prep	
240-22660-7	079SB-0083M-0001-SO	T	Solid	Increment, Prep	
240-22660-8	079SB-0084M-0001-SO	T	Solid	Increment, Prep	
240-22660-9	079SB-0085M-0001-SO	T	Solid	Increment, Prep	
240-22660-10	079SB-0086M-0001-SO	T	Solid	Increment, Prep	
240-22660-11	079SB-0087M-0001-SO	T	Solid	Increment, Prep	
240-22660-12	079SB-0088M-0001-SO	T	Solid	Increment, Prep	
240-22660-13	079SB-0089M-0001-SO	T	Solid	Increment, Prep	
240-22660-14	079SB-0090M-0001-SO	T	Solid	Increment, Prep	
240-22660-15	079SB-0091M-0001,0002-SO	T	Solid	Increment, Prep	
240-22660-15DU	Duplicate	T	Solid	Increment, Prep	
240-22660-15MS	Matrix Spike	T	Solid	Increment, Prep	
240-22660-16	079SB-0092M-0001-SO	T	Solid	Increment, Prep	
240-22660-17	079SB-0093M-0001-SO	T	Solid	Increment, Prep	
240-22660-18	079SB-0095M-0001-SO	T	Solid	Increment, Prep	
240-22660-20	079SB-0107M-0001-SO	T	Solid	Increment, Prep	
240-22660-21	079SB-0108M-0001-SO	T	Solid	Increment, Prep	
240-22660-22	079SB-0110M-0001-SO	T	Solid	Increment, Prep	
240-22660-23	079SB-0111M-0001-SO	T	Solid	Increment, Prep	
240-22660-24	079SB-0112M-0001-SO	T	Solid	Increment, Prep	
240-22660-25	079SB-0113M-0001-SO	T	Solid	Increment, Prep	
240-22660-26	079SB-0114M-0001-SO	T	Solid	Increment, Prep	
240-22660-27	079SB-0116M-0001-SO	T	Solid	Increment, Prep	
240-22660-28	079SB-0117M-0001-SO	T	Solid	Increment, Prep	
Prep Batch: 240-81357					
LCS 240-81357/2-A	Lab Control Sample	T	Solid	7471A	
MB 240-81357/1-A	Method Blank	T	Solid	7471A	
240-22660-1	079SB-0076M-0001-SO	T	Solid	7471A	240-80914
240-22660-2	079SB-0077M-0001-SO	T	Solid	7471A	240-80914
240-22660-3	079SB-0079M-0001-SO	T	Solid	7471A	240-80914
240-22660-4	079SB-0080M-0001-SO	T	Solid	7471A	240-80914
240-22660-5	079SB-0081M-0001-SO	T	Solid	7471A	240-80914
240-22660-6	079SB-0082M-0001,0002-SO	T	Solid	7471A	240-80914
240-22660-6DU	Duplicate	T	Solid	7471A	240-80914
240-22660-6MS	Matrix Spike	T	Solid	7471A	240-80914
240-22660-7	079SB-0083M-0001-SO	T	Solid	7471A	240-80914
240-22660-8	079SB-0084M-0001-SO	T	Solid	7471A	240-80914

Client: Environmental Chemical Corp. Job Number: 240-22660-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:240-81523					
LCS 240-81357/2-A	Lab Control Sample	T	Solid	7471/DOD	240-81357
MB 240-81357/1-A	Method Blank	T	Solid	7471/DOD	240-81357
240-22660-1	079SB-0076M-0001-SO	T	Solid	7471/DOD	240-81357
240-22660-2	079SB-0077M-0001-SO	T	Solid	7471/DOD	240-81357
240-22660-3	079SB-0079M-0001-SO	T	Solid	7471/DOD	240-81357
240-22660-4	079SB-0080M-0001-SO	T	Solid	7471/DOD	240-81357
240-22660-5	079SB-0081M-0001-SO	T	Solid	7471/DOD	240-81357
240-22660-6	079SB-0082M-0001,0002-SO	T	Solid	7471/DOD	240-81357
240-22660-6DU	Duplicate	T	Solid	7471/DOD	240-81357
240-22660-6MS	Matrix Spike	T	Solid	7471/DOD	240-81357
240-22660-7	079SB-0083M-0001-SO	T	Solid	7471/DOD	240-81357
240-22660-8	079SB-0084M-0001-SO	T	Solid	7471/DOD	240-81357
Prep Batch: 240-81545					
LCS 240-81545/2-A	Lab Control Sample	T	Solid	7471A	
MB 240-81545/1-A	Method Blank	T	Solid	7471A	
240-22660-9	079SB-0085M-0001-SO	T	Solid	7471A	240-80914
240-22660-10	079SB-0086M-0001-SO	T	Solid	7471A	240-80914
240-22660-11	079SB-0087M-0001-SO	T	Solid	7471A	240-80914
240-22660-12	079SB-0088M-0001-SO	T	Solid	7471A	240-80914
240-22660-13	079SB-0089M-0001-SO	T	Solid	7471A	240-80914
240-22660-14	079SB-0090M-0001-SO	T	Solid	7471A	240-80914
240-22660-15	079SB-0091M-0001,0002-SO	T	Solid	7471A	240-80914
240-22660-15DU	Duplicate	T	Solid	7471A	240-80914
240-22660-15MS	Matrix Spike	T	Solid	7471A	240-80914
240-22660-16	079SB-0092M-0001-SO	T	Solid	7471A	240-80914
240-22660-17	079SB-0093M-0001-SO	T	Solid	7471A	240-80914
240-22660-18	079SB-0095M-0001-SO	T	Solid	7471A	240-80914
240-22660-19	079SB-0096-0001-SO	T	Solid	7471A	
240-22660-20	079SB-0107M-0001-SO	T	Solid	7471A	240-80914
240-22660-21	079SB-0108M-0001-SO	T	Solid	7471A	240-80914
240-22660-22	079SB-0110M-0001-SO	T	Solid	7471A	240-80914
240-22660-23	079SB-0111M-0001-SO	T	Solid	7471A	240-80914
240-22660-24	079SB-0112M-0001-SO	T	Solid	7471A	240-80914
240-22660-25	079SB-0113M-0001-SO	T	Solid	7471A	240-80914
240-22660-26	079SB-0114M-0001-SO	T	Solid	7471A	240-80914
240-22660-27	079SB-0116M-0001-SO	T	Solid	7471A	240-80914

Client: Environmental Chemical Corp. Job Number: 240-22660-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:240-81798					
LCS 240-81545/2-A	Lab Control Sample	T	Solid	7471/DOD	240-81545
MB 240-81545/1-A	Method Blank	T	Solid	7471/DOD	240-81545
240-22660-9	079SB-0085M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-10	079SB-0086M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-11	079SB-0087M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-12	079SB-0088M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-13	079SB-0089M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-14	079SB-0090M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-15	079SB-0091M-0001,0002-SO	T	Solid	7471/DOD	240-81545
240-22660-15DU	Duplicate	T	Solid	7471/DOD	240-81545
240-22660-15MS	Matrix Spike	T	Solid	7471/DOD	240-81545
240-22660-16	079SB-0092M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-17	079SB-0093M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-18	079SB-0095M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-19	079SB-0096-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-20	079SB-0107M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-21	079SB-0108M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-22	079SB-0110M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-23	079SB-0111M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-24	079SB-0112M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-25	079SB-0113M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-26	079SB-0114M-0001-SO	T	Solid	7471/DOD	240-81545
240-22660-27	079SB-0116M-0001-SO	T	Solid	7471/DOD	240-81545
Prep Batch: 240-81976					
LCS 240-81976/2-A	Lab Control Sample	T	Solid	7471A	
MB 240-81976/1-A	Method Blank	T	Solid	7471A	
240-22660-28	079SB-0117M-0001-SO	T	Solid	7471A	240-80914
Analysis Batch:240-82289					
LCS 240-81976/2-A	Lab Control Sample	T	Solid	7471/DOD	240-81976
MB 240-81976/1-A	Method Blank	T	Solid	7471/DOD	240-81976
240-22660-28	079SB-0117M-0001-SO	T	Solid	7471/DOD	240-81976

Report Basis
T = Total

Client: Environmental Chemical Corp. Job Number: 240-22660-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:240-80985					
240-22660-1	079SB-0076M-0001-SO	T	Solid	Moisture	
240-22660-2	079SB-0077M-0001-SO	T	Solid	Moisture	
240-22660-3	079SB-0079M-0001-SO	T	Solid	Moisture	
240-22660-4	079SB-0080M-0001-SO	T	Solid	Moisture	
240-22660-5	079SB-0081M-0001-SO	T	Solid	Moisture	
240-22660-5DU	Duplicate	T	Solid	Moisture	
240-22660-6	079SB-0082M-0001,0002-SO	T	Solid	Moisture	
240-22660-6DU	Duplicate	T	Solid	Moisture	
240-22660-7	079SB-0083M-0001-SO	T	Solid	Moisture	
240-22660-8	079SB-0084M-0001-SO	T	Solid	Moisture	
240-22660-9	079SB-0085M-0001-SO	T	Solid	Moisture	
240-22660-10	079SB-0086M-0001-SO	T	Solid	Moisture	
240-22660-11	079SB-0087M-0001-SO	T	Solid	Moisture	
240-22660-12	079SB-0088M-0001-SO	T	Solid	Moisture	
240-22660-13	079SB-0089M-0001-SO	T	Solid	Moisture	
240-22660-14	079SB-0090M-0001-SO	T	Solid	Moisture	
240-22660-15	079SB-0091M-0001,0002-SO	T	Solid	Moisture	
240-22660-15DU	Duplicate	T	Solid	Moisture	
240-22660-16	079SB-0092M-0001-SO	T	Solid	Moisture	
240-22660-17	079SB-0093M-0001-SO	T	Solid	Moisture	
240-22660-18	079SB-0095M-0001-SO	T	Solid	Moisture	
240-22660-19	079SB-0096-0001-SO	T	Solid	Moisture	
240-22660-20	079SB-0107M-0001-SO	T	Solid	Moisture	
240-22660-21	079SB-0108M-0001-SO	T	Solid	Moisture	
240-22660-22	079SB-0110M-0001-SO	T	Solid	Moisture	
240-22660-23	079SB-0111M-0001-SO	T	Solid	Moisture	
240-22660-24	079SB-0112M-0001-SO	T	Solid	Moisture	
240-22660-25	079SB-0113M-0001-SO	T	Solid	Moisture	
240-22660-26	079SB-0114M-0001-SO	T	Solid	Moisture	
240-22660-27	079SB-0116M-0001-SO	T	Solid	Moisture	
240-22660-28	079SB-0117M-0001-SO	T	Solid	Moisture	
240-22660-30	068SB-0057M-0001-SO	T	Solid	Moisture	

Report Basis
T = Total

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Laboratory Chronicle

Lab ID: 240-22660-1 **Client ID: 079SB-0076M-0001-SO**

Sample Date/Time: 03/22/2013 16:37 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-1-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-1-A		180-70561	180-68898	04/30/2013 22:44	1	TAL PIT	BR
P:7471A	240-22660-C-1-B		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	240-22660-C-1-B		240-81523	240-81357	04/11/2013 11:15	1	TAL CAN	AS
A:Moisture	240-22660-A-1		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-2 **Client ID: 079SB-0077M-0001-SO**

Sample Date/Time: 03/22/2013 16:37 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-2-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-2-A		180-70561	180-68898	04/30/2013 23:09	1	TAL PIT	BR
P:7471A	240-22660-C-2-B		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	240-22660-C-2-B		240-81523	240-81357	04/11/2013 11:17	1	TAL CAN	AS
A:Moisture	240-22660-A-2		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-3 **Client ID: 079SB-0079M-0001-SO**

Sample Date/Time: 03/22/2013 16:42 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-3-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-3-A		180-70561	180-68898	04/30/2013 23:17	1	TAL PIT	BR
P:7471A	240-22660-C-3-B		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	240-22660-C-3-B		240-81523	240-81357	04/11/2013 11:18	1	TAL CAN	AS
A:Moisture	240-22660-A-3		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-4 **Client ID: 079SB-0080M-0001-SO**

Sample Date/Time: 03/22/2013 16:42 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-4-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-4-A		180-70561	180-68898	04/30/2013 23:25	1	TAL PIT	BR
P:7471A	240-22660-C-4-B		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	240-22660-C-4-B		240-81523	240-81357	04/11/2013 11:20	1	TAL CAN	AS
A:Moisture	240-22660-A-4		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Laboratory Chronicle

Lab ID: 240-22660-5 **Client ID: 079SB-0081M-0001-SO**

Sample Date/Time: 03/22/2013 15:50 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-5-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-5-A		180-70561	180-68898	04/30/2013 23:34	1	TAL PIT	BR
P:7471A	240-22660-C-5-B		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	240-22660-C-5-B		240-81523	240-81357	04/11/2013 11:21	1	TAL CAN	AS
A:Moisture	240-22660-A-5		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-5 DU **Client ID: 079SB-0081M-0001-SO**

Sample Date/Time: 03/22/2013 15:50 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:Moisture	240-22660-A-5 DU		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-6 **Client ID: 079SB-0082M-0001,0002-SO**

Sample Date/Time: 03/22/2013 15:59 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-C-6-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-C-6-A		180-70561	180-68898	04/30/2013 23:42	1	TAL PIT	BR
P:7471A	240-22660-D-6-E		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	240-22660-D-6-E		240-81523	240-81357	04/11/2013 11:11	1	TAL CAN	AS
A:Moisture	240-22660-A-6		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-6 **Client ID: 079SB-0082M-0001,0002-SO**

Sample Date/Time: 03/22/2013 15:59 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-A-6-B MS		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-A-6-B MS		180-70561	180-68898	05/01/2013 00:06	1	TAL PIT	BR
P:7471A	240-22660-D-6-G MS		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	240-22660-D-6-G MS		240-81523	240-81357	04/11/2013 11:14	1	TAL CAN	AS

Lab ID: 240-22660-6 **Client ID: 079SB-0082M-0001,0002-SO**

Sample Date/Time: 03/22/2013 15:59 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-A-6-A DU		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-A-6-A DU		180-70561	180-68898	04/30/2013 23:58	1	TAL PIT	BR
P:7471A	240-22660-D-6-F DU		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	240-22660-D-6-F DU		240-81523	240-81357	04/11/2013 11:13	1	TAL CAN	AS
A:Moisture	240-22660-B-6 DU		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Laboratory Chronicle

Lab ID: 240-22660-6 SD **Client ID: 079SB-0082M-0001,0002-SO**

Sample Date/Time: 03/22/2013 15:59 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-C-6-A SD ^5		180-70561	180-68898	04/11/2013 11:49	5	TAL PIT	CH
A:6020/DOD	240-22660-C-6-A SD ^5		180-70561	180-68898	04/30/2013 23:50	5	TAL PIT	BR
P:3050B	240-22660-C-6-A PDS		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-C-6-A PDS		180-70561	180-68898	05/01/2013 00:15	1	TAL PIT	BR

Lab ID: 240-22660-7 **Client ID: 079SB-0083M-0001-SO**

Sample Date/Time: 03/22/2013 16:33 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-7-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-7-A		180-70561	180-68898	05/01/2013 00:23	1	TAL PIT	BR
P:7471A	240-22660-C-7-B		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	240-22660-C-7-B		240-81523	240-81357	04/11/2013 11:22	1	TAL CAN	AS
A:Moisture	240-22660-A-7		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-8 **Client ID: 079SB-0084M-0001-SO**

Sample Date/Time: 03/22/2013 16:45 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-8-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-8-A		180-70561	180-68898	05/01/2013 00:47	1	TAL PIT	BR
P:7471A	240-22660-C-8-B		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	240-22660-C-8-B		240-81523	240-81357	04/11/2013 11:27	1	TAL CAN	AS
A:Moisture	240-22660-A-8		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-9 **Client ID: 079SB-0085M-0001-SO**

Sample Date/Time: 03/22/2013 16:22 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-9-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-9-A		180-70561	180-68898	05/01/2013 00:56	1	TAL PIT	BR
P:7471A	240-22660-C-9-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-9-B		240-81798	240-81545	04/12/2013 12:30	1	TAL CAN	DH
A:Moisture	240-22660-A-9		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Laboratory Chronicle

Lab ID: 240-22660-10 **Client ID: 079SB-0086M-0001-SO**

Sample Date/Time: 03/23/2013 14:00 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-10-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-10-A		180-70561	180-68898	05/01/2013 01:04	1	TAL PIT	BR
P:7471A	240-22660-C-10-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-10-B		240-81798	240-81545	04/12/2013 12:15	1	TAL CAN	DH
A:Moisture	240-22660-A-10		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-11 **Client ID: 079SB-0087M-0001-SO**

Sample Date/Time: 03/23/2013 14:00 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-11-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-11-A		180-70561	180-68898	05/01/2013 01:12	1	TAL PIT	BR
P:7471A	240-22660-C-11-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-11-B		240-81798	240-81545	04/12/2013 12:38	1	TAL CAN	DH
A:Moisture	240-22660-A-11		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-12 **Client ID: 079SB-0088M-0001-SO**

Sample Date/Time: 03/23/2013 14:09 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-12-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-12-A		180-70561	180-68898	05/01/2013 01:20	1	TAL PIT	BR
P:7471A	240-22660-C-12-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-12-B		240-81798	240-81545	04/12/2013 12:16	1	TAL CAN	DH
A:Moisture	240-22660-A-12		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-13 **Client ID: 079SB-0089M-0001-SO**

Sample Date/Time: 03/23/2013 14:09 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-13-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-13-A		180-70561	180-68898	05/01/2013 01:28	1	TAL PIT	BR
P:7471A	240-22660-C-13-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-13-B		240-81798	240-81545	04/12/2013 12:48	1	TAL CAN	DH
A:Moisture	240-22660-A-13		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Laboratory Chronicle

Lab ID: 240-22660-14 **Client ID: 079SB-0090M-0001-SO**

Sample Date/Time: 03/23/2013 13:34 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-14-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	240-22660-B-14-A		180-70561	180-68898	05/01/2013 01:37	1	TAL PIT	BR
P:7471A	240-22660-C-14-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-14-B		240-81798	240-81545	04/12/2013 12:32	1	TAL CAN	DH
A:Moisture	240-22660-A-14		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-15 **Client ID: 079SB-0091M-0001,0002-SO**

Sample Date/Time: 03/23/2013 13:19 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-C-15-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-C-15-A		180-70561	180-68991	05/01/2013 02:26	1	TAL PIT	BR
P:7471A	240-22660-F-15-E		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-F-15-E		240-81798	240-81545	04/12/2013 11:57	1	TAL CAN	DH
A:Moisture	240-22660-A-15		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-15 **Client ID: 079SB-0091M-0001,0002-SO**

Sample Date/Time: 03/23/2013 13:19 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-A-15-B MS		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-A-15-B MS		180-70561	180-68991	05/01/2013 02:51	1	TAL PIT	BR
P:7471A	240-22660-F-15-G MS		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-F-15-G MS		240-81798	240-81545	04/12/2013 12:05	1	TAL CAN	DH

Lab ID: 240-22660-15 **Client ID: 079SB-0091M-0001,0002-SO**

Sample Date/Time: 03/23/2013 13:19 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-A-15-A DU		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-A-15-A DU		180-70561	180-68991	05/01/2013 02:42	1	TAL PIT	BR
P:7471A	240-22660-F-15-F DU		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-F-15-F DU		240-81798	240-81545	04/12/2013 11:58	1	TAL CAN	DH
A:Moisture	240-22660-B-15 DU		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Laboratory Chronicle

Lab ID: 240-22660-15 SD **Client ID: 079SB-0091M-0001,0002-SO**

Sample Date/Time: 03/23/2013 13:19 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-C-15-A SD ^5		180-70561	180-68991	04/12/2013 09:08	5	TAL PIT	CNS
A:6020/DOD	240-22660-C-15-A SD ^5		180-70561	180-68991	05/01/2013 02:34	5	TAL PIT	BR
P:3050B	240-22660-C-15-A PDS		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-C-15-A PDS		180-70561	180-68991	05/01/2013 02:59	1	TAL PIT	BR

Lab ID: 240-22660-16 **Client ID: 079SB-0092M-0001-SO**

Sample Date/Time: 03/23/2013 13:56 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-16-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-16-A		180-70561	180-68991	05/01/2013 02:01	1	TAL PIT	BR
P:7471A	240-22660-C-16-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-16-B		240-81798	240-81545	04/12/2013 12:35	1	TAL CAN	DH
A:Moisture	240-22660-A-16		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-17 **Client ID: 079SB-0093M-0001-SO**

Sample Date/Time: 03/23/2013 14:06 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-17-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-17-A		180-70561	180-68991	05/01/2013 03:07	1	TAL PIT	BR
P:7471A	240-22660-C-17-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-17-B		240-81798	240-81545	04/12/2013 12:12	1	TAL CAN	DH
A:Moisture	240-22660-A-17		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-18 **Client ID: 079SB-0095M-0001-SO**

Sample Date/Time: 03/23/2013 12:56 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-18-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-18-A		180-70561	180-68991	05/01/2013 03:15	1	TAL PIT	BR
P:7471A	240-22660-C-18-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-18-B		240-81798	240-81545	04/12/2013 12:18	1	TAL CAN	DH
A:Moisture	240-22660-A-18		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Laboratory Chronicle

Lab ID: 240-22660-19 **Client ID: 079SB-0096-0001-SO**

Sample Date/Time: 03/23/2013 13:35 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-19-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-19-A		180-70561	180-68991	05/01/2013 03:23	1	TAL PIT	BR
P:7471A	240-22660-C-19-A		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-19-A		240-81798	240-81545	04/12/2013 12:46	1	TAL CAN	DH
A:Moisture	240-22660-A-19		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-20 **Client ID: 079SB-0107M-0001-SO**

Sample Date/Time: 03/23/2013 11:20 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-20-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-20-A		180-70561	180-68991	05/01/2013 03:32	1	TAL PIT	BR
P:7471A	240-22660-C-20-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-20-B		240-81798	240-81545	04/12/2013 12:07	1	TAL CAN	DH
A:Moisture	240-22660-A-20		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-21 **Client ID: 079SB-0108M-0001-SO**

Sample Date/Time: 03/23/2013 11:20 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-21-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-21-A		180-70561	180-68991	05/01/2013 03:40	1	TAL PIT	BR
P:7471A	240-22660-C-21-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-21-B		240-81798	240-81545	04/12/2013 12:11	1	TAL CAN	DH
A:Moisture	240-22660-A-21		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-22 **Client ID: 079SB-0110M-0001-SO**

Sample Date/Time: 03/23/2013 11:37 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-22-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-22-A		180-70561	180-68991	05/01/2013 04:37	1	TAL PIT	BR
P:7471A	240-22660-C-22-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-22-B		240-81798	240-81545	04/12/2013 12:23	1	TAL CAN	DH
A:Moisture	240-22660-A-22		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

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Lab ID: 240-22660-23 **Client ID: 079SB-0111M-0001-SO**

Sample Date/Time: 03/23/2013 11:37 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-23-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-23-A		180-70561	180-68991	05/01/2013 04:46	1	TAL PIT	BR
P:7471A	240-22660-C-23-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-23-B		240-81798	240-81545	04/12/2013 12:44	1	TAL CAN	DH
A:Moisture	240-22660-A-23		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-24 **Client ID: 079SB-0112M-0001-SO**

Sample Date/Time: 03/23/2013 08:56 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-24-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-24-A		180-70561	180-68991	05/01/2013 04:54	1	TAL PIT	BR
P:7471A	240-22660-C-24-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-24-B		240-81798	240-81545	04/12/2013 12:40	1	TAL CAN	DH
A:Moisture	240-22660-A-24		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-25 **Client ID: 079SB-0113M-0001-SO**

Sample Date/Time: 03/23/2013 09:25 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-25-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-25-A		180-70561	180-68991	05/01/2013 05:02	1	TAL PIT	BR
P:7471A	240-22660-C-25-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-25-B		240-81798	240-81545	04/12/2013 12:28	1	TAL CAN	DH
A:Moisture	240-22660-A-25		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-26 **Client ID: 079SB-0114M-0001-SO**

Sample Date/Time: 03/23/2013 10:31 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-26-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-26-A		180-70561	180-68991	05/01/2013 05:10	1	TAL PIT	BR
P:7471A	240-22660-C-26-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-26-B		240-81798	240-81545	04/12/2013 12:09	1	TAL CAN	DH
A:Moisture	240-22660-A-26		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

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Lab ID: 240-22660-27 **Client ID:** 079SB-0116M-0001-SO

Sample Date/Time: 03/23/2013 10:55 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-27-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-27-A		180-70561	180-68991	05/01/2013 05:19	1	TAL PIT	BR
P:7471A	240-22660-C-27-B		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	240-22660-C-27-B		240-81798	240-81545	04/12/2013 12:21	1	TAL CAN	DH
A:Moisture	240-22660-A-27		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-28 **Client ID:** 079SB-0117M-0001-SO

Sample Date/Time: 03/23/2013 11:16 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	240-22660-B-28-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	240-22660-B-28-A		180-70561	180-68991	05/01/2013 05:27	1	TAL PIT	BR
P:7471A	240-22660-C-28-B		240-82289	240-81976	04/15/2013 16:00	1	TAL CAN	AS
A:7471/DOD	240-22660-C-28-B		240-82289	240-81976	04/16/2013 12:19	1	TAL CAN	AS
A:Moisture	240-22660-A-28		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: 240-22660-30 **Client ID:** 068SB-0057M-0001-SO

Sample Date/Time: 03/29/2013 11:26 Received Date/Time: 04/02/2013 08:54

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5035	240-22660-B-30-A		240-80741	240-80275	03/29/2013 19:34	1	TAL CAN	LM
A:8260B/DoD	240-22660-B-30-A		240-80741	240-80275	04/05/2013 20:29	1	TAL CAN	SM
A:Moisture	240-22660-D-30		240-80985		04/08/2013 11:14	1	TAL CAN	JS

Lab ID: MB **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:8260B/DoD	MB 240-80741/30		240-80741		04/05/2013 13:05	1	TAL CAN	SM
P:3050B	MB 180-68898/1-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	MB 180-68898/1-A		180-70561	180-68898	04/30/2013 21:31	1	TAL PIT	BR
P:3050B	MB 180-68991/1-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	MB 180-68991/1-A		180-70561	180-68991	05/01/2013 01:45	1	TAL PIT	BR
P:7471A	MB 240-81357/1-A		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	MB 240-81357/1-A		240-81523	240-81357	04/11/2013 11:05	1	TAL CAN	AS
P:7471A	MB 240-81545/1-A		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	MB 240-81545/1-A		240-81798	240-81545	04/12/2013 11:53	1	TAL CAN	DH
P:7471A	MB 240-81976/1-A		240-82289	240-81976	04/15/2013 16:00	1	TAL CAN	AS
A:7471/DOD	MB 240-81976/1-A		240-82289	240-81976	04/16/2013 12:04	1	TAL CAN	AS

Client: Environmental Chemical Corp. Job Number: 240-22660-1

Laboratory Chronicle

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:8260B/DoD	LCS 240-80741/6		240-80741		04/05/2013 12:04	1	TAL CAN	SM
P:3050B	LCS 180-68898/2-A		180-70561	180-68898	04/11/2013 11:49	1	TAL PIT	CH
A:6020/DOD	LCS 180-68898/2-A		180-70561	180-68898	04/30/2013 21:39	1	TAL PIT	BR
P:3050B	LCS 180-68991/2-A		180-70561	180-68991	04/12/2013 09:08	1	TAL PIT	CNS
A:6020/DOD	LCS 180-68991/2-A		180-70561	180-68991	05/01/2013 01:53	1	TAL PIT	BR
P:7471A	LCS 240-81357/2-A		240-81523	240-81357	04/10/2013 14:15	1	TAL CAN	DE
A:7471/DOD	LCS 240-81357/2-A		240-81523	240-81357	04/11/2013 11:10	1	TAL CAN	AS
P:7471A	LCS 240-81545/2-A		240-81798	240-81545	04/11/2013 15:00	1	TAL CAN	DE
A:7471/DOD	LCS 240-81545/2-A		240-81798	240-81545	04/12/2013 11:55	1	TAL CAN	DH
P:7471A	LCS 240-81976/2-A		240-82289	240-81976	04/15/2013 16:00	1	TAL CAN	AS
A:7471/DOD	LCS 240-81976/2-A		240-82289	240-81976	04/16/2013 12:06	1	TAL CAN	AS

Lab ID: MRL **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:8260B/DoD	MRL 240-80741/5		240-80741		04/05/2013 11:42	1	TAL CAN	SM
A:8260B/DoD	MRL 240-80741/28		240-80741		04/05/2013 20:51	1	TAL CAN	SM

Lab References:

TAL CAN = TestAmerica Canton

TAL PIT = TestAmerica Pittsburgh

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MTAQUAREGIA_00490	04/10/13	04/10/13	NA, Lot NA	360 mL	MTHCL_00057	270 mL	Hydrogen Chloride	0.75 mL/mL
					MTHNO3_00045	90 mL	Nitric acid	0.25 mL/mL
.MTHCL_00057	03/22/15		MACRON, Lot 0000013500		(Purchased Reagent)		Hydrogen Chloride	100 %
.MTHNO3_00045	03/14/15		Macron Chemicals, Lot L10022		(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_00491	04/11/13	04/11/13	NA, Lot NA	360 mL	MTHCL_00057	270 mL	Hydrogen Chloride	0.75 mL/mL
					MTHNO3_00045	90 mL	Nitric acid	0.25 mL/mL
.MTHCL_00057	03/22/15		MACRON, Lot 0000013500		(Purchased Reagent)		Hydrogen Chloride	100 %
.MTHNO3_00045	03/14/15		Macron Chemicals, Lot L10022		(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_00492	04/15/13	04/15/13	NA, Lot NA	520 mL	MTTMHCL_00002	390 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00002	130 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00002	02/06/15		Fisher, Lot 4112100		(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00002	11/28/14		Fisher, Lot 1112110		(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_00493	04/16/13	04/16/13	NA, Lot NA	360 mL	MTTMHCL_00002	270 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00002	90 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00002	02/06/15		Fisher, Lot 4112100		(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00002	11/28/14		Fisher, Lot 1112110		(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_00351	04/10/13	04/10/13	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00008	1 mL	Mercury	100 ug/L
					MTHNO3_00045	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00008	03/14/14		High Purity, Lot 1306402		(Purchased Reagent)		Mercury	10 ug/mL
.MTHNO3_00045	03/14/15		Macron Chemicals, Lot L10022		(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_00352	04/11/13	04/11/13	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00008	1 mL	Mercury	100 ug/L
					MTHNO3_00045	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00008	03/14/14		High Purity, Lot 1306402		(Purchased Reagent)		Mercury	10 ug/mL
.MTHNO3_00045	03/14/15		Macron Chemicals, Lot L10022		(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_00354	04/15/13	04/15/13	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00008	1 mL	Mercury	100 ug/L
					MTHNO3_00045	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00008	03/14/14		High Purity, Lot 1306402		(Purchased Reagent)		Mercury	10 ug/mL
.MTHNO3_00045	03/14/15		Macron Chemicals, Lot L10022		(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_00355	04/16/13	04/16/13	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00008	1 mL	Mercury	100 ug/L
					MTTMHNO3_00002	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00008	03/14/14		High Purity, Lot 1306402		(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00002	11/28/14		Fisher, Lot 1112110		(Purchased Reagent)		Nitric acid	100 %
MTHgStd_00009	03/08/14		Plasma Pure, Lot 1277101		(Purchased Reagent)		Mercury	1 ug/mL
MTKMN04W_00042	04/05/15	04/05/13	DIWATER, Lot DIWATER	2 L	MTKMN04_00013	100 g	Potassium Permanganate	0.05 g/g
.MTKMN04_00013	10/05/17		Fisher, Lot 121666		(Purchased Reagent)		Potassium Permanganate	1 g/g
VM250SS_00010	06/07/13	12/07/12	MEOH, Lot 123279	100 mL	VMCUS8125_00007	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.VMCUS8125_00007	10/31/14		Ultra Scientific, Lot CG-3334		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	25000 ug/mL
							4-Bromofluorobenzene (Surr)	25000 ug/mL
							Dibromofluoromethane (Surr)	25000 ug/mL
							Toluene-d8 (Surr)	25000 ug/mL
vm50ss_00101	04/08/13	04/01/13	MEOH, Lot na	2 mL	vm50ss_stk_00049	2 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00049	06/15/13	03/15/13	MEOH, Lot 124454	50 mL	VMstm530_00019	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VMstm530_00019	05/31/15	Ultra Scientific, Lot CJ-1280			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VM567649_00002	02/28/18	restek, Lot A093504			(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VMCGAS_00115	04/01/13	03/25/13	MEOH, Lot 124454	10 mL	VMDWM544_00012	250 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMDWM544_00012	06/30/15	ULTRA, Lot CJ-1658			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
VMCGAS_00116	04/09/13	04/02/13	MEOH, Lot 124454	10 mL	VMDWM544_00012	250 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMDWM544_00012	06/30/15	ULTRA, Lot CJ-1658			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
VMPRIMARY_00174	04/06/13	03/30/13	MEOH, Lot na	1 mL	VMCUS7814_00021	1 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloroethene, Total	100 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	150 ug/mL
.VMCUS7814_00021	01/31/15	Ultra Scientific, Lot CJ-4366			(Purchased Reagent)		1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloroethene, Total	100 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	150 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMPRIMARY_00175	04/09/13	04/02/13	MEOH, Lot na	1 mL	VMCUS7814_00021	1 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloroethene, Total	100 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Methylene Chloride	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	150 ug/mL
.VMCUS7814_00021	01/31/15	Ultra Scientific, Lot CJ-4366			(Purchased Reagent)		1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloroethene, Total	100 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Methylene Chloride	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	150 ug/mL
VMRGAS_00002	04/08/14	04/01/13	MEOH, Lot 124454	10 mL	vm567645_00002	250 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm567645_00002	02/28/15	Restek, Lot A093341			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
VMRPRIMW_00001	04/08/13	04/01/13	MEOH, Lot 124454	1 mL	VMRPRIM_00003	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloroethene, Total	100 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
							2-Butanone (MEK)	100 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Acrolein	500 ug/mL
							Vinyl acetate	50 ug/mL
.VMRPRIM_00003	06/30/13	04/01/13	MEOH, Lot 124454	10 mL	VM567641_00002	250 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloroethene, Total	100 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
					VM567642_00002	100 uL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM567643_00002	500 uL	2-Chloroethyl vinyl ether	100 ug/mL
					VM567644_00002	1 mL	Acrolein	500 ug/mL
					VM567646_00002	125 uL	Vinyl acetate	50 ug/mL
..VM567641_00002	02/29/16		restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloroethene, Total	4000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
..VM567642_00002	02/29/16		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VM567643_00002	02/29/16		restek, Lot A093368		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
..VM567644_00002	06/30/13		Restek, Lot A093659		(Purchased Reagent)		Acrolein	5000 ug/mL
..VM567646_00002	08/31/13		Restek, Lot A093363		(Purchased Reagent)		Vinyl acetate	4000 ug/mL
VMSUPPW_00119	04/01/13	03/25/13	MEOH, Lot na	1 mL	VMSUPP_00019	1 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
.VMSUPP_00019	04/30/13	01/31/13	MEOH, Lot 124454	50 mL	VM30006_00004	1 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
..VM30006_00004	11/30/13		Restek, Lot A076449		(Purchased Reagent)		2-Butanone (MEK)	5000 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	5000 ug/mL
VMSUPPW_00120	04/09/13	04/02/13	MEOH, Lot na	1 mL	VMSUPP_00019	1 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
.VMSUPP_00019	04/30/13	01/31/13	MEOH, Lot 124454	50 mL	VM30006_00004	1 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
..VM30006_00004	11/30/13		Restek, Lot A076449		(Purchased Reagent)		2-Butanone (MEK)	5000 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
CCVHL1_00002	05/01/13	04/10/13	2% Nitric Acid, Lot 12756	50 mL	MCGAL10-1_00004	2.5 mL	Aluminum	500 ppm
					MCGBA1-1_00003	0.75 mL	Barium	15 ppm
					MCGCR(3)1-1_00003	1 mL	Chromium	20 ppm
					MCGCU1-1_00003	1 mL	Copper	20 ppm
					MCGFE10-1_00003	2.5 mL	Iron	500 ppm
					MCGMN1-1_00003	1 mL	Manganese	20 ppm
					MCGNI1-1_00003	0.5 mL	Nickel	10 ppm
					MCGPB1-1_00003	1 mL	Lead	20 ppm
					MCGZN1-1_00003	1 mL	Zinc	20 ppm
.MCGAL10-1_00004	12/01/13	Inorganic Ventures, Lot E2-AL04115			(Purchased Reagent)		Aluminum	10000 ppm
.MCGBA1-1_00003	12/01/13	Inorganic Ventures, Lot D2-BA02066			(Purchased Reagent)		Barium	1000 ppm
.MCGCR(3)1-1_00003	12/01/13	Inorganic Ventures, Lot E2-CR03060			(Purchased Reagent)		Chromium	1000 ppm
.MCGCU1-1_00003	12/01/13	Inorganic Ventures, Lot D2-CU02130			(Purchased Reagent)		Copper	1000 ppm
.MCGFE10-1_00003	06/01/13	Inorganic Ventures, Lot E2-FE03145			(Purchased Reagent)		Iron	10000 ppm
.MCGMN1-1_00003	08/01/13	Inorganic Ventures, Lot E2-MN02093			(Purchased Reagent)		Manganese	1000 ppm
.MCGNI1-1_00003	12/01/13	Inorganic Ventures, Lot D2-NI02074			(Purchased Reagent)		Nickel	1000 ppm
.MCGPB1-1_00003	05/01/13	Inorganic Ventures, Lot F2-PB03035			(Purchased Reagent)		Lead	1000 ppm
.MCGZN1-1_00003	12/01/13	Inorganic Ventures, Lot D2-ZN02075			(Purchased Reagent)		Zinc	1000 ppm
CCVHL2_00002	05/01/13	04/10/13	2% Nitric Acid, Lot 12756	50 mL	MCGCA10-1_00003	5 mL	Calcium	1000 ppm
					MCGK10-1_00003	2.5 mL	Potassium	500 ppm
					MCGMG10-1_00004	5 mL	Magnesium	1000 ppm
					MCGNA10-1_00003	2.5 mL	Sodium	500 ppm
.MCGCA10-1_00003	06/01/13	Inorganic Ventures, Lot F2-CA04043			(Purchased Reagent)		Calcium	10000 ppm
.MCGK10-1_00003	05/01/13	Inorganic Ventures, Lot F2-K03029			(Purchased Reagent)		Potassium	10000 ppm
.MCGMG10-1_00004	12/01/13	Inorganic Ventures, Lot E2-MG03106			(Purchased Reagent)		Magnesium	10000 ppm
.MCGNA10-1_00003	08/01/13	Inorganic Ventures, Lot E2-NA03095			(Purchased Reagent)		Sodium	10000 ppm
MCCV1X_00041	05/22/13	04/22/13	2% Nitric Acid, Lot K35N55	500 mL	MCALSPECAREV_00004	10 mL	Aluminum	0.5 ppm
							Arsenic	0.1 ppm
							Barium	0.1 ppm
							Beryllium	0.1 ppm
							Cadmium	0.1 ppm
							Calcium	50 ppm
							Chromium	0.1 ppm
							Cobalt	0.1 ppm
							Copper	0.1 ppm
							Iron	25 ppm
							Lead	0.1 ppm
							Magnesium	50 ppm
							Manganese	0.5 ppm
							Nickel	0.1 ppm
							Potassium	50 ppm
							Selenium	0.1 ppm
							Silver	0.1 ppm
							Sodium	50 ppm

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Thallium	0.1 ppm
							Vanadium	0.1 ppm
							Zinc	0.1 ppm
					MCALSPECB_00005	10 mL	Antimony	0.1 ppm
.MCALSPECAREV_00004	04/01/14	Inorganic Ventures, Lot F2-MEB415031			(Purchased Reagent)		Aluminum	25 ppm
							Arsenic	5 ppm
							Barium	5 ppm
							Beryllium	5 ppm
							Cadmium	5 ppm
							Calcium	2500 ppm
							Chromium	5 ppm
							Cobalt	5 ppm
							Copper	5 ppm
							Iron	1250 ppm
							Lead	5 ppm
							Magnesium	2500 ppm
							Manganese	25 ppm
							Nickel	5 ppm
							Potassium	2500 ppm
							Selenium	5 ppm
							Silver	5 ppm
							Sodium	2500 ppm
							Thallium	5 ppm
							Vanadium	5 ppm
							Zinc	5 ppm
.MCALSPECB_00005	04/01/14	Inorganic Ventures, Lot F2-MEB415032			(Purchased Reagent)		Antimony	5 ppm
MCRIX_00032	05/26/13	04/26/13	HNO3, Lot K09N65	250 mL	MMSCRI-1B_00002	1 mL	Aluminum	0.03 ppm
							Arsenic	0.001 ppm
							Barium	0.01 ppm
							Beryllium	0.001 ppm
							Cadmium	0.001 ppm
							Calcium	0.1 ppm
							Chromium	0.002 ppm
							Cobalt	0.0005 ppm
							Copper	0.002 ppm
							Iron	0.05 ppm
							Lead	0.001 ppm
							Magnesium	0.1 ppm
							Manganese	0.005 ppm
							Nickel	0.001 ppm
							Potassium	0.1 ppm
							Selenium	0.005 ppm
							Silver	0.001 ppm
							Sodium	0.1 ppm
							Thallium	0.001 ppm
							Vanadium	0.001 ppm
							Zinc	0.005 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MMSCRI-2_00004	1 mL	Antimony	0.002 ppm
.MMSCRI-1B_00002	10/01/13	Inorganic Ventures, Lot F2-MEB439152			(Purchased Reagent)		Aluminum	7.5 ppm
							Arsenic	0.25 ppm
							Barium	2.5 ppm
							Beryllium	0.25 ppm
							Cadmium	0.25 ppm
							Calcium	25 ppm
							Chromium	0.5 ppm
							Cobalt	0.125 ppm
							Copper	0.5 ppm
							Iron	12.5 ppm
							Lead	0.25 ppm
							Magnesium	25 ppm
							Manganese	1.25 ppm
							Nickel	0.25 ppm
							Potassium	25 ppm
							Selenium	1.25 ppm
							Silver	0.25 ppm
							Sodium	25 ppm
							Thallium	0.25 ppm
							Vanadium	0.25 ppm
							Zinc	1.25 ppm
.MMSCRI-2_00004	10/01/13	Inorganic Ventures, Lot F2-MEB436153			(Purchased Reagent)		Antimony	0.5 ppm
MICSABX_00033	05/07/13	04/07/13	2% Nitric Acid, Lot J38N82	100 mL	M6020ICS-0A_00003	10 mL	Aluminum	100 ppm
							Calcium	100 ppm
							Iron	100 ppm
							Magnesium	100 ppm
							Mo	2 ppm
							Potassium	100 ppm
							Sodium	100 ppm
							Ti	2 ppm
					M6020ICS-0B_00004	1 mL	Arsenic	0.02 ppm
							Cadmium	0.02 ppm
							Chromium	0.02 ppm
							Cobalt	0.02 ppm
							Copper	0.02 ppm
							Manganese	0.0225 ppm
							Nickel	0.02 ppm
							Silver	0.02 ppm
							Zinc	0.025 ppm
					MMSICSAB-1_00006	0.2 mL	Barium	0.02 ppm
							Beryllium	0.02 ppm
							Lead	0.02 ppm
							Sr	0.025 ppm
							Thallium	0.02 ppm
							Vanadium	0.02 ppm
					MMSICSAB-2_00005	0.2 mL	Antimony	0.02 ppm

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							B	0.05 ppm
							Selenium	0.05 ppm
							Si	0.5 ppm
							Sn	0.1 ppm
.M6020ICS-0A_00003	11/01/13	Inorganic Ventures, Lot F2-MEB418129			(Purchased Reagent)		Aluminum	1000 ppm
							Calcium	1000 ppm
							Iron	1000 ppm
							Magnesium	1000 ppm
							Mo	20 ppm
							Potassium	1000 ppm
							Sodium	1000 ppm
							Ti	20 ppm
.M6020ICS-0B_00004	11/01/13	Inorganic Ventures, Lot F2-MEB415126			(Purchased Reagent)		Arsenic	2 ppm
							Cadmium	2 ppm
							Chromium	2 ppm
							Cobalt	2 ppm
							Copper	2 ppm
							Manganese	2.25 ppm
							Nickel	2 ppm
							Silver	2 ppm
							Zinc	2.5 ppm
.MMSICSAB-1_00006	04/01/14	Inorganic Ventures, Lot F2-MEB415033			(Purchased Reagent)		Barium	10 ppm
							Beryllium	10 ppm
							Lead	10 ppm
							Sr	12.5 ppm
							Thallium	10 ppm
							Vanadium	10 ppm
.MMSICSAB-2_00005	04/01/14	Inorganic Ventures, Lot G2-MEB467043			(Purchased Reagent)		Antimony	10 ppm
							B	25 ppm
							Selenium	25 ppm
							Si	250 ppm
							Sn	50 ppm
MICSAX_00029	05/07/13	04/07/13	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00003	10 mL	Aluminum	100 ppm
							Calcium	100 ppm
							Iron	100 ppm
							Magnesium	100 ppm
							Mo	2 ppm
							Potassium	100 ppm
							Sodium	100 ppm
							Ti	2 ppm
.M6020ICS-0A_00003	11/01/13	Inorganic Ventures, Lot F2-MEB418129			(Purchased Reagent)		Aluminum	1000 ppm
							Calcium	1000 ppm
							Iron	1000 ppm
							Magnesium	1000 ppm
							Mo	20 ppm
							Potassium	1000 ppm
							Sodium	1000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ti	20 ppm
MICVX_00003	04/17/13	03/17/13	2% Nitric Acid, Lot K09N65	250 mg/L	MICPMSICV_00013	10 mg/L	Aluminum	0.4 mg/L
							Antimony	0.08 mg/L
							Arsenic	0.08 mg/L
							Barium	0.08 mg/L
							Beryllium	0.08 mg/L
							Cadmium	0.08 mg/L
							Calcium	40 mg/L
							Chromium	0.08 mg/L
							Cobalt	0.08 mg/L
							Copper	0.08 mg/L
							Iron	20 mg/L
							Lead	0.08 mg/L
							Magnesium	40 mg/L
							Manganese	0.4 mg/L
							Nickel	0.08 mg/L
							Potassium	40 mg/L
							Selenium	0.08 mg/L
							Silver	0.08 mg/L
							Sodium	40 mg/L
							Thallium	0.08 mg/L
							Vanadium	0.08 mg/L
							Zinc	0.08 mg/L
.MICPMSICV_00013	12/30/13	SPEX CertiPrep, Lot 17-147CR			(Purchased Reagent)		Aluminum	10 ppm
							Antimony	2 ppm
							Arsenic	2 ppm
							Barium	2 ppm
							Beryllium	2 ppm
							Cadmium	2 ppm
							Calcium	1000 ppm
							Chromium	2 ppm
							Cobalt	2 ppm
							Copper	2 ppm
							Iron	500 ppm
							Lead	2 ppm
							Magnesium	1000 ppm
							Manganese	10 ppm
							Nickel	2 ppm
							Potassium	1000 ppm
							Selenium	2 ppm
							Silver	2 ppm
							Sodium	1000 ppm
							Thallium	2 ppm
							Vanadium	2 ppm
							Zinc	2 ppm
MSTD2X_00019	05/01/13	04/01/13	DI Water, Lot K35N55	250 mL	MCALSPECAREV_00004	10 mg/L	Aluminum	1 ppm

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Arsenic	0.2 ppm
							Barium	0.2 ppm
							Beryllium	0.2 ppm
							Cadmium	0.2 ppm
							Calcium	100 ppm
							Chromium	0.2 ppm
							Cobalt	0.2 ppm
							Copper	0.2 ppm
							Iron	50 ppm
							Lead	0.2 ppm
							Magnesium	100 ppm
							Manganese	1 ppm
							Nickel	0.2 ppm
							Potassium	100 ppm
							Selenium	0.2 ppm
							Silver	0.2 ppm
							Sodium	100 ppm
							Thallium	0.2 ppm
							Vanadium	0.2 ppm
							Zinc	0.2 ppm
.MCALSPECAREV_00004	04/01/14	Inorganic Ventures, Lot F2-MEB415031			(Purchased Reagent)		Aluminum	25 ppm
							Arsenic	5 ppm
							Barium	5 ppm
							Beryllium	5 ppm
							Cadmium	5 ppm
							Calcium	2500 ppm
							Chromium	5 ppm
							Cobalt	5 ppm
							Copper	5 ppm
							Iron	1250 ppm
							Lead	5 ppm
							Magnesium	2500 ppm
							Manganese	25 ppm
							Nickel	5 ppm
							Potassium	2500 ppm
							Selenium	5 ppm
							Silver	5 ppm
							Sodium	2500 ppm
							Thallium	5 ppm
							Vanadium	5 ppm
							Zinc	5 ppm
MSTD3X_00020	05/01/13	04/01/13	2% Nitric Acid, Lot K35N55	250 mL	MCALSPECB_00005	10 mg/L	Antimony	0.2 ppm
.MCALSPECB_00005	04/01/14	Inorganic Ventures, Lot F2-MEB415032			(Purchased Reagent)		Antimony	5 ppm
MTAPITTICPMS_00011	02/01/14	INORGANIC VENTURES, Lot G2-MEB455121			(Purchased Reagent)		Aluminum	200 ug/mL
							Arsenic	4 ug/mL
							Barium	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Chromium	20 ug/mL
							Cobalt	50 ug/mL
							Copper	25 ug/mL
							Iron	100 ug/mL
							Lead	2 ug/mL
							Manganese	50 ug/mL
							Nickel	50 ug/mL
							Selenium	1 ug/mL
							Silver	5 ug/mL
							Thallium	5 ug/mL
							Vanadium	50 ug/mL
							Zinc	50 ug/mL
MTAPITTICPMS_00014	02/01/14	INORGANIC VENTURES, Lot E2-MEB379097			(Purchased Reagent)		Aluminum	200 ug/mL
							Arsenic	4 ug/mL
							B	100 ug/mL
							Barium	200 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Chromium	20 ug/mL
							Cobalt	50 ug/mL
							Copper	25 ug/mL
							Iron	100 ug/mL
							Lead	2 ug/mL
							Manganese	50 ug/mL
							Nickel	50 ug/mL
							Selenium	1 ug/mL
							Silver	5 ug/mL
							Sr	100 ug/mL
							Thallium	5 ug/mL
							Vanadium	50 ug/mL
							Zinc	50 ug/mL
MTAPITTMSA_00014	03/01/14	INORGANIC VENTURES, Lot G2-MEB458093			(Purchased Reagent)		Calcium	5000 ug/mL
							Magnesium	5000 ug/mL
							Potassium	5000 ug/mL
							Sodium	5000 ug/mL
MTAPITTMSC_00018	03/01/14	Inorganic Ventures, Lot G2-MEB458094			(Purchased Reagent)		Antimony	50 ug/mL
MTAPITTMSC_00020	03/01/14	Inorganic Ventures, Lot E2-MEB379096			(Purchased Reagent)		Antimony	50 ug/mL
							Mo	100 ug/mL
							Si	1000 ug/mL
							SiO2	2140 ug/mL
							Sn	200 ug/mL
							Ti	100 ug/mL

Certificate of Analysis

Rec. 3-18-13 DE

Product Description:

Name:	Mercury	Source Material:	Mercury Metal
Part Number:	**10 33-1**	Material Purity:	99.9998%
Lot Number:	**1306402**	Matrix:	5% (v/v) HNO_3

Certified Value: 10.0 µg/mL ± 0.1 µg/mL

The Certified value is based on gravimetric and volumetric preparation, and confirmed against SRM 3133 (lot number 061204) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Preparation Information:

The standard solution is prepared using high purity materials and assayed by analytical methods for conformity prior to use. This standard was prepared using the methods developed at NIST for SRM Spectrometric Standard Solutions under appropriate laboratory conditions.

Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 mega ohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
   The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.
b. **Volumetric Device**
   The calibration of volumetric vessels is checked annually using the NBS 602 method.
c. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.
d. **Calibration Standards:**
   The Calibration Standard is directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**March 5, 2013**
Shipped Date:	**March 14, 2013**
Expiration Date:	**March 14, 2013**
Certificate Issue Date:	**March 7, 2013**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Vanny T. Yib,
Inorganic Laboratory Manager

Angel Sellers
Quality Manager

PLASMA-PURE ™

Standard Certificate

Catalog Number: 610-0000 **Lot Number:** 1287101

Starting Material: 99.9999% purity Hg metal **Diluent/Matrix:** 2% HCl

Preparation Date: Mar-13 **Expiration Date:** Mar-14

Element	Concentration
Hg	1.00 ± 0.02 µg/ml

Received 3/8/2013
ADS

Residual Impurities *	Concentration
None Detected	

* **Impurities were determined via ICP Emission Spectroscopy. Only elements detected are reported.**

Traceability

1. **This standard is certified using wet chemistry assay procedures and/or plasma emission spectroscopy, traceable to primary or well-characterized secondary standards. Traceable to:** NIST SRM 3133, Hg Lot#991304
2. **Analytical balances are routinely calibrated using NIST weight sets.**

Certification

Leeman Labs, Inc. certifies that PLASMA-PURE Standards have been formulated to the concentrations listed above (±0.5% of reported value). This certification does not apply and will be considered null and void if PLASMA-PURE Standards are used in a manner or in an environment not consistent with their intended purpose or are modified by the Customer in any manner.

Limitations

THE ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MECHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Limitation of Liability

In no event shall Leeman Labs, Inc. be liable for any indirect, incidental, special, or consequential damages, including loss of profits, revenue, or used incurred by Customer or any third party, whether in an action in contract or tort. Leeman Labs Inc's liability for damages hereunder shall in no event exceed the amounts paid for the PLASMA-PURE Standards.

QC Analyst:

Date: March 5, 2013

ISO 9001:2000 QUALITY

TELEDYNE *Leeman Labs*
A Teledyne Technologies Company
6 Wentworth Drive . Hudson, NH 03051
Tel: 603.886.8400 Fax: 603.886.9141

3/15/11
TS

RESTEK

Certificate of Analysis

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

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. : 30006 **Lot No.:** A076449

Description : VOA Calibration Mix #1

Expiration Date[1]**:** November 2013 **Storage:** Freezer

Elution Order	Compound	CAS #	Percent Purity [2]	Concentration [3] (weight/volume)	% Uncertainty [4] (95% C.L.; K=2)
1	Acetone	67-64-1	99%	5,000.000 ug/ml	+/-0.58 %
2	2-Butanone (MEK)	78-93-3	99%	5,000.000 ug/ml	+/-0.58 %
3	4-Methyl-2-pentanone (MIBK)	108-10-1	99%	5,000.000 ug/ml	+/-0.58 %
4	2-Hexanone	591-78-6	99%	5,000.000 ug/ml	+/-0.58 %
Solvent:	P&T Methanol/Water (90:10)	67-56-1/7732-18-5	99%		

Column:
105m x .53mm x 3.0um
Rtx-502.2 (cat.#10910)

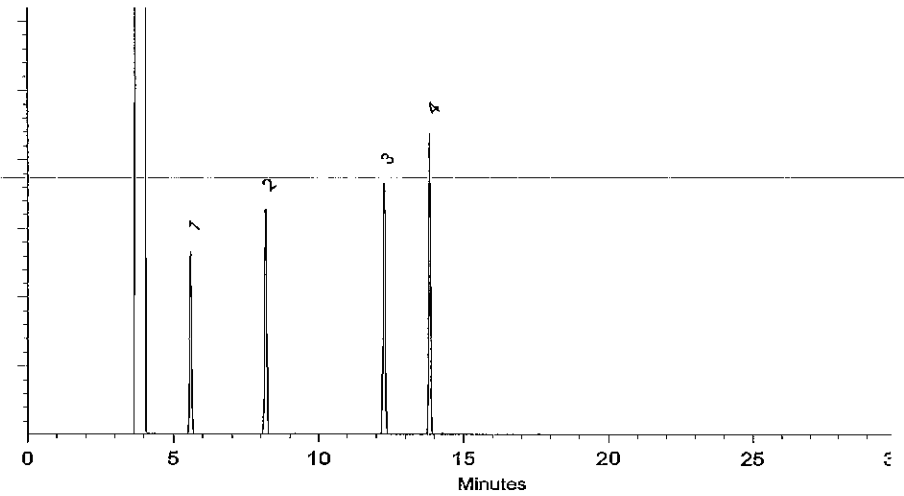
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



Sara Eyster QA Analyst **Date Passed:** 25-Aug-2010 **Balance:** 1128353505

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

1 Expiration date of the unopened ampule stored at the recommended storage condition.

2A Purity is determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value is rounded to the nearest whole number. Chemical identity is confirmed using GC/MS. See data pack or contact provider for further details.

2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.

2C The following types of compounds will have a listed purity of less than 99%: Aldehyde/Ketone-DNPH compounds, Bromides, Chlorides, HCL salts, HBR salts, sulfates, hydrates, and other compounds as necessary. The listed purity is a correction factor that is equivalent to the percentage of parent compound in the molecule. This correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution. The concentration listed on the certificate is the concentration of the parent compound in the solution.

2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.

3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels) and/or class A glassware used for dilutions.

4 Uncertainties determined using data for balances and glassware from measurement systems analysis methodology, raw material purity, and, when significant, equipment tolerances or calibration results.

RESTEK

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

www.restek.com

4

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. : 567641 **Lot No.:** A093581

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 **Purity** 97%	1,999.9 µg/mL	+/- 11.6279 +/- 44.2519 +/- 44.4323	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 **Purity** 99%	20,000.0 µg/mL	+/- 116.2756 +/- 442.5291 +/- 444.3332	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4 **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Methyl acetate **CAS #** 79-20-9 **Purity** 99%	10,000.0 µg/mL	+/- 58.1378 +/- 221.2646 +/- 222.1666	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Carbon disulfide **CAS #** 75-15-0 **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

29	Methylcyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-87-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
30	1,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 78-87-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
31	1,4-Dioxane	40,000.0	µg/mL	+/-	232.5513	µg/mL	Gravimetric
	CAS # 123-91-1			+/-	885.0582	µg/mL	Unstressed
	Purity 99%			+/-	888.6665	µg/mL	Stressed
32	Dibromomethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-95-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
33	bromodichloromethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-27-4			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
34	cis-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 10061-01-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
35	Toluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-88-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
36	Ethyl methacrylate	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 97-63-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
37	trans-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 10061-02-6			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
38	1,1,2-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-00-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
39	1,3-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-28-9			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
40	Tetrachloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 127-18-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
41	dibromochloromethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 124-48-1			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
42	1,2-Dibromoethane (EDB)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-93-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
43	Chlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-90-7			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
44	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 630-20-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
45	m-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-38-3			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
46	p-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-42-3			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
47	o-Xylene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-47-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

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

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

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

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

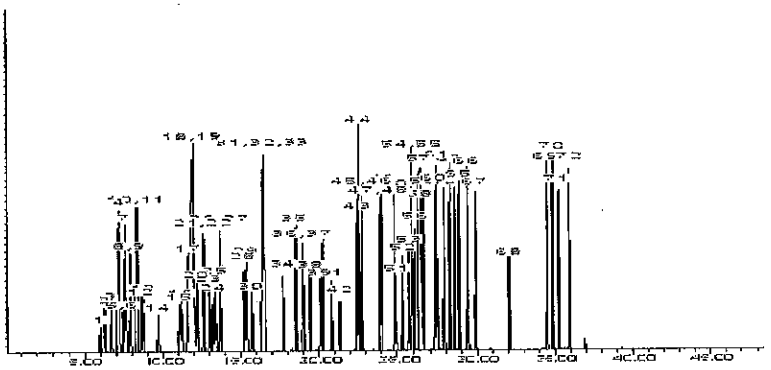
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** B251644995

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

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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. : 567642 **Lot No.:** A093365

Description : 8260 List 1 / Std #2 Ketones

8260 List 1 / Std #2 Ketones 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

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

CERTIFIED VALUES

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

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

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

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

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

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

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

CERTIFIED VALUES

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

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

Tech Tips:

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

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

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Catalog No. : 567644 **Lot No.:** A093659

Description : 8260 List 1 / Std # 5 Acrolein

8260 List 1 / Std # 5 Acrolein 5000 ug/ml, Water, 1 ml/ampul

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

Expiration Date : June 2013 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	5,000.0 µg/mL	+/- 29.2761	µg/mL	Gravimetric
	CAS # 107-02-8		+/- 134.3543	µg/mL	Unstressed
	Purity 99%		+/- 167.4846	µg/mL	Stressed

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

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Catalog No. : 567645 **Lot No.:** A093341

Description : 8260 List 1 / Std #3 Gases

8260 List 1 / Std #3 Gases 2,000 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : February 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

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

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

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Catalog No. : 567646 **Lot No.:** A093363

Description : 8260 List 1 / Std #6 Vinyl Acetate

8260 List 1 / Std #6 Vinyl Acetate 4000 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : August 2013 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	4,000.0 µg/mL	+/- 23.2563	µg/mL	Gravimetric
	CAS # 108-05-4		+/- 319.4759	µg/mL	Unstressed
	Purity 99%		+/- 319.6324	µg/mL	Stressed

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

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

Description : 8260 Internal Standard

8260 Internal Standard 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

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

Expiration Date : February 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

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

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

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Custom Standard

Product Number: CUS-7814 **Page:** 1 of 4

Lot Number: CJ-4366 **Lot Issue Date:** 10-Dec-2012 **Expiration Date:** 31-Jan-2015

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. 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
1,1,2-trichlorotrifluoroethane	000076-13-1	RM04487	50.2 ± 0.3 µg/mL
methyl iodide	000074-88-4	RM04128	50.2 ± 0.3 µg/mL
carbon disulfide	000075-15-0	RM04258	50.2 ± 0.3 µg/mL
methylene chloride	000075-09-2	RM01647	50.2 ± 0.3 µg/mL
tert-butanol	000075-65-0	RM00555	1004 ± 5 µg/mL
1,1-dichloroethene	000075-35-4	RM01356	50.2 ± 0.3 µg/mL
1,1-dichloroethane	000075-34-3	RM00019	50.2 ± 0.3 µg/mL
trans-1,2-dichloroethene	000156-60-5	01306HD	50.2 ± 0.3 µg/mL
MTBE	001634-04-4	RM05302	50.2 ± 0.3 µg/mL
n-hexane	000110-54-3	NT00436	50.2 ± 0.3 µg/mL
cis-1,2-dichloroethene	000156-59-2	RM01500	50.2 ± 0.3 µg/mL
tetrahydrofuran	000109-99-9	RM05587	50.2 ± 0.3 µg/mL
chloroform	000067-66-3	RM01693	50.2 ± 0.3 µg/mL
1,2-dichloroethane	000107-06-2	RM02111	50.2 ± 0.3 µg/mL
dibromomethane	000074-95-3	RM02090	50.2 ± 0.3 µg/mL
1,4-dioxane	000123-91-1	RM02104	2503 ± 13 µg/mL
1,1,1-trichloroethane	000071-55-6	RM00027	50.2 ± 0.3 µg/mL
carbon tetrachloride	000056-23-5	RM00012	50.2 ± 0.3 µg/mL
bromodichloromethane	000075-27-4	10529HD	50.2 ± 0.3 µg/mL

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.

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William J. Leary
Quality Assurance Manager

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Product Number: CUS-7814 **Page:** 2 of 4

Lot Number: CJ-4366 **Lot Issue Date:** 10-Dec-2012 **Expiration Date:** 31-Jan-2015

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

1,2-dichloropropane	000078-87-5	RM02091	50.2 ± 0.3 µg/mL
cis-1,3-dichloropropene	010061-01-5	RM01442	50.2 ± 0.3 µg/mL
trichloroethene	000079-01-6	RM00029	50.2 ± 0.3 µg/mL
dibromochloromethane	000124-48-1	07705AN	50.2 ± 0.3 µg/mL
1,2-dibromoethane	000106-93-4	RM00018	50.2 ± 0.3 µg/mL
1,2,3-trichloropropane	000096-18-4	RM02562	50.2 ± 0.3 µg/mL
1,1,2-trichloroethane	000079-00-5	RM02575	50.2 ± 0.3 µg/mL
benzene	000071-43-2	RM03830	50.2 ± 0.3 µg/mL
ethyl methacrylate	000097-63-2	RM04592	50.2 ± 0.3 µg/mL
trans-1,3-dichloropropene	010061-02-6	RM01443	50.2 ± 0.3 µg/mL
bromoform	000075-25-2	RM01801	50.2 ± 0.3 µg/mL
tetrachloroethene	000127-18-4	RM00026	50.2 ± 0.3 µg/mL
toluene	000108-88-3	RM02555	50.2 ± 0.3 µg/mL
1,1,2,2-tetrachloroethane	000079-34-5	RM02540	50.2 ± 0.3 µg/mL
chlorobenzene	000108-90-7	RM01874	50.2 ± 0.3 µg/mL
ethylbenzene	000100-41-4	RM00783	50.2 ± 0.3 µg/mL
styrene	000100-42-5	LR-11228MQ	50.2 ± 0.3 µg/mL
trans-1,4-dichloro-2-butene	000110-57-6	RM04930	50.2 ± 0.3 µg/mL
m-xylene	000108-38-3	RM00053	50.2 ± 0.3 µg/mL

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.

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Product Number: CUS-7814 **Page:** 3 of 4

Lot Number: CJ-4366 **Lot Issue Date:** 10-Dec-2012 **Expiration Date:** 31-Jan-2015

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

p-xylene	000106-42-3	RM02647	50.2 ± 0.3 µg/mL
o-xylene	000095-47-6	RM00052	50.2 ± 0.3 µg/mL
1,3-dichlorobenzene	000541-73-1	RM00061	50.2 ± 0.3 µg/mL
1,4-dichlorobenzene	000106-46-7	RM01501	50.2 ± 0.3 µg/mL
1,2-dichlorobenzene	000095-50-1	RM00060	50.2 ± 0.3 µg/mL
bromochloromethane	000074-97-5	RM00009	50.2 ± 0.3 µg/mL
bromobenzene	000108-86-1	RM00056	50.2 ± 0.3 µg/mL
isopropylbenzene	000098-82-8	RM02285	50.2 ± 0.3 µg/mL
n-propylbenzene	000103-65-1	RM02468	50.2 ± 0.3 µg/mL
n-butylbenzene	000104-51-8	RM01802	50.2 ± 0.3 µg/mL
sec-butylbenzene	000135-98-8	RM01800	50.2 ± 0.3 µg/mL
tert-butylbenzene	000098-06-6	RM01814	50.2 ± 0.3 µg/mL
1,2,4-trimethylbenzene	000095-63-6	RM00050	50.2 ± 0.3 µg/mL
1,3,5-trimethylbenzene	000108-67-8	RM02563	50.2 ± 0.3 µg/mL
1,2,3-trichlorobenzene	000087-61-6	RM02563	50.2 ± 0.3 µg/mL
1,2,4-trichlorobenzene	000120-82-1	RM00063	50.2 ± 0.3 µg/mL
1,1-dichloropropene	000563-58-6	RM01234	50.2 ± 0.3 µg/mL
1,3-dichloropropane	000142-28-9	RM02080	50.2 ± 0.3 µg/mL
2,2-dichloropropane	000594-20-7	01104EE	50.2 ± 0.3 µg/mL

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

ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

Custom Standard

Product Number: CUS-7814 **Page:** 4 of 4

Lot Number: CJ-4366 **Lot Issue Date:** 10-Dec-2012 **Expiration Date:** 31-Jan-2015

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

2-chlorotoluene	000095-49-8	NT00290	50.2 ± 0.3 µg/mL
4-chlorotoluene	000106-43-4	RM01866	50.2 ± 0.3 µg/mL
4-isopropyltoluene	000099-87-6	RM00046	50.2 ± 0.3 µg/mL
1,2-dibromo-3-chloropropane	000096-12-8	RM02088	50.2 ± 0.3 µg/mL
hexachlorobutadiene	000087-68-3	RM02247	50.1 ± 0.3 µg/mL
1,1,1,2-tetrachloroethane	000630-20-6	RM02567	50.2 ± 0.3 µg/mL
naphthalene	000091-20-3	RM02406	50.2 ± 0.3 µg/mL
methyl acetate	000079-20-9	NT02091	50.2 ± 0.3 µg/mL
methylcyclohexane	000108-87-2	RM04641	50.2 ± 0.3 µg/mL
cyclohexane	000110-82-7	RM01880	50.2 ± 0.3 µg/mL
1,3,5-trichlorobenzene	000108-70-3	RM02554	50.2 ± 0.3 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at < 4° 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. 0861-01
ISO 9001:2008 Registered TUV USA, Inc. Cert. No. 09-1009

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wwww.ultrasci.com

William J. Leary
Quality Assurance Manager

ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

2/1/12
TS

Custom Standard

Product Number: CUS-8125 **Page:** 1 of 1

Lot Number: CG-3334 **Lot Issue Date:** Sep-2010 **Expiration Date:** Oct-2012

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
4-bromofluorobenzene	000460-00-4	01127CO	25046 ± 125 µg/mL
dibromofluoromethane	001868-53-7	RM01021	25120 ± 126 µg/mL
1,2-dichloroethane-d4	017060-07-0	9H-136	25058 ± 125 µg/mL
toluene-d8	002037-26-5	E90P1	25096 ± 125 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at < 4° C

VM CUS 8125- 00007

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

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William J Leahy
Quality Assurance Manager

ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

6/11/12
TB

VOC Gas Mixture

Product Number: DWM-544 **Page:** 1 of 1

Lot Number: CJ-1658 **Lot Issue Date:** 09-May-2012 **Expiration Date:** 30-Jun-2015

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
bromomethane	000074-83-9	06623AQ	2008 ± 10 µg/mL
chloroethane	000075-00-3	00223KG	2008 ± 10 µg/mL
chloromethane	000074-87-3	07-44048	2008 ± 10 µg/mL
dichlorodifluoromethane	000075-71-8	Q96-67	2007 ± 10 µg/mL
trichlorofluoromethane	000075-69-4	DR-16417BR	2006 ± 10 µg/mL
vinyl chloride	000075-01-4	1201FC10	2008 ± 10 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at < 4° C

VM DWM544 00012

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.

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

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

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William J. Leary
Quality Assurance Manager

ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

2/15/13
TS

Method 8260 Surrogate Standard Mixture

Product Number: STM-530 **Page:** 1 of 1

Lot Number: CJ-1280 **Lot Issue Date:** 17-Apr-2012 **Expiration Date:** 31-May-2015

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
4-bromofluorobenzene	000460-00-4	RM03908-	2512 ± 13 µg/mL
dibromofluoromethane	001868-53-7	RM04871-01	2512 ± 13 µg/mL
1,2-dichloroethane-d4	017060-07-0	RM04304-	2512 ± 13 µg/mL
toluene-d8	002037-26-5	RM04138-	2512 ± 13 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at < 4° 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.

A2LA ACCREDITED
ISO 17025:2005 Accredited A2LA Cert. No. 0861-01

ISO 9001:2008 Registered TUV USA, Inc. Cert. No. 09-1008

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William J. Leary
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CERTIFICATE OF ANALYSIS

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765217

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: **F2-MEB415031**

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	25.00 ± 0.18 µg/mL	Arsenic, As	5.000 ± 0.032 µg/mL	Barium, Ba	4.999 ± 0.036 µg/mL
Beryllium, Be	5.002 ± 0.036 µg/mL	Cadmium, Cd	5.000 ± 0.032 µg/mL	Calcium, Ca	2,500 ± 16 µg/mL
Chromium+3, Cr3	5.001 ± 0.032 µg/mL	Cobalt, Co	5.003 ± 0.032 µg/mL	Copper, Cu	5.001 ± 0.032 µg/mL
Iron, Fe	1,250 ± 8 µg/mL	Lead, Pb	5.002 ± 0.032 µg/mL	Magnesium, Mg	2,500 ± 16 µg/mL
Manganese, Mn	25.02 ± 0.15 µg/mL	Nickel, Ni	4.999 ± 0.028 µg/mL	Potassium, K	2,500 ± 16 µg/mL
Selenium, Se	5.002 ± 0.028 µg/mL	Silver, Ag	4.999 ± 0.032 µg/mL	Sodium, Na	2,500 ± 16 µg/mL
Strontium, Sr	5.001 ± 0.032 µg/mL	Thallium, Tl	5.002 ± 0.032 µg/mL	Vanadium, V	4.999 ± 0.032 µg/mL
Zinc, Zn	5.001 ± 0.028 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	010713
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	892707
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	010728
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	030721
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	992106
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

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

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

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

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

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

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

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

Certification Date: March 06, 2012

Expiration Date: EXPIRES 01 APR 2014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Donna Senn
Product Documentation Technician

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

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

REC: 31313

CERTIFICATE OF ANALYSIS

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is an ISO Guide 34 "General Requirements for the
e Material Producers" and ISO 9001 registered
icturing laboratory is accredited to ISO/IEC 17025
or the Competence of Testing and Calibration

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

Custom Solution

TAPITT-CAL-SPECB

F2-MEB415032

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

Sn, Ti

UNCERTAINTIES

	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
nL	Boron, B	5.000 ± 0.032 µg/mL	Molybdenum, Mo	5.002 ± 0.035 µg/mL
nL	Tin, Sn	5.002 ± 0.041 µg/mL	Titanium, Ti	5.002 ± 0.039 µg/mL

6 g/mL (measured at 20 ± 1° C)

alculation of the certified value and the uncertainty. Reported uncertainties represent expanded
the 95% confidence level using a coverage factor of k = 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

4.1 ASSAY INFORMATION

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

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

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

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

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

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

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- 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 06, 2012

Expiration Date: EXPIRES 01 APR 2014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Donna Senn
Product Documentation Technician

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

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

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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 863.01 — ACCREDITED Reference Material Producer Certificate 863.02

2.0 DESCRIPTION OF CRM **10000 µg/mL Aluminum in 7% (v/v) HNO3**

Catalog Number:	CGAL10-1, CGAL10-2, and CGAL10-5
Lot Number:	**F2-AL04115**
Starting Material:	Al ingot
Starting Material Purity (%):	99.9991
Starting Material Lot No:	1629
Matrix:	7% (v/v) HNO3

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 10,041 ± 51 µg/mL - weighted mean

Certified Density: 1.089 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 $(\bar{x}) = \frac{\sum x_i}{n}$

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

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

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

4.1 **Assay Method #1** **10,039 ± 31 µg/mL**
ICP Assay NIST SRM 3101a Lot Number: 060502

Assay Method #2 **10,043 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

s	Al	M	Dy < 0.036903	O	Li 0.000033	M	Pr < 0.001845	M	Te < 0.184517
M	Sb < 0.003075	M	Er < 0.030753	M	Lu < 0.002460	M	Re < 0.006151	M	Tb < 0.001845
M	As < 0.061506	M	Eu < 0.018452	O	Mg 0.002764	M	Rh < 0.006151	M	Tl < 0.006151
M	Ba < 0.061506	M	Gd < 0.006151	O	Mn 0.000488	M	Rb < 0.006151	M	Th < 0.006151
O	Be < 0.000170	M	Ga < 0.006151	O	Hg < 0.007000	M	Ru < 0.012301	M	Tm < 0.002460
M	Bi 0.006000	M	Ge < 0.036903	M	Mo < 0.012301	M	Sm < 0.006151	M	Sn < 0.030753
O	B 0.001626	M	Au < 0.018452	M	Nd < 0.012301	M	Sc < 0.061506	O	Ti 0.006016
M	Cd < 0.018452	M	Hf < 0.012301	O	Ni 0.001301	M	Se < 0.049205	M	W < 0.061506
O	Ca 0.013495	M	Ho < 0.003075	M	Nb < 0.003075	O	Si 0.048777	M	U < 0.012301
M	Ce < 0.030753	M	In < 0.061506	n	Os	M	Ag < 0.012301	M	V < 0.012301
M	Cs < 0.001845	M	Ir < 0.030753	M	Pd < 0.030753	O	Na 0.022763	M	Yb < 0.006151
O	Cr < 0.001500	O	Fe 0.003252	O	P < 0.030000	M	Sr < 0.003075	M	Y < 0.246023
M	Co < 0.018452	M	La < 0.003075	M	Pt < 0.012301	O	S < 0.100000	O	Zn 0.016259
M	Cu < 0.036903	M	Pb < 0.018452	O	K 0.019511	M	Ta < 0.043054	M	Zr < 0.030753

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4 °C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98154; +3; 6;Al(H2O)6+3

Chemical Compatibility - Soluble in HCl, HNO3, HF and H2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Al Containing Samples (Preparation and Solution) - Metal (Best dissolved in HCl / HNO3); α- Al2O3 (Na2CO3 fusion in Pt0); γ- Al2O3 (Soluble in acids such as HCl) ; Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (sulfuric/peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl.

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES394.401 nm	0.05 / 0.006 µg/mL	1	atom	U, Ce
ICP-OES396.152 nm	0.03 / 0.006 µg/mL	1	atom	Mo, Zr, Ce
ICP-OES167.078 nm	0.1 / 0.009 µg/mL	1	ion	Fe
ICP-MS27 amu	30 ppt	n/a	M+	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

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

Certification Date: June 27, 2012

Expiration Date: EXPIRES 01 DEC 2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Stephan Blaakman Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

6350560

INORGANIC VENTURES™
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inorganicventures.com

CERTIFICATE OF ANALYSIS

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

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

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** **1000 µg/mL Barium in 0.1% (v/v) HNO3**

Catalog Number:	CGBA1-1, CGBA1-2, and CGBA1-5
Lot Number:	**E2-BA02066**
Starting Material:	Ba(NO3)2
Starting Material Purity (%):	99.9998
Starting Material Lot No:	1514_1599
Matrix:	0.1% (v/v) HNO3

Received 11/12/12 JR

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

Certified Concentration: 997 ± 6 µg/mL - weighted mean

Certified Density: 1.000 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 $(\bar{x}) = \frac{\sum x_i}{n}$

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

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

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

4.1 **Assay Method #1** **997 ± 4 µg/mL**
ICP Assay NIST SRM 3104a Lot Number: 070222

Assay Method #2 **996 ± 3 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O Al < 0.000900	M Dy < 0.012010	O Li < 0.004000	M Pr < 0.000601	M Te < 0.060052
M Sb < 0.001001	M Er < 0.010009	M Lu < 0.000801	M Re < 0.002002	O Tb < 0.003900
M As < 0.020017	O Eu < 0.000400	O Mg 0.000130	M Rh < 0.002002	M Tl < 0.002002
s Ba	O Gd < 0.000520	M Mn < 0.008007	M Rb < 0.002002	M Th < 0.002002
M Be < 0.001001	M Ga < 0.002002	O Hg < 0.012000	M Ru < 0.004003	M Tm < 0.000801
M Bi < 0.000801	M Ge < 0.012010	M Mo < 0.004003	O Sm < 0.000710	M Sn < 0.010009
M B < 0.140121	M Au < 0.006005	O Nd < 0.001400	M Sc < 0.020017	M Ti < 0.100087
M Cd < 0.006005	M Hf < 0.004003	O Ni < 0.000900	M Se < 0.016014	M W < 0.020017
O Ca 0.000999	M Ho < 0.001001	M Nb < 0.001001	O Si < 0.003400	M U < 0.004003
M Ce < 0.010009	M In < 0.020017	n Os	M Ag < 0.004003	M V < 0.004003
M Cs < 0.000601	M Ir < 0.010009	M Pd < 0.010009	O Na < 0.010000	M Yb < 0.002002
M Cr < 0.010009	O Fe 0.001149	O P < 0.002600	O Sr 0.001449	O Y < 0.001000
M Co < 0.006005	O La < 0.000200	M Pt < 0.004003	O S < 0.025000	O Zn < 0.000390
M Cu < 0.012010	M Pb < 0.006005	O K < 0.001800	O Ta < 0.006900	M Zr < 0.010009

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33; +2; 6; $Ba(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.

Ba Containing Samples (Preparation and Solution) - Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 455.403 nm	0.002 / 0.0001 µg/mL	1	ion	Zr, U
ICP-OES 233.527 nm	0.004 / 0.0003 µg/mL	1	ion	
ICP-OES 230.424 nm	0.004 / 0.0005 µg/mL	1	ion	Mo, Ir, Co
ICP-MS 138 amu	1 ppt	n/a	M+	122Sn16O, 122Te16O

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

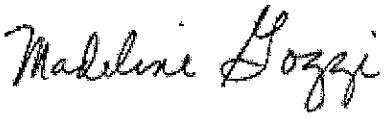
11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations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

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

Certification Date: October 31, 2011

Expiration Date: EXPIRES 01 Dec 2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny Product Documentation Technician	
Certificate Approved By:	Madeline Gozzi Quality Control Supervisor	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

#424659

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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

Received 5/24/12 RJR

2.0 DESCRIPTION OF CRM **10000 µg/mL Calcium in 2% (v/v) HNO3**

Catalog Number:	CGCA10-1, CGCA10-2, and CGCA10-5
Lot Number:	**F2-CA04043**
Starting Material:	CaO
Starting Material Purity (%):	99.9980
Starting Material Lot No:	1635
Matrix:	2% (v/v) HNO3

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 10,025 ± 56 µg/mL - weighted mean

Certified Density: 1.039 g/mL (measured at 20 ± 1°C)

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

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

x_i = individual results

n = number of measurements

Uncertainty (±) = $2 [\Sigma(s_i)^2]^{½}$ 2 = the coverage factor.

$[\Sigma(s_i)^2]^{½}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

4.1 **Assay Method #1** **10,026 ± 41 µg/mL**
ICP Assay NIST SRM 3109a Lot Number: 050825

Assay Method #2 **10,022 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O	Al	< 0.000900	M	Dy	< 0.044386	O	Li	< 0.000024	M	Pr	< 0.002219	M	Te	< 0.221932
M	Sb	< 0.003699	M	Er	< 0.036989	M	Lu	< 0.002959	M	Re	< 0.007398	M	Tb	< 0.002219
M	As	< 0.073977	M	Eu	< 0.022193	O	Mg	0.047315	M	Rh	< 0.007398	M	Tl	< 0.007398
O	Ba	0.004732	M	Gd	< 0.007398	O	Mn	< 0.000300	M	Rb	< 0.007398	M	Th	< 0.007398
O	Be	< 0.000085	M	Ga	< 0.007398	O	Hg	< 0.011000	M	Ru	< 0.014795	M	Tm	< 0.002959
M	Bi	< 0.002959	M	Ge	< 0.044386	M	Mo	< 0.014795	M	Sm	< 0.007398	M	Sn	< 0.036989
O	B	< 0.000540	M	Au	< 0.022193	M	Nd	< 0.014795	O	Sc	< 0.000020	O	Ti	< 0.005000
O	Cd	< 0.004500	M	Hf	< 0.014795	O	Ni	< 0.002300	O	Se	< 0.006200	M	W	< 0.073977
s	Ca		M	Ho	< 0.003699	M	Nb	< 0.003699	O	Si	0.013519	M	U	< 0.014795
M	Ce	< 0.036989	O	In	< 0.002000	n	Os		M	Ag	< 0.014795	O	V	< 0.000900
M	Cs	< 0.002219	M	Ir	< 0.036989	M	Pd	< 0.036989	O	Na	0.021630	M	Yb	< 0.007398
O	Cr	< 0.000800	O	Fe	< 0.001100	O	P	< 0.004800	O	Sr	0.189261	M	Y	< 0.295910
O	Co	< 0.001200	M	La	< 0.003699	M	Pt	< 0.014795	O	S	0.108149	O	Zn	< 0.000190
O	Cu	< 0.004000	M	Pb	< 0.022193	O	K	0.008111	M	Ta	< 0.051784	M	Zr	< 0.036989

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.078; +2; 6; Ca(H2O)6+2

Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.

Ca Containing Samples (Preparation and Solution) - Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2) .The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Contamination is a very real problem when analyzing for trace levels.

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	ion	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	ion	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	atom	Ge
ICP-MS 44 amu	1200 ppt	n/a	M+	16O212C, 28Si16O, 88Sr

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

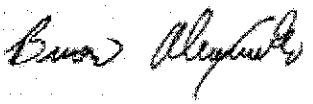
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: March 12, 2012

Expiration Date:

EXPIRES
01/2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

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300 Technology Drive
Christiansburg, VA 24073 • USA
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tel: 800.669.6799 • 540.585.3030
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635012

CERTIFICATE OF ANALYSIS

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

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 DESCRIPTION OF CRM **1000 µg/mL Chromium (+3) in 2% (v/v) HNO3**

Catalog Number:	CGCR(3)1-1, CGCR(3)1-2, and CGCR(3)1-5
Lot Number:	**E2-CR03060**
Starting Material:	Cr pieces
Starting Material Purity (%):	99.9958
Starting Material Lot No:	1604
Matrix:	2% (v/v) HNO3

received 11/20/12 JR

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 998 ± 5 µg/mL - weighted mean

Certified Density: 1.011 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 (±) $= \frac{2\,[(\Sigma s_i)^2]^{1/2}}{(n)^{1/2}}$ Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

4.1	**Assay Method #1**	**997 ± 3 µg/mL** ICP Assay NIST SRM 3112a Lot Number: 030730
	Assay Method #2	**998 ± 3 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O	Al	0.001480	M	Dy < 0.032554	O	Li < 0.000020	M	Pr < 0.001628	M	Te < 0.162771
M	Sb < 0.002713	M	Er < 0.027128	M	Lu < 0.002170	M	Re < 0.005426	M	Tb < 0.001628
M	As < 0.054257	M	Eu < 0.016277	O	Mg < 0.000300	M	Rh < 0.005426	M	Tl < 0.005426
M	Ba < 0.054257	M	Gd < 0.005426	M	Mn < 0.021703	M	Rb < 0.005426	M	Th < 0.005426
M	Be < 0.002713	M	Ga < 0.005426	O	Hg < 0.015000	M	Ru < 0.010851	M	Tm < 0.002170
M	Bi < 0.002170	M	Ge < 0.032554	M	Mo < 0.010851	M	Sm < 0.005426	M	Sn < 0.027128
O	B < 0.010000	M	Au < 0.016277	M	Nd < 0.010851	M	Sc < 0.054257	O	Ti < 0.001000
M	Cd < 0.016277	M	Hf < 0.010851	O	Ni < 0.020000	M	Se < 0.043406	M	W < 0.054257
O	Ca 0.003885	M	Ho < 0.002713	M	Nb < 0.002713	O	Si < 0.200000	M	U < 0.010851
M	Ce < 0.027128	M	In < 0.054257	n	Os	M	Ag < 0.010851	O	V < 0.020000
M	Cs < 0.001628	M	Ir < 0.027128	M	Pd < 0.027128	O	Na 0.004625	M	Yb < 0.005426
s	Cr	O	Fe 0.022572	O	P < 0.040000	M	Sr < 0.002713	M	Y < 0.217028
M	Co < 0.016277	M	La < 0.002713	M	Pt < 0.010851	i	S	O	Zn < 0.004000
M	Cu 0.006023	M	Pb < 0.016277	O	K 0.004070	M	Ta < 0.037980	M	Zr < 0.027128

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 51.9961; +3; 6; $Cr(H_2O)_6^{3+}$

Chemical Compatibility - Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr Containing Samples (Preparation and Solution) - Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used:

A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1.
B. Fusion with $NaKSO_4$ and NaF, 2:1.
C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1.
D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2.

Nickel, iron, copper, or silver crucibles should be used for **D**. Platinum may be used for **A, B and C**);
Organic Matrices (Ash at 450EC followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples) .

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 205.552 nm	0.006 / 0.0008 µg/mL	1	ion	Os
ICP-OES 284.325 nm	0.008 / 0.0007 µg/mL	1	ion	
ICP-OES 276.654 nm	0.01 / 0.001 µg/mL	1	ion	Cu, Ta, V
ICP-MS 52 amu	40 ppt	n/a	M+	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

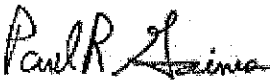
11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

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

Certification Date: January 13, 2012
Expiration Date: EXPIRES 01 DEC 2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

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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** **1000 µg/mL Copper in 3% (v/v) HNO3**

Catalog Number:	CGCU1-1, CGCU1-2, and CGCU1-5
Lot Number:	**E2-CU02130**
Starting Material:	Cu shot
Starting Material Purity (%):	100.0000
Starting Material Lot No:	1612
Matrix:	3% (v/v) HNO3

Received 11/13/12 JR

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

Certified Concentration: 1,002 ± 5 µg/mL - weighted mean

Certified Density: 1.016 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 $(\bar{x}) = \frac{\Sigma x_i}{n}$

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

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

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

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

4.1	**Assay Method #1**	**1,001 ± 3 µg/mL** ICP Assay NIST SRM 3114 Lot Number: 011017
	Assay Method #2	**1,003 ± 3 µg/mL** EDTA NIST SRM 928 Lot Number: 928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O Al < 0.000900	M Dy < 0.059973	O Li < 0.000020	M Pr < 0.002999	M Te < 0.299865
M Sb < 0.004998	M Er < 0.049978	M Lu < 0.003998	M Re < 0.009996	M Tb < 0.002999
M As < 0.099955	M Eu < 0.029987	O Mg < 0.000030	M Rh < 0.009996	M Tl < 0.009996
M Ba < 0.099955	M Gd < 0.009996	O Mn < 0.000200	M Rb < 0.009996	M Th < 0.009996
M Be < 0.004998	M Ga < 0.009996	O Hg < 0.015000	M Ru < 0.019991	M Tm < 0.003998
M Bi < 0.003998	M Ge < 0.059973	M Mo < 0.019991	M Sm < 0.009996	O Sn < 0.004000
M B < 0.699685	M Au < 0.029987	M Nd < 0.019991	M Sc < 0.099955	M Ti < 0.499775
M Cd < 0.029987	M Hf < 0.019991	O Ni < 0.003000	M Se < 0.079964	M W < 0.099955
O Ca 0.000040	M Ho < 0.004998	M Nb < 0.004998	O Si < 0.003400	M U < 0.019991
M Ce < 0.049978	M In < 0.099955	n Os	M Ag < 0.019991	O V < 0.003000
M Cs < 0.002999	M Ir < 0.049978	M Pd < 0.049978	O Na 0.000060	M Yb < 0.009996
M Cr < 0.049978	O Fe < 0.001100	O P < 0.002600	M Sr < 0.004998	M Y < 0.399820
M Co < 0.029987	M La < 0.004998	M Pt < 0.019991	n S	O Zn < 0.010000
s Cu	O Pb < 0.010000	O K < 0.001800	M Ta < 0.069969	M Zr < 0.049978

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.546; +2; 6; $Cu(H_2O)_6^{2+}$

Chemical Compatibility - Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 324.754 nm	0.06/.001 µg/mL		atom	Nb, U, Th, Mo, Hf
ICP-OES 224.700 nm	0.01/.001µg/mL	1	ion	Pb, Ir, Ni, W
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	atom	Th, Ta, Nb, U, Hf
ICP-MS 63 amu	10 ppt	n/a	M+	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

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

Certification Date: November 18, 2011

Expiration Date: EXPIRES 01 DEC 2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

#424660

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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 663.01

ACCREDITED Reference Material Producer Certificate 663.02

Ron Rowland
RECEIVED
5/29/12

2.0 DESCRIPTION OF CRM **10000 µg/mL Iron in 5% (v/v) HNO3**

Catalog Number:	CGFE10-1, CGFE10-2, and CGFE10-5
Lot Number:	**E2-FE03145**
Starting Material:	Fe powder
Starting Material Purity (%):	99.9983
Starting Material Lot No:	1618
Matrix:	5% (v/v) HNO3

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 10,032 ± 54 µg/mL - weighted mean

Certified Density: 1.053 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.

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

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

4.1 **Assay Method #1** **10,023 ± 38 µg/mL**
ICP Assay NIST SRM 3126a Lot Number: 051031

Assay Method #2 **10,052 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O Al < 0.002700	M Dy < 0.039911	O Li < 0.000030	M Pr < 0.001996	M Te < 0.199556
M Sb < 0.003326	M Er < 0.033259	M Lu < 0.002661	M Re < 0.006652	M Tb < 0.001996
M As < 0.066519	M Eu < 0.019956	O Mg < 0.000060	M Rh < 0.006652	M Tl < 0.006652
O Ba < 0.000100	M Gd < 0.006652	O Mn 0.054322	M Rb < 0.006652	M Th < 0.006652
O Be < 0.000050	M Ga < 0.006652	O Hg < 0.011000	M Ru < 0.013304	M Tm < 0.002661
M Bi < 0.002661	i Ge	M Mo < 0.013304	M Sm < 0.006652	M Sn < 0.033259
O B < 0.020000	M Au < 0.019956	M Nd < 0.013304	M Sc < 0.066519	M Ti < 0.332594
M Cd < 0.019956	M Hf < 0.013304	O Ni 0.055831	M Se < 0.053215	M W < 0.066519
O Ca 0.004527	M Ho < 0.003326	M Nb < 0.003326	O Si < 0.010000	M U < 0.013304
M Ce < 0.033259	M In < 0.066519	n Os	M Ag < 0.013304	M V < 0.013304
M Cs < 0.001996	M Ir < 0.033259	M Pd < 0.033259	O Na 0.004678	M Yb < 0.006652
M Cr < 0.033259	s Fe	i P	M Sr < 0.003326	M Y < 0.266075
O Co 0.057340	M La < 0.003326	M Pt < 0.013304	i S	M Zn < 0.133038
M Cu < 0.039911	M Pb < 0.019956	O K < 0.001700	M Ta < 0.046563	M Zr < 0.033259

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 55.847; +3; 6; $Fe(H_2O)_6^{3+}$

Chemical Compatibility - Stable in HCl, HNO_3, H_2SO_4 ,HF and H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Fe Containing Samples (Preparation and Solution) - Metal (Soluble in HCl); Oxides (If the oxide has been at a high temperature then Na_2CO_3 fusion in Pt0 followed by HCl dissolution otherwise dissolve in dilute HCl); Ores (See Oxides above using only the fusion approach).

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 238.204 nm	0.005 / 0.001 µg/mL	1	ion	Ru, Co
ICP-OES 239.562 nm	0.005 / 0.001 µg/mL	1	ion	Co, W, Cr
ICP-OES 259.940 nm	0.006 / 0.001 µg/mL	1	ion	Hf, Nb
ICP-MS 56 amu	970 ppt	n/a	M+	40Ar15N1H, 40Ar16O, 36Ar17O1H , 38Ar18O, 37Cl18O1H, 40Ca16O

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI Certificate Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

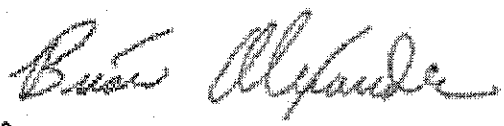
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: January 16, 2012

Expiration Date:

EXPIRES
01/2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny, Product Documentation Technician	
Certificate Approved By:	Brian Alexander, PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines, PhD., Senior Technical Director	

INORGANIC™ VENTURES
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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 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** **10000 µg/mL Potassium in 2% (v/v) HNO3**

Catalog Number:	CGK10-1, CGK10-2, and CGK10-5
Lot Number:	**F2-K03029**
Starting Material:	KNO3
Starting Material Purity (%):	99.9981
Starting Material Lot No:	B19P01
Matrix:	2% (v/v) HNO3

Received 4/17/12

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

Certified Concentration: 9,979 ± 55 µg/mL - weighted mean

Certified Density: 1.024 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 $(\bar{x}) = \frac{\Sigma x_i}{n}$

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

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

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

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

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

4.1 **Assay Method #1** **9,981 ± 40 µg/mL**
ICP Assay NIST SRM 3141a Lot Number: 051220

Assay Method #2 **9,971 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O	Al	< 0.000900	M	Dy	< 0.037817	O	Li	0.000065	M	Pr	< 0.001891	M	Te	< 0.189084
M	Sb	< 0.003151	M	Er	< 0.031514	M	Lu	< 0.002521	M	Re	< 0.006303	M	Tb	< 0.001891
M	As	< 0.063028	M	Eu	< 0.018908	O	Mg	0.001032	M	Rh	< 0.006303	M	Tl	< 0.006303
O	Ba	0.000055	M	Gd	< 0.006303	O	Mn	0.000161	M	Rb	0.416797	M	Th	< 0.006303
O	Be	< 0.000200	M	Ga	< 0.006303	O	Hg	< 0.015000	M	Ru	< 0.012606	M	Tm	< 0.002521
M	Bi	< 0.002521	O	Ge	< 0.001500	M	Mo	< 0.012606	M	Sm	< 0.006303	M	Sn	< 0.031514
O	B	< 0.000600	O	Au	< 0.003000	M	Nd	< 0.012606	O	Sc	< 0.000100	O	Ti	< 0.000700
M	Cd	< 0.018908	M	Hf	< 0.012606	O	Ni	0.000806	O	Se	< 0.050000	M	W	< 0.063028
O	Ca	0.003548	M	Ho	< 0.003151	M	Nb	< 0.003151	O	Si	< 0.003400	M	U	< 0.012606
M	Ce	< 0.031514	M	In	< 0.063028	n	Os		M	Ag	< 0.012606	O	V	< 0.000900
M	Cs	< 0.001891	M	Ir	< 0.031514	M	Pd	< 0.031514	O	Na	0.051613	M	Yb	< 0.006303
M	Cr	< 0.031514	O	Fe	0.000500	O	P	< 0.002500	M	Sr	< 0.003151	M	Y	< 0.252111
M	Co	< 0.018908	M	La	< 0.003151	M	Pt	< 0.012606	O	S	< 0.072000	O	Zn	0.000403
M	Cu	< 0.037817	M	Pb	< 0.018908	s	K		M	Ta	< 0.044119	M	Zr	< 0.031514

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.0983; +1; (6); K+(aq)
(Coordination Number in parentheses is assumed, not certain.)

Chemical Compatibility - Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	atom	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	atom	2nd order radiation from R.E.s on some optical designs
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	atom	U, Ce,
ICP-MS 39 amu	10 ppt	n/a	M+	38ArH, 23Na16O, 78Se

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

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

Certification Date: March 29, 2012
Expiration Date: EXPIRES 01-2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny, Product Documentation Technician	
Certificate Approved By:	Brian Alexander, PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines, PhD., Senior Technical Director	

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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 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 DESCRIPTION OF CRM **10000 µg/mL Magnesium in 2% (v/v) HNO3**

Catalog Number:	CGMG10-1, CGMG10-2, and CGMG10-5
Lot Number:	**E2-MG03106**
Starting Material:	Mg metal
Starting Material Purity (%):	99.9998
Starting Material Lot No:	1484
Matrix:	2% (v/v) HNO3

Received 11/12/12 JR

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 10,000 ± 54 µg/mL - weighted mean

Certified Density: 1.053 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 $(\bar{x}) = \frac{\sum x_i}{n}$

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors
(Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

4.1	Assay Method #1	**9,999 ± 38 µg/mL** ICP Assay NIST SRM 3131a Lot Number: 050302
	Assay Method #2	**10,001 ± 26 µg/mL** EDTA NIST SRM 928 Lot Number: 928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O Al < 0.000600	M Dy < 0.022339	O Li 0.011947	M Pr < 0.001117	M Te < 0.111693
M Sb < 0.001862	M Er < 0.018615	M Lu < 0.001489	M Re < 0.003723	M Tb < 0.001117
M As < 0.037231	M Eu < 0.011169	s Mg	M Rh < 0.003723	M Tl < 0.003723
M Ba < 0.037231	M Gd < 0.003723	O Mn < 0.000024	M Rb < 0.003723	M Th < 0.003723
O Be < 0.000170	M Ga < 0.003723	O Hg < 0.009000	M Ru < 0.007446	M Tm < 0.001489
M Bi < 0.001489	M Ge < 0.022339	M Mo < 0.007446	M Sm < 0.003723	M Sn < 0.018615
O B < 0.003000	M Au < 0.011169	M Nd < 0.007446	M Sc < 0.037231	O Ti < 0.001100
M Cd < 0.011169	M Hf < 0.007446	O Ni < 0.002700	M Se < 0.029785	M W < 0.037231
O Ca 0.003982	M Ho < 0.001862	M Nb < 0.001862	O Si < 0.006000	M U < 0.007446
M Ce < 0.018615	M In < 0.037231	n Os	M Ag < 0.007446	M V < 0.007446
M Cs < 0.001117	M Ir < 0.018615	M Pd < 0.018615	O Na 0.011947	M Yb < 0.003723
O Cr < 0.000300	O Fe < 0.001600	O P < 0.016000	M Sr < 0.001862	M Y < 0.148924
M Co < 0.011169	M La < 0.001862	M Pt < 0.007446	n S	O Zn < 0.000900
O Cu < 0.004000	M Pb 0.004942	O K < 0.050000	M Ta < 0.026062	M Zr < 0.018615

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.305; +2; 6; $Mg(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HNO_3, and H_2SO_4 avoid HF, H_3PO_4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO_3 / LDPE container.

Mg Containing Samples (Preparation and Solution) - Metal (Best dissolved in diluted HNO_3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	ion	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	ion	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	atom	U, Hf, Cr, Zr
ICP-MS 24 amu	42 ppt	n/a	M+	$^{7}Li^{17}O$, $^{48}Ti^{+2}$, $^{48}Ca^{+2}$

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

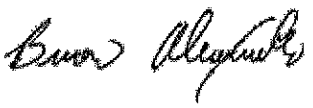
11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations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

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

Certification Date: November 30, 2011

Expiration Date: EXPIRES 01 DEC 2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

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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 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 DESCRIPTION OF CRM **1000 µg/mL Manganese in 3% (v/v) HNO3**

Catalog Number:	CGMN1-1, CGMN1-2, and CGMN1-5
Lot Number:	**E2-MN02093**
Starting Material:	Mn pieces
Starting Material Purity (%):	99.9940
Starting Material Lot No:	1573
Matrix:	3% (v/v) HNO3

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 999 ± 5 µg/mL - weighted mean

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

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

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

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

4.1 **Assay Method #1** **998 ± 3 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **1,000 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O	Al	0.000806	M	Dy	< 0.049987	O	Li	< 0.000020	M	Pr	< 0.002499	M	Te	< 0.249933
M	Sb	< 0.004166	M	Er	< 0.041656	M	Lu	< 0.003332	M	Re	< 0.008331	M	Tb	< 0.002499
M	As	< 0.083311	M	Eu	< 0.024993	O	Mg	0.041735	M	Rh	< 0.008331	M	Tl	< 0.008331
M	Ba	< 0.083311	M	Gd	< 0.008331	s	Mn		M	Rb	< 0.008331	M	Th	< 0.008331
M	Be	< 0.004166	O	Ga	< 0.050000	i	Hg		M	Ru	< 0.016662	M	Tm	< 0.003332
M	Bi	< 0.003332	O	Ge	< 0.003000	M	Mo	< 0.016662	M	Sm	< 0.008331	M	Sn	< 0.041656
O	B	0.002646	M	Au	< 0.024993	M	Nd	< 0.016662	M	Sc	< 0.083311	O	Ti	< 0.002000
M	Cd	< 0.024993	M	Hf	< 0.016662	M	Ni	< 0.066649	M	Se	< 0.066649	M	W	< 0.083311
O	Ca	0.003247	M	Ho	< 0.004166	M	Nb	< 0.004166	O	Si	< 0.050000	M	U	< 0.016662
M	Ce	< 0.041656	M	In	< 0.083311	n	Os		M	Ag	< 0.016662	M	V	< 0.016662
M	Cs	< 0.002499	M	Ir	< 0.041656	M	Pd	< 0.041656	O	Na	0.006375	M	Yb	< 0.008331
M	Cr	0.004208	O	Fe	< 0.010000	i	P		M	Sr	< 0.004166	M	Y	< 0.333244
M	Co	0.001804	M	La	< 0.004166	M	Pt	< 0.016662	i	S		O	Zn	< 0.000600
M	Cu	< 0.049987	M	Pb	< 0.024993	O	K	0.000842	M	Ta	< 0.058318	M	Zr	< 0.041656

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.
Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.9380; +2; **6**; Mn(H2O)62+
Chemical Compatibility - Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3/LDPE container.
Mn Containing Samples (Preparation and Solution) - Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H2SO4 and heat to SO3 fumes - dense white fumes).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	ion	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	ion	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	ion	Co
ICP-MS 55 amu	10 ppt	n/a	M+	40Ar14N1H, 39K16O, 37Cl18O, 40Ar15N, 38Ar17O, 36Ar18O1H , 38Ar16O1H, 37Cl17O1H, 23Na32S

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

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

Certification Date: January 03, 2012
Expiration Date:

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny, Product Documentation Technician	
Certificate Approved By:	Brian Alexander, PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines, PhD., Senior Technical Director	

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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 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 DESCRIPTION OF CRM **10000 µg/mL Sodium in 2% (v/v) HNO3**

Catalog Number:	CGNA10-1, CGNA10-2, and CGNA10-5
Lot Number:	**E2-NA03095**
Starting Material:	Na2CO3
Starting Material Purity (%):	99.9994
Starting Material Lot No:	C18157
Matrix:	2% (v/v) HNO3

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 9,986 ± 55 µg/mL - weighted mean

Certified Density: 1.033 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.

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

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

4.1 **Assay Method #1** **9,983 ± 39 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 010728

Assay Method #2 **9,998 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O	Al		0.002434	M	Dy	<	0.051831	O	Li	<	0.000030	M	Pr	< 0.002592	M	Te	< 0.259157
M	Sb	<	0.004319	M	Er	<	0.043193	M	Lu	<	0.003455	M	Re	< 0.008639	M	Tb	< 0.002592
M	As	<	0.086386	M	Eu	<	0.025916	O	Mg		0.003361	M	Rh	< 0.008639	M	Tl	< 0.008639
O	Ba		0.001043	M	Gd	<	0.008639	O	Mn	<	0.000030	M	Rb	< 0.008639	M	Th	< 0.008639
O	Be	<	0.000200	M	Ga	<	0.008639	O	Hg	<	0.015000	M	Ru	< 0.017277	M	Tm	< 0.003455
M	Bi	<	0.003455	O	Ge	<	0.001500	M	Mo	<	0.017277	M	Sm	< 0.008639	M	Sn	< 0.043193
O	B	<	0.000600	M	Au	<	0.025916	M	Nd	<	0.017277	O	Sc	< 0.000020	O	Ti	< 0.000700
M	Cd	<	0.025916	M	Hf	<	0.017277	O	Ni	<	0.002300	O	Se	< 0.050000	M	W	< 0.086386
O	Ca		0.026656	M	Ho	<	0.004319	M	Nb	<	0.004319	O	Si	0.008113	M	U	< 0.017277
M	Ce	<	0.043193	M	In	<	0.086386	n	Os			M	Ag	< 0.017277	O	V	< 0.000900
M	Cs	<	0.002592	M	Ir	<	0.043193	M	Pd	<	0.043193	S	Na		M	Yb	< 0.008639
M	Cr	<	0.043193	O	Fe	<	0.001100	O	P	<	0.040000	O	Sr	0.000174	M	Y	< 0.345543
M	Co	<	0.025916	M	La	<	0.004319	M	Pt	<	0.017277	O	S	< 0.072000	O	Zn	0.000116
O	Cu	<	0.001400	M	Pb	<	0.025916	O	K		0.023179	M	Ta	< 0.060470	M	Zr	< 0.043193

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.98977; +1; (6); Na+(aq) largely ionic in nature (Coordination Number in parentheses is assumed, not certain.)

Chemical Compatibility - Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	atom	2nd order radiation from R.E.s on some optical designs
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	atom	2nd order radiation from R.E.s on some optical designs
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	atom	Pd, Zn
ICP-MS 23 amu	310 ppt	n/a	M+	46Ti+2 , 46Ca+2

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI Certificate Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

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

Certification Date: December 12, 2011

Expiration Date:

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny, Product Documentation Technician	
Certificate Approved By:	Brian Alexander, PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines, PhD., Senior Technical Director	

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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** **1000 µg/mL Nickel in 2% (v/v) HNO3**

Catalog Number:	CGNI1-1, CGNI1-2, and CGNI1-5
Lot Number:	**E2-NI02074**
Starting Material:	Ni pieces
Starting Material Purity (%):	99.9998
Starting Material Lot No:	1559
Matrix:	2% (v/v) HNO3

Received 11/12/12 JR

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

Certified Concentration: 1,003 ± 5 µg/mL - weighted mean

Certified Density: 1.011 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 $(\bar{x}) = \frac{\sum x_i}{n}$

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

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

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

4.1	**Assay Method #1**	**1,002 ± 3 µg/mL** ICP Assay NIST SRM 3136 Lot Number: 000612
	Assay Method #2	**1,003 ± 3 µg/mL** EDTA NIST SRM 928 Lot Number: 928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O Al < 0.003000	M Dy < 0.070404	O Li < 0.000020	M Pr < 0.003520	M Te < 0.352022
M Sb < 0.005867	M Er < 0.058670	M Lu < 0.004694	M Re < 0.011734	M Tb < 0.003520
O As < 0.005400	M Eu < 0.035202	O Mg 0.000033	M Rh < 0.011734	M Tl < 0.011734
M Ba < 0.117341	M Gd < 0.011734	M Mn < 0.046936	M Rb < 0.011734	M Th < 0.011734
O Be < 0.002000	M Ga < 0.011734	O Hg < 0.011000	M Ru < 0.023468	M Tm < 0.004694
M Bi < 0.004694	M Ge < 0.070404	M Mo < 0.023468	M Sm < 0.011734	M Sn < 0.058670
O B < 0.009900	M Au < 0.035202	M Nd < 0.023468	M Sc < 0.117341	M Ti < 0.586704
M Cd < 0.035202	M Hf < 0.023468	s Ni	O Se < 0.006000	M W < 0.117341
O Ca 0.000327	M Ho < 0.005867	M Nb < 0.005867	O Si < 0.003400	M U < 0.023468
M Ce < 0.058670	M In < 0.117341	n Os	M Ag < 0.023468	M V < 0.023468
M Cs < 0.003520	M Ir < 0.058670	M Pd < 0.058670	O Na 0.000435	M Yb < 0.011734
M Cr < 0.058670	O Fe 0.000762	O P < 0.100000	M Sr < 0.005867	M Y < 0.469363
O Co < 0.002000	M La < 0.005867	M Pt < 0.023468	O S < 0.025000	M Zn < 0.234682
M Cu < 0.070404	M Pb < 0.035202	O K 0.000163	M Ta < 0.082139	M Zr < 0.058670

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69; +2; 6; $Ni(H_2O)_6^{2+}$

Chemical Compatibility - Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ni Containing Samples (Preparation and Solution) - Metal (Soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	ion	Si
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	atom	Cr, Re, Os, Nb, Ag, Pt, Fe
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	ion	Sb, Ta, Co
ICP-MS 60 amu	100 ppt	n/a	M+	43Ca16O1H , 44Ca16O, 23Na37Cl

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

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

Certification Date: February 10, 2012

Expiration Date: EXPIRES 01 DEC 2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

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381731

CERTIFICATE OF ANALYSIS

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

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0	**DESCRIPTION OF CRM**	**1000 µg/mL Lead in 0.5% (v/v) HNO3**
	Catalog Number:	CGPB1-1, CGPB1-2, and CGPB1-5
	Lot Number:	**F2-PB03035**
	Starting Material:	Pb(NO3)2
	Starting Material Purity (%):	99.9998
	Starting Material Lot No:	1717
	Matrix:	0.5% (v/v) HNO3

Received 4/17/12

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 1,001 ± 5 µg/mL - weighted mean

Certified Density: 1.002 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 $(\bar{x}) = \frac{\Sigma x_i}{n}$

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

4.1	Assay Method #1	**1,000 ± 3 µg/mL** ICP Assay NIST SRM 3128 Lot Number: 101026
	Assay Method #2	**1,002 ± 3 µg/mL** EDTA NIST SRM 928 Lot Number: 928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O	Al	0.000477	M	Dy	< 0.017590	O	Li	0.000136	M	Pr	< 0.000880	M	Te	< 0.067952
M	Sb	< 0.001466	M	Er	< 0.014659	M	Lu	< 0.001173	M	Re	< 0.002932	M	Tb	< 0.000880
M	As	< 0.029317	M	Eu	< 0.008795	O	Mg	0.000102	O	Rh	< 0.009000	O	Tl	< 0.022000
O	Ba	0.000545	M	Gd	< 0.002932	M	Mn	< 0.011727	M	Rb	< 0.002932	M	Th	< 0.002932
M	Be	< 0.001466	M	Ga	< 0.002932	O	Hg	< 0.015000	M	Ru	< 0.005863	M	Tm	< 0.001173
O	Bi	< 0.020000	M	Ge	< 0.017590	M	Mo	< 0.005863	M	Sm	< 0.002932	M	Sn	< 0.014659
O	B	< 0.040000	M	Au	< 0.008795	M	Nd	< 0.005863	M	Sc	< 0.029317	M	Ti	< 0.146587
M	Cd	< 0.008795	M	Hf	< 0.005863	O	Ni	< 0.003000	M	Se	< 0.023454	M	W	< 0.029317
O	Ca	0.000682	M	Ho	< 0.001466	M	Nb	< 0.001466	O	Si	< 0.003400	M	U	< 0.005863
M	Ce	< 0.014659	M	In	< 0.029317	n	Os		M	Ag	< 0.005863	M	V	< 0.005863
M	Cs	< 0.000880	M	Ir	< 0.014659	M	Pd	< 0.014659	O	Na	< 0.006000	M	Yb	< 0.002932
M	Cr	< 0.014659	O	Fe	0.000545	O	P	< 0.005000	O	Sr	0.000204	M	Y	< 0.117270
M	Co	< 0.008795	M	La	< 0.001466	M	Pt	< 0.005863	O	S	< 0.100000	O	Zn	< 0.000200
M	Cu	< 0.017590	s	Pb		O	K	< 0.001800	M	Ta	< 0.020522	M	Zr	< 0.014659

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.2; +2; 6; $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) - Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl.).

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	ion	Co
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	ion	Bi, Nb
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	atom	W, Ir, Hf, Sb, Th
ICP-MS 208 amu	5 ppt	n/a	M+	192Pt16O, 192Os16O

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI Certificate Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

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

Certification Date: February 10, 2012

Expiration Date:

EXPIRES
01/2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny, Product Documentation Technician	
Certificate Approved By:	Brian Alexander, PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines, PhD., Senior Technical Director	

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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** **1000 µg/mL Zinc in 2% (v/v) HNO3**

Catalog Number:	CGZN1-1, CGZN1-2, and CGZN1-5
Lot Number:	**F2-ZN02075**
Starting Material:	Zn shot
Starting Material Purity (%):	99.9999
Starting Material Lot No:	1676 1677
Matrix:	2% (v/v) HNO3

Received 11/12/12 JR

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

Certified Concentration: 1,000 ± 5 µg/mL - weighted mean

Certified Density: 1.007 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 $(\bar{x}) = \frac{\sum x_i}{n}$

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
$\sum s_i$ = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

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

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

4.1 **Assay Method #1** **998 ± 3 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 080123

Assay Method #2 **1,001 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

O Al < 0.007000	M Dy < 0.031427	O Li < 0.000030	M Pr < 0.001571	M Te < 0.157134
M Sb < 0.002619	M Er < 0.026189	M Lu < 0.002095	M Re < 0.005238	M Tb < 0.001571
M As < 0.052378	M Eu < 0.015713	M Mg 0.000330	M Rh < 0.005238	M Tl 0.000020
M Ba < 0.052378	M Gd < 0.005238	O Mn < 0.000300	M Rb < 0.005238	M Th < 0.005238
M Be < 0.002619	M Ga < 0.005238	O Hg < 0.010000	M Ru < 0.010476	M Tm < 0.002095
M Bi < 0.002095	M Ge < 0.031427	M Mo < 0.010476	M Sm < 0.005238	M Sn < 0.026189
O B < 0.001000	M Au < 0.015713	M Nd < 0.010476	M Sc < 0.052378	M Ti < 0.261891
M Cd < 0.015713	M Hf < 0.010476	O Ni < 0.000900	M Se < 0.041903	M W < 0.052378
O Ca 0.000134	M Ho < 0.002619	M Nb < 0.002619	O Si < 0.004000	M U < 0.010476
M Ce < 0.026189	M In < 0.052378	n Os	M Ag < 0.010476	M V < 0.010476
M Cs < 0.001571	M Ir < 0.026189	M Pd < 0.026189	O Na 0.000153	M Yb < 0.005238
O Cr < 0.001000	O Fe < 0.001000	O P < 0.003000	M Sr < 0.002619	M Y < 0.209513
M Co < 0.015713	M La < 0.002619	M Pt < 0.010476	O S < 0.020000	s Zn
O Cu < 0.000500	M Pb < 0.015713	O K < 0.003000	M Ta < 0.036665	M Zr < 0.026189

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± °4C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39; +2; 4; Zn(OH)(aq)1+

Chemical Compatibility - Stable in HCl, HNO3, H2SO4 ,HF, H3PO4 Avoid basic media that promotes the formation of insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Zn Containing Samples (Preparation and Solution) - Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl /HNO3); Organic based (Dry ash at 450EC and dissolve ash in HCl) (Sulfuric/peroxide acid digestion)

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

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 213.856 nm	0.002 / 0.0004 µg/mL	1	atom	Ni, Cu, V
ICP-OES 202.548 nm	0.004 / 0.0002 µg/mL	1	ion	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006 / 0.0006 µg/mL	1	ion	Sb, Ta, Bi, Os
ICP-MS 66 amu	7 ppt	n/a	M+	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

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

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

Certification Date: February 13, 2012

Expiration Date: EXPIRES: 01 Dec 2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: ZCAL-60-250 **Lot No.** 17-147CR

Description: Custom Claritas Standard

Matrix: 5% HNO_3 / Tr. Tart. Acid / Tr. HF

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

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

Instrumental Analysis by ICP Spectrometer:

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

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

SPEX CertiPrep Reference Multi: Lot# ALL8

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

Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L
Au	<0.7	Ga	<3	Ir	20	Pd	<2	Sc	<1	Tm	<0.1
Bi	6	Gd	<0.01	La	1	Pr	<0.05	Sm	<0.4	U	<0.2
Ce	1	Ge	<6	Li	<30	Pt	<1	Ta	20	W	<7
Cs	<0.3	Hf	0.2	Lu	<0.05	Rb	40	Tb	0.1	Y	0.4
Dy	<0.2	Hg	<4	Nb	2	Re	<0.4	Te	<6	Yb	<0.3
Er	<0.2	Ho	<0.1	Nd	<0.2	Rh	<0.8	Th	0.4	Zr	<50
Eu	<0.1	In	<6	P	<400	Ru	<0.8				

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 kept tightly closed and stored under ambient laboratory conditions.

Date of Certification: DEC 2012 Certifying Officer:

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Rec 3B13

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-1

Lot Number: **F2-MEB415033**

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	10.00 ± 0.07 µg/mL	Beryllium, Be	10.00 ± 0.07 µg/mL	Lead, Pb	10.00 ± 0.06 µg/mL
Strontium, Sr	10.00 ± 0.06 µg/mL	Thallium, Tl	10.00 ± 0.06 µg/mL	Vanadium, V	10.00 ± 0.06 µg/mL

Certified Density: 1.014 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	892707
Pb	ICP Assay	3128	030721
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 ± 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.

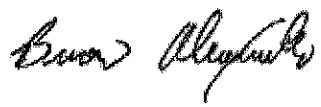
Certification Date: March 06, 2012

Expiration Date: EXPIRES 01 APR 2014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Donna Senn
Product Documentation Technician

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



Certifying Officer: Paul Gaines
PhD., Senior Technical Director

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Rec 3B13

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 (±) = $2\,[\,\Sigma(s_i)^2\,]^{1/2}$

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 01APR2014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Donna Senn
Product Documentation Technician

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

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

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

CERTIFICATE OF ANALYSIS

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

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

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** Custom Solution

Catalog No.: TAPITT-MS-ICPMS

Lot Number: **G2-MEB455121**

Matrix: 0.7% HNO3(v/v)

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	200.1 ± 1.3 µg/mL	Arsenic, As	4.001 ± 0.026 µg/mL	Barium, Ba	200.0 ± 1.3 µg/mL
Beryllium, Be	5.001 ± 0.028 µg/mL	Boron, B	100.0 ± 0.7 µg/mL	Cadmium, Cd	5.001 ± 0.032 µg/mL
Chromium+3, Cr3	20.01 ± 0.13 µg/mL	Cobalt, Co	50.02 ± 0.33 µg/mL	Copper, Cu	25.00 ± 0.17 µg/mL
Iron, Fe	100.0 ± 0.6 µg/mL	Lead, Pb	2.000 ± 0.013 µg/mL	Manganese, Mn	50.01 ± 0.32 µg/mL
Nickel, Ni	50.01 ± 0.33 µg/mL	Selenium, Se	1.001 ± 0.007 µg/mL	Silver, Ag	5.001 ± 0.032 µg/mL
Strontium, Sr	100.0 ± 0.6 µg/mL	Thallium, Tl	5.001 ± 0.032 µg/mL	Vanadium, V	50.00 ± 0.35 µg/mL
Zinc, Zn	50.00 ± 0.33 µg/mL				

Certified Density: 1.005 g/mL (measured at 20 ± 1° C)

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

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

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

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

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

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Al	ICP Assay	3101a	060502
As	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Ba	ICP Assay	3104a	070222
Be	ICP Assay	3105a	090514
Cd	EDTA	928	928
Co	EDTA	928	928
Cr3	ICP Assay	3112a	030730
Cu	EDTA	928	928
Fe	EDTA	928	928
Mn	EDTA	928	928
Ni	EDTA	928	928
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Tl	ICP Assay	3158	993012
V	EDTA	928	928
Zn	EDTA	928	928

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	Volhard	999b	999b
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Be	Calculated		See Sec. 4.2
Cd	ICP Assay	3108	060531
Co	ICP Assay	3113	00630
Cr3	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	011017
Fe	ICP Assay	3126a	051031
Mn	ICP Assay	3132	050429
Ni	ICP Assay	3136	000612
Pb	ICP Assay	3128	101026
Se	Calculated		See Sec. 4.2
Sr	ICP Assay	3153a	990906
Tl	Calculated		See Sec. 4.2
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	080123

4.2 **BALANCE CALIBRATION -** All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - 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**
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. 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: January 09, 2013

Expiration Date: EXPIRES 01/2014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Christy Shortridge
Product Documentation Technician

Christy Shortridge

Certificate Approved By: Brian Alexander
PhD., Quality Control Supervisor

Brian Alexander

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

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300 Technology Drive
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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 863.01

ACCREDITED Reference Material Producer Certificate 863.02

2.0 **DESCRIPTION OF CRM** Custom Solution

Catalog No.: TAPITT-MS-ICPMS

Lot Number: **E2-MEB379097**

Matrix: 0.7% HNO3(v/v)

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 ± 1.1 µg/mL	Arsenic, As	4.001 ± 0.016 µg/mL	Barium, Ba	200.0 ± 1.5 µg/mL
Beryllium, Be	5.000 ± 0.030 µg/mL	Boron, B	100.0 ± 0.5 µg/mL	Cadmium, Cd	5.000 ± 0.020 µg/mL
Chromium+3, Cr3	20.01 ± 0.15 µg/mL	Cobalt, Co	50.00 ± 0.33 µg/mL	Copper, Cu	25.01 ± 0.07 µg/mL
Iron, Fe	100.0 ± 0.6 µg/mL	Lead, Pb	2.001 ± 0.004 µg/mL	Manganese, Mn	50.00 ± 0.38 µg/mL
Nickel, Ni	50.01 ± 0.31 µg/mL	Selenium, Se	1.000 ± 0.004 µg/mL	Silver, Ag	5.000 ± 0.025 µg/mL
Strontium, Sr	100.1 ± 0.5 µg/mL	Thallium, Tl	5.000 ± 0.020 µg/mL	Vanadium, V	50.00 ± 0.39 µg/mL
Zinc, Zn	50.00 ± 0.16 µg/mL				

Certified Density: 1.006 g/mL (measured at 20 ± 1° C)

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 (±) = $\frac{2\,[(\Sigma s_i)^2]^{1/2}}{(n)^{1/2}}$ Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

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.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Al	ICP Assay	3101a	060502
As	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Ba	ICP Assay	3104a	070222
Be	ICP Assay	3105a	892707
Cd	EDTA	928	928
Co	EDTA	928	928
Cr3	ICP Assay	3112a	030730
Cu	EDTA	928	928
Fe	EDTA	928	928
Mn	EDTA	928	928
Ni	EDTA	928	928
Pb	EDTA	928	928
Se	ICP Assay	3149	992106
Sr	EDTA	928	928
Tl	ICP Assay	3158	993012
V	EDTA	928	928
Zn	EDTA	928	928

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	Volhard	999b	999b
Al	EDTA	928	928
As	ICP Assay	3103a	010713
Ba	Gravimetric		See Sec. 4.2
Be	Calculated		See Sec. 4.2
Cd	ICP Assay	3108	060531
Co	ICP Assay	3113	00630
Cr3	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	011017
Fe	ICP Assay	3126a	051031
Mn	ICP Assay	3132	050429
Ni	ICP Assay	3136	000612
Pb	ICP Assay	3128	030721
Se	Calculated		See Sec. 4.2
Sr	ICP Assay	3153a	990906
Tl	Calculated		See Sec. 4.2
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	080123

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

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

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. 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: June 16, 2011

Expiration Date: EXPIRES 01 2014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By: Madeline Gozzi
Quality Control Supervisor

Madeline Gozzi

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

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CERTIFICATE OF ANALYSIS

CH 2/14/13

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

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** Custom Solution

Catalog No.: TAPITT-MS-A

Lot Number: **G2-MEB458093**

Matrix: 3% HNO3(v/v)

5,000 µg/mL ea:
Ca, K, Mg, Na

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Calcium, Ca	5,000 ± 35 µg/mL	Magnesium, Mg	5,000 ± 33 µg/mL	Potassium, K	5,000 ± 37 µg/mL
Sodium, Na	5,000 ± 34 µg/mL				

Certified Density: 1.073 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#	ELEMENT	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	010728

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

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

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

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

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. 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: February 01, 2013

Expiration Date: EXPIRES 01 MAR 2014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician

Certificate Approved By: Brian Alexander
PhD., Quality Control Supervisor

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

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CERTIFICATE OF ANALYSIS

CH 2/14/13

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** Custom Solution

Catalog No.: TAPITT-MS-C

Lot Number: **G2-MEB458094**

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

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

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	50.02 ± 0.38 µg/mL	Molybdenum, Mo	100.0 ± 0.7 µg/mL	Silicon, Si	1,000 ± 7 µg/mL
Tin, Sn	200.0 ± 1.4 µg/mL	Titanium, Ti	100.1 ± 0.7 µg/mL		

Certified Density: 1.020 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#	ELEMENT	METHOD	NIST SRM#	SRM LOT#
Mo	Calculated		See Sec. 4.2	Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2	Sb	ICP Assay	3102A	061229
Si	Calculated		See Sec. 4.2	Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2	Sn	ICP Assay	3161a	070330
Ti	ICP Assay	3162a	060808				

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

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

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

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - 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
- QMI File Number 010105

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- Reference Materials Production - Accredited A2LA Certificate Number 883.02

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10.5 10CFR21 - Nuclear Regulatory Commission
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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: February 01, 2013

Expiration Date: EXPIRES 01 MAR 2014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician

Certificate Approved By: Brian Alexander
PhD., Quality Control Supervisor

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Certification Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-22660-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Canton	California	NELAP	9	01144CA
TestAmerica Canton	Connecticut	State Program	1	PH-0590
TestAmerica Canton	Florida	NELAP	4	E87225
TestAmerica Canton	Georgia	State Program	4	N/A
TestAmerica Canton	Illinois	NELAP	5	200004
TestAmerica Canton	Kansas	NELAP	7	E-10336
TestAmerica Canton	Kentucky	State Program	4	58
TestAmerica Canton	L-A-B	DoD ELAP		L2315
TestAmerica Canton	Minnesota	NELAP	5	039-999-348
TestAmerica Canton	Nevada	State Program	9	OH-000482008A
TestAmerica Canton	New Jersey	NELAP	2	OH001
TestAmerica Canton	New York	NELAP	2	10975
TestAmerica Canton	Ohio VAP	State Program	5	CL0024
TestAmerica Canton	Pennsylvania	NELAP	3	68-00340
TestAmerica Canton	Texas	NELAP	6	
TestAmerica Canton	USDA	Federal		P330-11-00328
TestAmerica Canton	Virginia	NELAP	3	460175
TestAmerica Canton	Washington	State Program	10	C971
TestAmerica Canton	West Virginia DEP	State Program	3	210
TestAmerica Canton	Wisconsin	State Program	5	999518190
TestAmerica Pittsburgh	Arkansas DEQ	State Program	6	88-0690
TestAmerica Pittsburgh	California	NELAP	9	4224CA
TestAmerica Pittsburgh	Connecticut	State Program	1	PH-0688
TestAmerica Pittsburgh	Florida	NELAP	4	E871008
TestAmerica Pittsburgh	Illinois	NELAP	5	002602
TestAmerica Pittsburgh	L-A-B	DoD ELAP		L2314
TestAmerica Pittsburgh	Louisiana	NELAP	6	04041
TestAmerica Pittsburgh	New Hampshire	NELAP	1	203011
TestAmerica Pittsburgh	New Jersey	NELAP	2	PA005
TestAmerica Pittsburgh	New York	NELAP	2	11182
TestAmerica Pittsburgh	North Carolina DENR	State Program	4	434
TestAmerica Pittsburgh	Pennsylvania	NELAP	3	02-00416
TestAmerica Pittsburgh	South Carolina	State Program	4	89014
TestAmerica Pittsburgh	US Fish & Wildlife	Federal		LE94312A-1
TestAmerica Pittsburgh	USDA	Federal		P330-10-00139
TestAmerica Pittsburgh	USDA	Federal		P-Soil-01
TestAmerica Pittsburgh	Utah	NELAP	8	STLP
TestAmerica Pittsburgh	Virginia	NELAP	3	460189
TestAmerica Pittsburgh	West Virginia DEP	State Program	3	142
TestAmerica Pittsburgh	Wisconsin	State Program	5	998027800

Accreditation may not be offered or required for all methods and analytes reported in this package Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method 8260B DOD

Volatile Organic Compounds (GC/MS) by Method 8260B/DOD

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
	MRL 240-80741/5	87	97	94	91
	MRL 240-80741/28	86	99	90	87

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	50-150
DCA = 1,2-Dichloroethane-d4 (Surr)	50-150
TOL = Toluene-d8 (Surr)	50-150
BFB = 4-Bromofluorobenzene (Surr)	50-150

Column to be used to flag recovery values

FORM II 8260B/DoD

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
068SB-0057M-0001-SO	240-22660-30	75	91	76 Q	67 Q
	MB 240-80741/30	89	101	101	93
	LCS 240-80741/6	93	93	95	92

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	59-138
DCA = 1,2-Dichloroethane-d4 (Surr)	61-130
TOL = Toluene-d8 (Surr)	85-115
BFB = 4-Bromofluorobenzene (Surr)	85-120

Column to be used to flag recovery values

FORM II 8260B/DoD

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 141801.D

Lab ID: LCS 240-80741/6 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Acetone	100	104	104	20-160	
Benzene	50.0	49.6	99	75-125	
Bromochloromethane	50.0	49.8	100	70-125	
Bromodichloromethane	50.0	43.0	86	70-130	
Bromoform	50.0	44.6	89	55-135	
Bromomethane	50.0	55.2	110	30-160	
2-Butanone (MEK)	100	91.9	92	30-160	
Carbon disulfide	50.0	37.1	74	45-160	
Carbon tetrachloride	50.0	49.8	100	65-135	
Chlorobenzene	50.0	50.2	100	75-125	
Chloroethane	50.0	56.8	114	40-155	
Chloroform	50.0	51.0	102	70-125	
Chloromethane	50.0	47.7	95	50-130	
cis-1,3-Dichloropropene	50.0	44.0	88	70-125	
Dibromochloromethane	50.0	44.0	88	65-130	
1,1-Dichloroethane	50.0	48.7	97	75-125	
1,2-Dichloroethane	50.0	49.8	100	70-135	
1,1-Dichloroethene	50.0	48.1	96	65-135	
1,2-Dichloropropane	50.0	50.6	101	70-120	
Ethylbenzene	50.0	51.9	104	75-125	
2-Hexanone	100	93.3	93	45-145	
Methylene Chloride	50.0	49.8	100	55-140	
4-Methyl-2-pentanone (MIBK)	100	95.0	95	45-145	
Styrene	50.0	52.8	106	75-125	
1,1,2,2-Tetrachloroethane	50.0	53.1	106	55-130	
Tetrachloroethene	50.0	51.7	103	65-140	
Toluene	50.0	51.0	102	70-125	
trans-1,3-Dichloropropene	50.0	46.6	93	65-125	
1,1,1-Trichloroethane	50.0	49.5	99	70-135	
1,1,2-Trichloroethane	50.0	51.5	103	60-125	
Trichloroethene	50.0	48.1	96	75-125	
Vinyl chloride	50.0	52.7	105	60-125	
Xylenes, Total	150	156	104	75-125	

Column to be used to flag recovery and RPD values

FORM III 8260B/DoD

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 141800.D

Lab ID: MRL 240-80741/5 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acetone	0.0100	0.0186	186	70-130	^
Benzene	0.00500	0.00533	107	70-130	
Bromochloromethane	0.00500	0.00483	97	70-130	
Bromodichloromethane	0.00500	0.00429	86	70-130	
Bromoform	0.00500	0.00586	117	70-130	
Bromomethane	0.00500	0.00623	125	70-130	
2-Butanone (MEK)	0.0100	0.0100	100	70-130	
Carbon disulfide	0.00500	0.00579	116	70-130	
Carbon tetrachloride	0.00500	0.00412	82	70-130	
Chlorobenzene	0.00500	0.00529	106	70-130	
Chloroethane	0.00500	0.00471	94	70-130	
Chloroform	0.00500	0.00523	105	70-130	
Chloromethane	0.00500	0.00546	109	70-130	
cis-1,3-Dichloropropene	0.00500	0.00429	86	70-130	
Dibromochloromethane	0.00500	0.00607	121	70-130	
1,1-Dichloroethane	0.00500	0.00507	101	70-130	
1,2-Dichloroethane	0.00500	0.00521	104	70-130	
1,1-Dichloroethene	0.00500	0.00477	95	70-130	
1,2-Dichloropropane	0.00500	0.00523	105	70-130	
Ethylbenzene	0.00500	0.00525	105	70-130	
2-Hexanone	0.0100	0.0104	104	70-130	
Methylene Chloride	0.00500	0.00907	181	70-130	^
4-Methyl-2-pentanone (MIBK)	0.0100	0.00982 J	98	70-130	
Styrene	0.00500	0.00467	93	70-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00537	107	70-130	
Tetrachloroethene	0.00500	0.00536	107	70-130	
Toluene	0.00500	0.00523	105	70-130	
trans-1,3-Dichloropropene	0.00500	0.00423	85	70-130	
1,1,1-Trichloroethane	0.00500	0.00448	90	70-130	
1,1,2-Trichloroethane	0.00500	0.00536	107	70-130	
Trichloroethene	0.00500	0.00520	104	70-130	
Vinyl chloride	0.00500	0.00558	112	70-130	
Xylenes, Total	0.0100	0.0102	102	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260B/DoD

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 141824.D

Lab ID: MRL 240-80741/28 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acetone	0.0100	0.0207	207	70-130	^
Benzene	0.00500	0.00526	105	70-130	
Bromochloromethane	0.00500	0.00520	104	70-130	
Bromodichloromethane	0.00500	0.00432	86	70-130	
Bromoform	0.00500	0.00637	127	70-130	
Bromomethane	0.00500	0.00702	140	70-130	^
2-Butanone (MEK)	0.0100	0.0120	120	70-130	
Carbon disulfide	0.00500	0.00556	111	70-130	
Carbon tetrachloride	0.00500	0.00385	77	70-130	
Chlorobenzene	0.00500	0.00532	106	70-130	
Chloroethane	0.00500	0.00580	116	70-130	
Chloroform	0.00500	0.00494	99	70-130	
Chloromethane	0.00500	0.00569	114	70-130	
cis-1,3-Dichloropropene	0.00500	0.00403	81	70-130	
Dibromochloromethane	0.00500	0.00643	129	70-130	
1,1-Dichloroethane	0.00500	0.00483	97	70-130	
1,2-Dichloroethane	0.00500	0.00536	107	70-130	
1,1-Dichloroethene	0.00500	0.00455	91	70-130	
1,2-Dichloropropane	0.00500	0.00523	105	70-130	
Ethylbenzene	0.00500	0.00527	105	70-130	
2-Hexanone	0.0100	0.0128	128	70-130	
Methylene Chloride	0.00500	0.00785	157	70-130	^
4-Methyl-2-pentanone (MIBK)	0.0100	0.0118	118	70-130	
Styrene	0.00500	0.00517	103	70-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00666	133	70-130	^
Tetrachloroethene	0.00500	0.00509	102	70-130	
Toluene	0.00500	0.00519	104	70-130	
trans-1,3-Dichloropropene	0.00500	0.00387	77	70-130	
1,1,1-Trichloroethane	0.00500	0.00427	85	70-130	
1,1,2-Trichloroethane	0.00500	0.00586	117	70-130	
Trichloroethene	0.00500	0.00517	103	70-130	
Vinyl chloride	0.00500	0.00605	121	70-130	
Xylenes, Total	0.0100	0.0102	102	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260B/DoD

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Lab File ID: 141803.D Lab Sample ID: MB 240-80741/30

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

Instrument ID: A3UX14 Date Analyzed: 04/05/2013 13:05

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-80741/6	141801.D	04/05/2013 12:04
068SB-0057M-0001-SO	240-22660-30	141823.D	04/05/2013 20:29

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Lab File ID: BFB14383.D BFB Injection Date: 04/01/2013

Instrument ID: A3UX14 BFB Injection Time: 13:20

Analysis Batch No.: 80127

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.7	
75	30.0 - 60.0 % of mass 95	47.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	82.0	
175	5.0 - 9.0 % of mass 174	6.1	(7.4)1
176	95.0 - 101.0 % of mass 174	78.6	(95.7)1
177	5.0 - 9.0 % of mass 176	5.1	(6.5)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-80127/3	141665.D	04/01/2013	14:03
	IC 240-80127/4	141666.D	04/01/2013	14:25
	IC 240-80127/5	141667.D	04/01/2013	14:46
	ICIS 240-80127/6	141668.D	04/01/2013	15:08
	IC 240-80127/7	141669.D	04/01/2013	15:29
	IC 240-80127/8	141670.D	04/01/2013	15:51
	IC 240-80127/9	141671.D	04/01/2013	16:12
	IC 240-80127/10	141672.D	04/01/2013	16:34
	IC 240-80127/11	141673.D	04/01/2013	16:55
	ICV 240-80127/21	141683.D	04/01/2013	20:31

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Lab File ID: BFB14388.D BFB Injection Date: 04/05/2013

Instrument ID: A3UX14 BFB Injection Time: 10:16

Analysis Batch No.: 80741

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.5	
75	30.0 - 60.0 % of mass 95	48.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	83.0	
175	5.0 - 9.0 % of mass 174	6.0	(7.2)1
176	95.0 - 101.0 % of mass 174	80.5	(97.0)1
177	5.0 - 9.0 % of mass 176	5.1	(6.3)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-80741/3	141798.D	04/05/2013	10:59
	CCV 240-80741/4	141799.D	04/05/2013	11:21
	MRL 240-80741/5	141800.D	04/05/2013	11:42
	LCS 240-80741/6	141801.D	04/05/2013	12:04
	MB 240-80741/30	141803.D	04/05/2013	13:05
068SB-0057M-0001-SO	240-22660-30	141823.D	04/05/2013	20:29
	MRL 240-80741/28	141824.D	04/05/2013	20:51

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Sample No.: ICIS 240-80127/6 Date Analyzed: 04/01/2013 15:08

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 141668.D Heated Purge: (Y/N) Y

Calibration ID: 14354

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1285361	6.93	847501	9.64	381352	11.61
UPPER LIMIT		2570722	7.43	1695002	10.14	762704	12.11
LOWER LIMIT		642681	6.43	423751	9.14	190676	11.11
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-80127/21		1276199	6.93	859219	9.64	404592	11.61
CCV 240-80741/3		1173634	6.93	797196	9.64	380223	11.61
CCV 240-80741/4		1169885	6.93	775392	9.64	350507	11.61
MRL 240-80741/5		1144306	6.93	767559	9.64	366063	11.61
LCS 240-80741/6		1163312	6.93	769543	9.64	355535	11.61
MB 240-80741/30		1131638	6.93	750297	9.64	351042	11.61
240-22660-30	068SB-0057M-0001-SO	1061913	6.93	735577	9.64	348310	11.61
MRL 240-80741/28		1121209	6.93	766174	9.64	352083	11.61

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

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 8260B/DOD

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-22660-1

SDG No.:

Client Sample ID: 068SB-0057M-0001-SO | Lab Sample ID: 240-22660-30

Matrix: Solid | Lab File ID: 141823.D

Analysis Method: 8260B/DoD | Date Collected: 03/29/2013 11:26

Sample wt/vol: 6.24(g) | Date Analyzed: 04/05/2013 20:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.1 | Level: (low/med) Low

Analysis Batch No.: 80741 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-64-1	Acetone	6.5	U	21	6.5	6.5
71-43-2	Benzene	0.51	U	5.1	0.51	0.24
74-97-5	Bromochloromethane	1.0	U	5.1	1.0	0.73
75-27-4	Bromodichloromethane	0.51	U	5.1	0.51	0.29
75-25-2	Bromoform	0.51	U	5.1	0.51	0.34
74-83-9	Bromomethane	1.0	U	5.1	1.0	0.56
78-93-3	2-Butanone (MEK)	2.1	U	21	2.1	1.4
75-15-0	Carbon disulfide	0.51	U	5.1	0.51	0.45
56-23-5	Carbon tetrachloride	0.51	U	5.1	0.51	0.38
108-90-7	Chlorobenzene	0.51	U	5.1	0.51	0.34
75-00-3	Chloroethane	1.0	U	5.1	1.0	0.88
67-66-3	Chloroform	0.51	U	5.1	0.51	0.30
74-87-3	Chloromethane	0.51	U	5.1	0.51	0.42
10061-01-5	cis-1,3-Dichloropropene	0.51	U	5.1	0.51	0.35
124-48-1	Dibromochloromethane	1.0	U	5.1	1.0	0.57
106-93-4	1,2-Dibromoethane	1.0	U	5.1	1.0	0.51
75-34-3	1,1-Dichloroethane	0.51	U	5.1	0.51	0.37
107-06-2	1,2-Dichloroethane	0.51	U	5.1	0.51	0.35
75-35-4	1,1-Dichloroethene	1.0	U	5.1	1.0	0.53
540-59-0	1,2-Dichloroethene, Total	1.0	U	10	1.0	0.79
78-87-5	1,2-Dichloropropane	1.0	U	5.1	1.0	0.71
100-41-4	Ethylbenzene	0.51	U	5.1	0.51	0.27
591-78-6	2-Hexanone	1.0	U	21	1.0	0.65
75-09-2	Methylene Chloride	1.6	J B	5.1	1.0	0.69
108-10-1	4-Methyl-2-pentanone (MIBK)	1.0	U	21	1.0	0.56
100-42-5	Styrene	0.51	U	5.1	0.51	0.15
79-34-5	1,1,2,2-Tetrachloroethane	0.51	U	5.1	0.51	0.35
127-18-4	Tetrachloroethene	1.0	U	5.1	1.0	0.53
108-88-3	Toluene	0.51	U	5.1	0.51	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	5.1	1.0	0.56
71-55-6	1,1,1-Trichloroethane	1.0	U	5.1	1.0	0.58
79-00-5	1,1,2-Trichloroethane	0.51	U	5.1	0.51	0.40
79-01-6	Trichloroethene	0.51	U	5.1	0.51	0.43
75-01-4	Vinyl chloride	0.51	U	5.1	0.51	0.40
1330-20-7	Xylenes, Total	1.5	U	10	1.5	0.69

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Client Sample ID: 068SB-0057M-0001-SO Lab Sample ID: 240-22660-30

Matrix: Solid Lab File ID: 141823.D

Analysis Method: 8260B/DoD Date Collected: 03/29/2013 11:26

Sample wt/vol: 6.24(g) Date Analyzed: 04/05/2013 20:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.1 Level: (low/med) Low

Analysis Batch No.: 80741 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	67	Q	85-120
1868-53-7	Dibromofluoromethane (Surr)	75		59-138
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		61-130
2037-26-5	Toluene-d8 (Surr)	76	Q	85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141823.D
Lims ID: 240-22660-B-30-A Client ID: 068SB-0057M-0001-SO
Inject. Date: 05-Apr-2013 20:29:30 Dil. Factor: 1.0000
Sample Type: Client
Sample ID: 240-22660-b-30-a
Misc. Info.: 240-0018585-027 =240-0018585-027
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 26
Lims Batch ID: 80741 Lims Sample ID: 27
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130405-18585.b\8260_14.m
Last Update: 08-Apr-2013 09:54:39 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK014

First Level Reviewer: macenczaks Date: 08-Apr-2013 09:22:42

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	100	1061913	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	89	735577	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	348310	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.257	6.258	-0.001	75	216177	37.7	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	95	282077	45.3	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	879096	38.1	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.624	0.0	93	267011	33.6	
13 Chloromethane	50		1.643					9
14 Vinyl chloride	62		1.761					
15 Bromomethane	94		2.104					
16 Chloroethane	64		2.211					
21 1,1-Dichloroethene	96		3.205					
22 Acetone	43	3.311	3.311	0.0	81	10718	1.34	
26 Carbon disulfide	76		3.477					
30 Methylene Chloride	84	3.950	3.950	0.0	93	8692	1.52	
33 trans-1,2-Dichloroethene	96		4.388					
34 Methyl tert-butyl ether	73		4.412					
36 1,1-Dichloroethane	63		4.979					
42 cis-1,2-Dichloroethene	96		5.713					
41 2-Butanone (MEK)	43		5.749					9
47 Chlorobromomethane	128		5.973					
49 Chloroform	83		6.092					9
50 1,1,1-Trichloroethane	97		6.257					
53 Carbon tetrachloride	117		6.435					
55 Benzene	78		6.648					9
56 1,2-Dichloroethane	62		6.672					
60 Trichloroethene	130		7.287					
62 1,2-Dichloropropane	63		7.500					9
67 Dichlorobromomethane	83		7.760					9
70 cis-1,3-Dichloropropene	75		8.163					

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
71 4-Methyl-2-pentanone (MIBK)	43		8.293					9
72 Toluene	91	8.447	8.458	-0.011	57	3685	0.1486	
73 trans-1,3-Dichloropropene	75		8.648					
75 1,1,2-Trichloroethane	97		8.802					
77 Tetrachloroethene	164		8.932					
78 2-Hexanone	43		9.015					
79 Chlorodibromomethane	129		9.145					
123 Ethylene Dibromide	107		9.239					
82 Chlorobenzene	112		9.665					9
84 Ethylbenzene	106		9.748					9
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	71	1699	0.1660	
85 o-Xylene	106		10.186					
86 Styrene	104		10.198					9
87 Bromoform	173		10.363					9
90 1,1,2,2-Tetrachloroethane	83		10.742					9
S 11 1,2-Dichloroethene, Total	96		1.140					
S 114 Xylenes, Total	106				0		0.1660	

QC Flag Legend

Processing Flags
9 - Failed A Reference Spectral Test

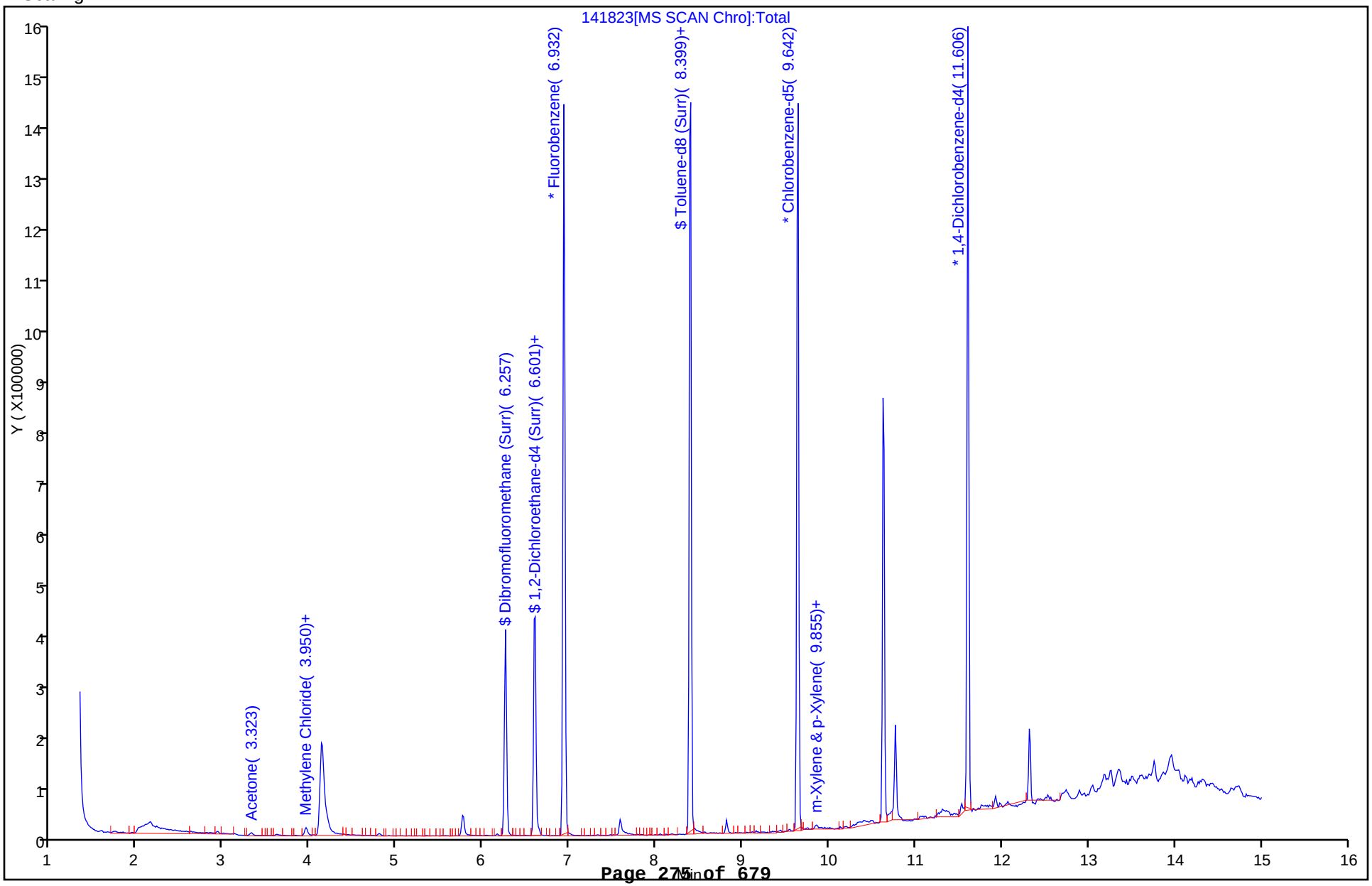
Report Date: 09-Apr-2013 16:26:17 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141823.D

Injection Date:	05-Apr-2013 20:29:30	Limit Group:	MSV 8260DOD ICAL
Client ID:	068SB-0057M-0001-SO	Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	27
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



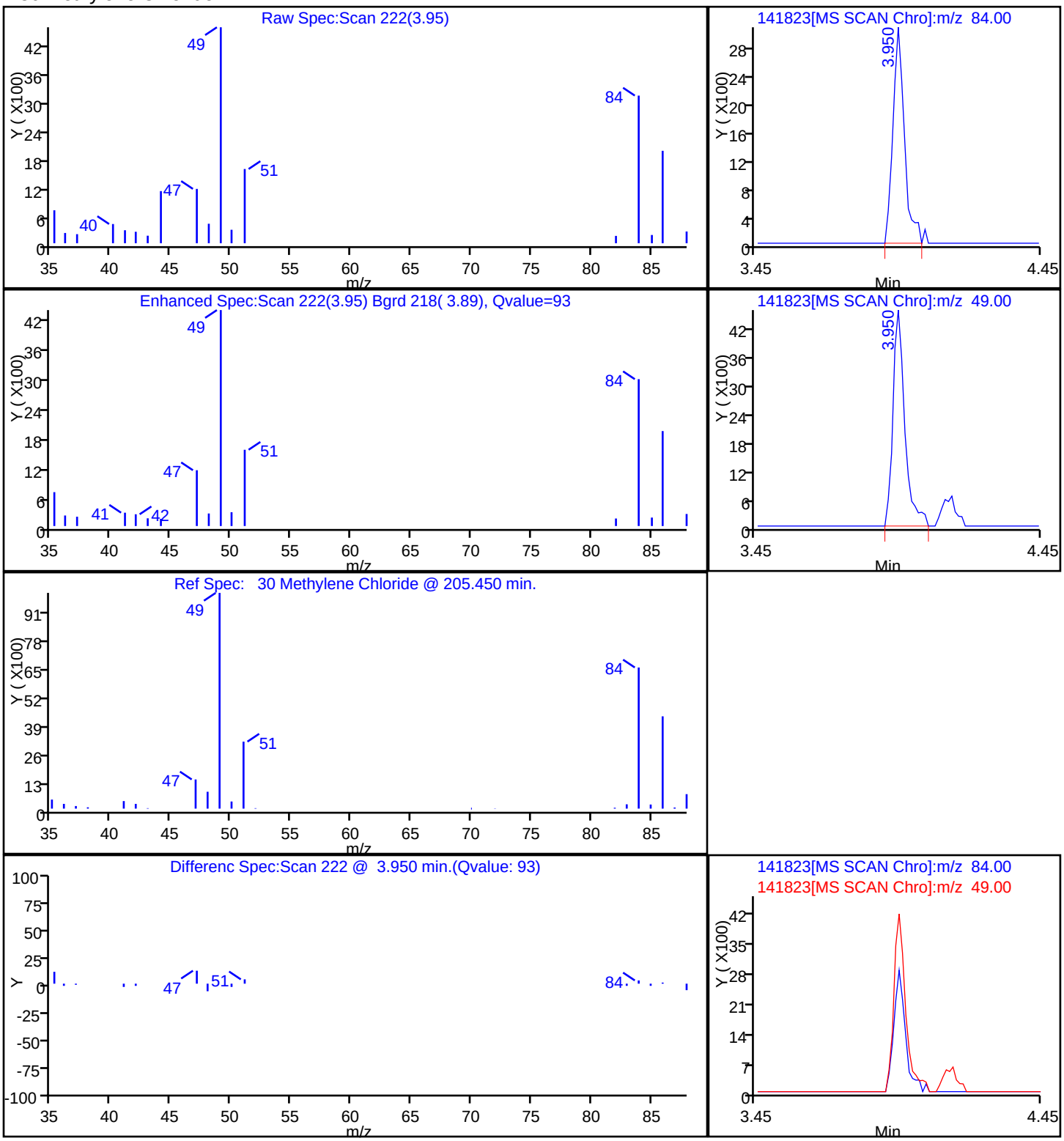
Report Date: 09-Apr-2013 16:26:17 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141823.D

Injection Date:	05-Apr-2013 20:29:30	Limit Group:	MSV 8260DOD ICAL
Client ID:	068SB-0057M-0001-SO	Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	27
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

30 Methylene Chloride



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

Lab Name: TestAmerica Canton Job No.: 240-22660-1 Analy Batch No.: 80127

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/01/2013 14:03 Calibration End Date: 04/01/2013 16:55 Calibration ID: 14354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-80127/11	141673.D
Level 2	IC 240-80127/10	141672.D
Level 3	IC 240-80127/9	141671.D
Level 4	IC 240-80127/8	141670.D
Level 5	IC 240-80127/7	141669.D
Level 6	ICIS 240-80127/6	141668.D
Level 7	IC 240-80127/5	141667.D
Level 8	IC 240-80127/4	141666.D
Level 9	IC 240-80127/3	141665.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 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2414 0.2988	0.2625 0.2996	0.2989	0.2979	0.2983	Ave		0.2854			0.1000	8.3		15.0			
Chloromethane	0.4127 0.3752	0.3493 0.3719	0.3544 0.3750	0.3620 0.3539	0.3667	Ave		0.3690			0.1000	5.1		15.0			
Vinyl chloride	0.2863 0.3047	0.2684 0.3100	0.2929 0.3140	0.2935 0.3074	0.2980	Ave		0.2972			0.1000	4.7		15.0			
Bromomethane	0.1193 0.0891	0.1211 0.0909	0.0900 0.0928	0.0861 0.0957	0.0920	Ave		0.0974			0.0500	14.0		15.0			
Chloroethane	0.1403 0.1411	0.1379 0.1317	0.1345 0.1443	0.1325 0.1499	0.1318	Ave		0.1382				4.6		15.0			
Dichlorofluoromethane	0.4395 0.4038	0.4005 0.3975	0.3938 0.4011	0.3886 0.4068	0.3931	Ave		0.4028				3.7		15.0			
Trichlorofluoromethane	0.3380 0.3967	0.3612 0.3977	0.3619 0.4009	0.3694 0.4083	0.3802	Ave		0.3794			0.1000	6.2		15.0			
Ethyl ether	0.2805 0.2124	0.2378 0.2122	0.2226 0.2151	0.2078 0.2201	0.2206	Ave		0.2254				9.9		15.0			
Acrolein	+++++ 0.0327	+++++ 0.0319	0.0318 0.0322	0.0297 0.0326	0.0318	Ave		0.0318				3.2		15.0			
1,1-Dichloroethene	0.2012 0.2406	0.2035 0.2375	0.2330 0.2471	0.2162 0.2502	0.2350	Ave		0.2294			0.1000	7.9		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.2072	+++++ 0.2076	0.1840 0.2139	0.1842 0.2125	0.2022	Ave		0.2017			0.0500	6.2		15.0			
Acetone	+++++ 0.0700	+++++ 0.0663	0.1121 0.0637	0.0760 0.0641	0.0725	Lin1	0.4196	0.0633			0.0500				0.9990		0.9950
Iodomethane	0.3127 0.3931	0.3490 0.4020	0.3627 0.4093	0.3536 0.4044	0.3786	Ave		0.3739				8.6		15.0			

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

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1 Analy Batch No.: 80127

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/01/2013 14:03 Calibration End Date: 04/01/2013 16:55 Calibration ID: 14354

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 9	LVL 5		B	M1	M2								
Carbon disulfide	+++++ 0.6299	+++++ 0.6770	0.4409 0.7217	0.4534 0.7250	0.5366	Lin1	-2.215	0.7209			0.1000				0.9980		0.9950
3-Chloro-1-propene	+++++ 0.1430	+++++ 0.1458	0.1110 0.1516	0.1108 0.1530	0.1315	Ave		0.1352				13.0		15.0			
Methyl acetate	0.1722 0.1710	0.1765 0.1691	0.1728 0.1715	0.1590 0.1726	0.1736	Ave		0.1709			0.1000	2.9		15.0			
Methylene Chloride	+++++ 0.2556	+++++ 0.2468	0.3303 0.2480	0.2827 0.2480	0.2755	Ave		0.2696			0.1000	11.0		15.0			
2-Methyl-2-propanol	0.0212 0.0164	0.0178 0.0173	0.0183 0.0159	0.0142 0.0159	0.0163	Ave		0.0170				12.0		15.0			
Acrylonitrile	0.0838 0.0820	0.0869 0.0824	0.0814 0.0831	0.0759 0.0838	0.0821	Ave		0.0824				3.5		15.0			
trans-1,2-Dichloroethene	0.2315 0.2772	0.2442 0.2727	0.2698 0.2759	0.2595 0.2759	0.2711	Ave		0.2642			0.1000	6.1		15.0			
Methyl tert-butyl ether	0.5261 0.6109	0.5976 0.6150	0.5887 0.6288	0.5559 0.6423	0.6002	Ave		0.5962			0.1000	6.0		15.0			
Hexane	0.0589 0.0725	0.0711 0.0728	0.0754 0.0754	0.0710 0.0767	0.0760	Ave		0.0722				7.5		15.0			
1,1-Dichloroethane	0.4346 0.5093	0.5050 0.5056	0.4791 0.5170	0.4618 0.5255	0.5028	Ave		0.4934			0.1000	5.9		15.0			
Vinyl acetate	0.0294 0.0435	0.0373 0.0469	0.0350	0.0390	0.0402	Ave		0.0388				15.0		15.0			
2,2-Dichloropropane	+++++ 0.2427	+++++ 0.2578	0.1939 0.2579	0.1965 0.2524	0.2248	Ave		0.2323				12.0		15.0			
cis-1,2-Dichloroethene	0.2654 0.2929	0.2684 0.2915	0.2909 0.2933	0.2742 0.2928	0.2913	Ave		0.2845			0.1000	4.1		15.0			
2-Butanone (MEK)	+++++ 0.1012	+++++ 0.1037	0.1074 0.1018	0.0943 0.1035	0.1001	Ave		0.1017			0.0500	4.0		15.0			
Bromochloromethane	0.1085 0.1335	0.1232 0.1330	0.1303 0.1351	0.1191 0.1352	0.1296	Ave		0.1275				7.1		15.0			
Tetrahydrofuran	0.0816 0.0667	0.0762 0.0673	0.0682 0.0670	0.0630 0.0670	0.0683	Ave		0.0695				8.2		15.0			
Chloroform	0.3787 0.4507	0.4159 0.4392	0.4227 0.4479	0.4030 0.4534	0.4386	Ave		0.4278				5.9		15.0			
1,1,1-Trichloroethane	+++++ 0.3477	+++++ 0.3577	0.2839 0.3642	0.2870 0.3606	0.3233	Ave		0.3321			0.1000	10.0		15.0			
Cyclohexane	0.3872 0.5310	0.4665 0.5255	0.4940 0.5298	0.4940 0.5334	0.5270	Ave		0.4987			0.1000	9.6		15.0			
1,1-Dichloropropene	0.3028 0.3554	0.3193 0.3514	0.3506 0.3533	0.3333 0.3591	0.3536	Ave		0.3421				5.7		15.0			

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

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1 Analy Batch No.: 80127

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/01/2013 14:03 Calibration End Date: 04/01/2013 16:55 Calibration ID: 14354

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 9	LVL 5		B	M1	M2								
Carbon tetrachloride	+++++ 0.3324	+++++ 0.3489	0.2584 0.3653	0.2654 0.3747	0.3055	Ave		0.3215			0.1000	14.0		15.0			
Isobutyl alcohol	0.0073 0.0068	0.0070 0.0072	0.0068 0.0072	0.0061 0.0073	0.0067	Ave		0.0069				5.4		15.0			
Benzene	1.0390 1.0712	1.0450 1.0569	1.0968 1.0668	1.0216 1.0732	1.0690	Ave		1.0599			0.5000	2.1		15.0			
1,2-Dichloroethane	0.3427 0.3383	0.3492 0.3339	0.3493 0.3441	0.3241 0.3486	0.3422	Ave		0.3414			0.1000	2.4		15.0			
n-Heptane	0.0717 0.0879	0.0783 0.0865	0.0842 0.0890	0.0820 0.0906	0.0865	Ave		0.0841				7.1		15.0			
Trichloroethene	0.3189 0.3118	0.3184 0.3039	0.3173 0.3074	0.2895 0.3116	0.3120	Ave		0.3101			0.2000	3.0		15.0			
Methylcyclohexane	0.3612 0.4847	0.3880 0.4711	0.4739 0.4750	0.4492 0.4783	0.4807	Ave		0.4513			0.1000	10.0		15.0			
1,2-Dichloropropane	0.2323 0.2776	0.2468 0.2725	0.2703 0.2765	0.2536 0.2811	0.2745	Ave		0.2650			0.1000	6.3		15.0			
Dibromomethane	0.1292 0.1268	0.1265 0.1273	0.1165 0.1301	0.1169 0.1310	0.1250	Ave		0.1255				4.2		15.0			
1,4-Dioxane	0.0017 0.0018	0.0020 0.0019	0.0019 0.0019	0.0019 0.0019	0.0020	Ave		0.0019				4.7		15.0			
Bromodichloromethane	0.1665 0.2811	0.1848 0.2931	0.2074 0.3125	0.2126 0.3184	0.2476	Lin1	-0.292	0.3084			0.1000				0.9970		0.9950
2-Chloroethyl vinyl ether	0.0825 0.1062	0.0843 0.1097	0.0945 0.1122	0.0962 0.1145	0.1061	Ave		0.1007				12.0		15.0			
cis-1,3-Dichloropropene	0.1858 0.3458	0.2012 0.3620	0.2358 0.3774	0.2671 0.3851	0.3115	Lin1	-0.372	0.3750			0.1500				0.9970		0.9950
4-Methyl-2-pentanone (MIBK)	0.2731 0.3154	0.2990 0.3142	0.2951 0.3193	0.2856 0.3128	0.3174	Ave		0.3035			0.0500	5.4		15.0			
Toluene	1.7149 1.7111	1.6767 1.6600	1.7241 1.6819	1.6298 1.6715	1.6960	Ave		1.6851			0.4000	1.8		15.0			
trans-1,3-Dichloropropene	0.2095 0.3897	0.2327 0.4076	0.2871 0.4383	0.2962 0.4393	0.3457	Lin1	-0.431	0.4288			0.1000				0.9970		0.9950
Ethyl methacrylate	0.2964 0.3630	0.2619 0.3706	0.3126 0.3790	0.3088 0.3754	0.3481	Ave		0.3351				12.0		15.0			
1,1,2-Trichloroethane	0.2428 0.2682	0.2425 0.2602	0.2645 0.2673	0.2508 0.2600	0.2728	Ave		0.2588			0.1000	4.3		15.0			
Tetrachloroethene	0.3039 0.3548	0.3419 0.3467	0.3661 0.3502	0.3533 0.3500	0.3540	Ave		0.3468			0.2000	5.0		15.0			
1,3-Dichloropropane	0.4492 0.4698	0.4610 0.4518	0.4877 0.4650	0.4496 0.4550	0.4750	Ave		0.4627				2.8		15.0			

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

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1 Analy Batch No.: 80127

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/01/2013 14:03 Calibration End Date: 04/01/2013 16:55 Calibration ID: 14354

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 9	LVL 5		B	M1	M2								
2-Hexanone	0.1967 0.2018	0.1938 0.2051	0.2044 0.2057	0.1954 0.2047	0.2048	Ave		0.2014			0.0500	2.4		15.0			
Dibromochloromethane	+++++ 0.2720	+++++ 0.2932	0.1742 0.3182	0.1959 0.3198	0.2299	Lin1	-1.073	0.3172							0.9980		0.9950
1,2-Dibromoethane	0.2214 0.2692	0.2214 0.2623	0.2429 0.2655	0.2408 0.2583	0.2640	Ave		0.2495				7.5		15.0			
Chlorobenzene	1.0858 1.0420	1.0498 1.0089	1.0708 1.0365	1.0311 1.0162	1.0486	Ave		1.0433			0.3000	2.3		15.0			
1,1,1,2-Tetrachloroethane	+++++ 0.3557	+++++ 0.3579	0.2892 0.3709	0.2852 0.3637	0.3227	Ave		0.3351				11.0		15.0			
Ethylbenzene	0.5044 0.5810	0.5717 0.5663	0.5809 0.5736	0.5559 0.5701	0.5730	Ave		0.5641				4.2		15.0			
m-Xylene & p-Xylene	0.7086 0.7106	0.6724 0.6899	0.7107 0.6995	0.6733 0.6943	0.7021	Ave		0.6957				2.1		15.0			
o-Xylene	0.6435 0.6789	0.6289 0.6572	0.6804 0.6702	0.6451 0.6492	0.6698	Ave		0.6581				2.7		15.0			
Styrene	0.8274 1.0726	0.8794 1.0793	1.0058 1.1202	0.9956 1.0814	1.0504	Ave		1.0124			0.3000	9.8		15.0			
Bromoform	0.0628 0.1351	0.0691 0.1519	0.0883 0.1774	0.0865 0.1789	0.1095	Qua	-0.414	0.1429	0.0002		0.1000				0.9990		0.9900
Isopropylbenzene	1.4863 1.8374	1.5543 1.8245	1.7522 1.8738	1.7222 1.8287	1.7586	Ave		1.7376			0.1000	7.7		15.0			
1,1,2,2-Tetrachloroethane	0.4922 0.6097	0.5319 0.6226	0.5699 0.6245	0.5698 0.6291	0.6105	Ave		0.5845			0.3000	8.1		15.0			
Bromobenzene	0.8794 0.9086	0.8894 0.8687	0.9230 0.8698	0.8658 0.8604	0.9141	Ave		0.8866				2.6		15.0			
1,2,3-Trichloropropane	0.2247 0.2006	0.1831 0.1983	0.2046 0.1924	0.1931 0.1937	0.1971	Ave		0.1986				5.8		15.0			
trans-1,4-Dichloro-2-butene	0.1783 0.2011	0.1588 0.2040	0.1648 0.2115	0.1766 0.2174	0.1908	Ave		0.1893				11.0		15.0			
N-Propylbenzene	0.8714 1.1378	0.8984 1.1075	1.0966 1.0908	1.0721 1.0988	1.1150	Ave		1.0543				9.3		15.0			
2-Chlorotoluene	0.8478 0.9453	0.8256 0.9250	0.9440 0.9110	0.9111 0.9051	0.9257	Ave		0.9045				4.6		15.0			
1,3,5-Trimethylbenzene	2.4622 3.2341	2.6772 3.2175	3.0288 3.2310	2.9964 3.2278	3.1042	Ave		3.0199				9.1		15.0			
4-Chlorotoluene	0.8550 0.9611	0.9085 0.9200	0.9682 0.9121	0.9169 0.9125	0.9394	Ave		0.9215				3.6		15.0			
tert-Butylbenzene	2.3433 3.0252	2.4691 3.0304	2.9041 3.0351	2.8580 3.0099	2.9154	Ave		2.8434				9.1		15.0			

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

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1 Analy Batch No.: 80127

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/01/2013 14:03 Calibration End Date: 04/01/2013 16:55 Calibration ID: 14354

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 9	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.5713 3.2449	2.8097 3.2110	3.1075 3.2443	3.0387 3.2412	3.1352	Ave		3.0671				7.6		15.0			
sec-Butylbenzene	3.0202 4.1726	3.5118 4.1913	3.9871 4.1939	3.8905 4.2312	4.0379	Ave		3.9152				10.0		15.0			
1,3-Dichlorobenzene	1.8921 1.7295	1.7519 1.7301	1.8573 1.6669	1.7079 1.6793	1.7584	Ave		1.7526			0.6000	4.3		15.0			
4-Isopropyltoluene	2.7348 3.5594	2.9655 3.6134	3.3479 3.6531	3.3233 3.6038	3.4583	Ave		3.3622				9.4		15.0			
1,4-Dichlorobenzene	2.0359 1.6987	1.8705 1.6709	1.8154 1.6745	1.7099 1.6701	1.7299	Ave		1.7640			0.5000	7.0		15.0			
n-Butylbenzene	2.4783 3.0293	2.5738 3.0453	2.9781 3.0827	2.9004 3.0798	2.9748	Ave		2.9047				7.7		15.0			
1,2-Dichlorobenzene	1.7167 1.5609	1.6514 1.5736	1.7263 1.5730	1.5297 1.5669	1.5641	Ave		1.6070			0.4000	4.5		15.0			
1,2-Dibromo-3-Chloropropane	0.0694 0.0842	0.0791 0.1057	0.0648	0.0735	0.0778	Qua	0.0299	0.0640	0.0004		0.0500				1.0000		0.9900
1,2,4-Trichlorobenzene	+++++ 0.8826	+++++ 0.9885	1.1626 1.0562	1.0374 1.0417	0.9118	Ave		1.0115			0.2000	9.3		15.0			
Hexachlorobutadiene	+++++ 0.4531	+++++ 0.4437	0.6228 0.4963	0.5647 0.4941	0.5068	Ave		0.5116				12.0		15.0			
Naphthalene	+++++ 1.7277	+++++ 2.0945	2.2787	1.9611	1.8020	Ave		1.9728				11.0		15.0			
1,2,3-Trichlorobenzene	+++++ 0.6835	+++++ 0.8063	1.0581 0.8906	0.8421	0.7353	Qua	1.1571	0.6622	0.0011						0.9990		0.9900
Dibromofluoromethane (Surr)	1.1908 0.2401	0.7258 0.2470	0.4724 0.2511	0.3541 0.2537	0.2903	Lin1	0.9660	0.2445							0.9990		0.9950
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2610	+++++ 0.2661	0.5658 0.2702	0.4181 0.2755	0.3316	Lin1	1.4297	0.2617							0.9980		0.9950
Toluene-d8 (Surr)	+++++ 1.4165	+++++ 1.4023	3.0068 1.4186	2.2245 1.4020	1.7435	Lin1	8.0196	1.3564							0.9990		0.9950
4-Bromofluorobenzene (Surr)	+++++ 0.9854	+++++ 1.0360	2.1334 1.0051	1.5795 1.0072	1.2584	Lin1	5.6406	0.9730							0.9990		0.9950

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

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1 Analy Batch No.: 80127

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/01/2013 14:03 Calibration End Date: 04/01/2013 16:55 Calibration ID: 14354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-80127/11	141673.D
Level 2	IC 240-80127/10	141672.D
Level 3	IC 240-80127/9	141671.D
Level 4	IC 240-80127/8	141670.D
Level 5	IC 240-80127/7	141669.D
Level 6	ICIS 240-80127/6	141668.D
Level 7	IC 240-80127/5	141667.D
Level 8	IC 240-80127/4	141666.D
Level 9	IC 240-80127/3	141665.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Dichlorodifluoromethane	FB	Ave	5995 384066	12576 764747	37785	79303	150340	1.00 50.0	2.00 100	5.00	10.0	20.0
Chloromethane	FB	Ave	10249 482247	16733 949269	44791 1889964	96385 2174787	184845	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Vinyl chloride	FB	Ave	7109 391674	12858 791227	37022 1582302	78146 1888946	150215	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromomethane	FB	Ave	2964 114533	5800 232002	11372 467734	22917 587948	46385	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Chloroethane	FB	Ave	3485 181388	6607 336051	17000 727475	35264 921111	66418	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Dichlorofluoromethane	FB	Ave	10916 519005	19185 1014504	49773 2021495	103470 2500242	198146	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Trichlorofluoromethane	FB	Ave	8393 509898	17300 1015150	45747 2020341	98339 2509228	191645	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl ether	FB	Ave	6966 273001	11391 541542	28137 1083988	55319 1352454	111184	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Acrolein	FB	Ave	+++++ 419888	+++++ 813789	40200 1625125	79077 2005921	160333	+++++ 500	+++++ 1000	50.0 2000	100 2500	200
1,1-Dichloroethene	FB	Ave	4996 309321	9746 606092	29452 1245442	57564 1537559	118436	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	+++++ 266264	+++++ 529727	23261 1078206	49046 1305863	101906	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Acetone	FB	Lin1	+++++ 179967	+++++ 338437	28343 641818	40463 788160	73127	+++++ 100	+++++ 200	10.0 400	20.0 500	40.0
Iodomethane	FB	Ave	7765 505260	16717 1026112	45850 2062602	94140 2485578	190805	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Carbon disulfide	FB	Lin1	+++++ 809709	+++++ 1727805	55727 3637177	120702 4455446	270446	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1 Analy Batch No.: 80127

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/01/2013 14:03 Calibration End Date: 04/01/2013 16:55 Calibration ID: 14354

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
3-Chloro-1-propene	FB	Ave	+++++ 183822	+++++ 372076	14025 764141	29497 940405	66288	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Methyl acetate	FB	Ave	21386 1099059	42269 2158500	109236 4320590	211623 5302324	437383	5.00 250	10.0 500	25.0 1000	50.0 1250	100
Methylene Chloride	FB	Ave	+++++ 328593	+++++ 630017	41745 1249829	75274 1523990	138859	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
2-Methyl-2-propanol	FB	Ave	5264 210767	8538 441987	23079 801288	37847 974925	82181	10.0 500	20.0 1000	50.0 2000	100 2500	200
Acrylonitrile	FB	Ave	20805 1053509	41601 2102664	102856 4188923	202062 5148980	414053	10.0 500	20.0 1000	50.0 2000	100 2500	200
trans-1,2-Dichloroethene	FB	Ave	5750 356326	11699 696061	34102 1390446	69076 1695682	136663	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methyl tert-butyl ether	FB	Ave	13065 785249	28623 1569755	74407 3169088	147988 3947410	302544	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Hexane	FB	Ave	1463 93183	3406 185904	9535 380246	18891 471238	38311	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1-Dichloroethane	FB	Ave	10792 654641	24191 1290314	60560 2605755	122950 3229819	253425	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Vinyl acetate	FB	Ave	731 55896	1788 119739	4426	10377	20238	1.00 50.0	2.00 100	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	+++++ 311907	+++++ 657926	24512 1299900	52328 1550962	113299	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
cis-1,2-Dichloroethene	FB	Ave	6591 376473	12856 743893	36773 1478270	72998 1799354	146833	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Butanone (MEK)	FB	Ave	+++++ 260176	+++++ 529140	27138 1026432	50186 1272512	100893	+++++ 100	+++++ 200	10.0 400	20.0 500	40.0
Bromochloromethane	FB	Ave	2694 171657	5903 339369	16473 681018	31707 831171	65302	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Tetrahydrofuran	FB	Ave	4053 171507	7302 343757	17236 675319	33540 823102	68818	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Chloroform	FB	Ave	9406 579362	19920 1121062	53430 2257063	107287 2786714	221086	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,1-Trichloroethane	FB	Ave	+++++ 446980	+++++ 912874	35880 1835461	76406 2216376	162941	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Cyclohexane	FB	Ave	9617 682502	22347 1341219	62445 2670098	131522 3277951	265642	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1-Dichloropropene	FB	Ave	7521 456847	15293 896731	44314 1780376	88740 2206944	178238	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Carbon tetrachloride	FB	Ave	+++++ 427266	+++++ 890505	32666 1840945	70663 2302836	153965	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Isobutyl alcohol	FB	Ave	4531 218358	8364 461032	21481 904777	40734 1115325	84736	25.0 1250	50.0 2500	125 5000	250 6250	500

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1 Analy Batch No.: 80127

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/01/2013 14:03 Calibration End Date: 04/01/2013 16:55 Calibration ID: 14354

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Benzene	FB	Ave	25803 1376887	50055 2697424	138640 5376161	271978 6595955	538837	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloroethane	FB	Ave	8511 434871	16727 852106	44154 1734215	86284 2142294	172468	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Heptane	FB	Ave	1780 113030	3750 220707	10649 448298	21837 556955	43622	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Trichloroethene	FB	Ave	7919 400779	15249 775617	40106 1549091	77074 1914749	157278	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methylcyclohexane	FB	Ave	8970 623015	18586 1202266	59905 2393962	119600 2939268	242287	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloropropane	FB	Ave	5770 356825	11822 695406	34166 1393475	67507 1727537	138377	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Dibromomethane	FB	Ave	3208 162976	6061 324986	14731 655473	31110 805046	62992	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,4-Dioxane	FB	Ave	845 47479	1926 98385	4718 191864	10340 234353	19929	20.0 1000	40.0 2000	100 4000	200 5000	400
Bromodichloromethane	FB	Lin1	4134 361255	8854 747993	26212 1574921	56613 1956685	124799	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chloroethyl vinyl ether	FB	Ave	4097 272934	8079 559875	23890 1130814	51197 1407012	106910	2.00 100	4.00 200	10.0 400	20.0 500	40.0
cis-1,3-Dichloropropene	FB	Lin1	4615 444436	9636 923818	29809 1901930	71109 2366962	157008	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	8983 534541	18879 1085084	48609 2172432	99480 2665512	211843	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Toluene	CBZ	Ave	28207 1450184	52939 2866124	142007 5722077	283830 7121115	566046	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,3-Dichloropropene	CBZ	Lin1	3446 330257	7347 703694	23647 1490980	51586 1871674	115389	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl methacrylate	CBZ	Ave	4876 307669	8269 639857	25748 1289332	53776 1599198	116187	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2-Trichloroethane	CBZ	Ave	3993 227277	7657 449289	21785 909290	43676 1107537	91031	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Tetrachloroethene	CBZ	Ave	4998 300695	10795 598619	30153 1191518	61534 1491026	118145	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3-Dichloropropane	CBZ	Ave	7389 398186	14556 780007	40174 1581794	78294 1938642	158534	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Hexanone	CBZ	Ave	6470 342035	12238 708137	33674 1399595	68073 1744579	136713	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Dibromochloromethane	CBZ	Lin1	+++++ 230536	+++++ 506273	14348 1082498	34113 1362354	76731	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
1,2-Dibromoethane	CBZ	Ave	3642 228134	6989 452947	20005 903400	41941 1100376	88124	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1 Analy Batch No.: 80127

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/01/2013 14:03 Calibration End Date: 04/01/2013 16:55 Calibration ID: 14354

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Chlorobenzene	CBZ	Ave	17859 883136	33145 1741969	88200 3526347	179576 4329447	349981	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	+++++ 301455	+++++ 617998	23823 1261669	49671 1549574	107708	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Ethylbenzene	CBZ	Ave	8296 492413	18051 977812	47847 1951347	96806 2428956	191237	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
m-Xylene & p-Xylene	CBZ	Ave	11656 602270	21230 1191172	58542 2379624	117256 2957972	234337	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
o-Xylene	CBZ	Ave	10585 575333	19856 1134682	56045 2279973	112351 2765691	223532	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Styrene	CBZ	Ave	13609 909029	27767 1863397	82843 3810848	173395 4607155	350553	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromoform	CBZ	Qua	1033 114519	2183 262261	7271 603440	15062 762194	36549	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Isopropylbenzene	CBZ	Ave	24447 1557219	49077 3150029	144321 6374950	299925 7791108	586913	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	3757 232504	7892 491861	21893 994721	45168 1229747	90265	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromobenzene	DCB	Ave	6712 346479	13197 686253	35455 1385417	68627 1681891	135151	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,3-Trichloropropane	DCB	Ave	1715 76505	2717 156663	7861 306535	15308 378523	29138	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	1361 76700	2356 161179	6330 336946	13996 425031	28206	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
N-Propylbenzene	DCB	Ave	6651 433915	13330 874885	42125 1737514	84983 2147763	164862	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chlorotoluene	DCB	Ave	6471 360473	12250 730772	36261 1451111	72221 1769074	136870	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3,5-Trimethylbenzene	DCB	Ave	18793 1233325	39724 2541770	116348 5146435	237509 6309206	458973	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Chlorotoluene	DCB	Ave	6526 366523	13481 726805	37191 1452776	72680 1783699	138902	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
tert-Butylbenzene	DCB	Ave	17886 1153651	36637 2394016	111555 4834309	226540 5883385	431067	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,4-Trimethylbenzene	DCB	Ave	19626 1237447	41691 2536688	119371 5167541	240863 6335442	463568	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
sec-Butylbenzene	DCB	Ave	23052 1591228	52109 3311093	153156 6680041	308380 8270519	597026	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3-Dichlorobenzene	DCB	Ave	14442 659542	25995 1366763	71345 2655040	135378 3282502	259988	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Isopropyltoluene	DCB	Ave	20874 1357367	44003 2854539	128602 5818773	263424 7044257	511329	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1 Analy Batch No.: 80127

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/01/2013 14:03 Calibration End Date: 04/01/2013 16:55 Calibration ID: 14354

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dichlorobenzene	DCB	Ave	15539 647811	27755 1319952	69736 2667224	135533 3264493	255782	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Butylbenzene	DCB	Ave	18916 1155240	38190 2405787	114399 4910129	229898 6019950	439842	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichlorobenzene	DCB	Ave	13103 595262	24504 1243139	66313 2505481	121248 3062810	231257	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dibromo-3-Chloropropane	DCB	Qua	530 32108	1173 83535	2490	5824	11502	1.00 50.0	2.00 100	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	+++++ 336594	+++++ 780877	44661 1682390	82228 2036121	134816	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Hexachlorobutadiene	DCB	Ave	+++++ 172776	+++++ 350533	23922 790485	44761 965800	74937	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Naphthalene	DCB	Ave	+++++ 658860	+++++ 1654592	87532	155447	266441	+++++ 50.0	+++++ 100	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Qua	+++++ 260636	+++++ 636994	40647 1418552	66746	108714	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Lin1	29574 308631	34767 630308	59709 1265439	94284 1558963	146298	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Lin1	+++++ 335525	+++++ 679113	71515 1361901	111312 1692874	167163	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Toluene-d8 (Surr)	CBZ	Lin1	+++++ 1200479	+++++ 2421189	247665 4826243	387397 5973057	581877	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
4-Bromofluorobenzene (Surr)	DCB	Lin1	+++++ 375791	+++++ 818425	81950 1600928	125200 1968745	186058	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0

Curve Type Legend:

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

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141665.D
Lims ID: IC Client ID:
Inject. Date: 01-Apr-2013 14:03:30 Dil. Factor: 1.0000
Sample Type: IC Calib Level: 9
Sample ID: ic
Misc. Info.: 240-0018434-003 =240-0018434-003
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 2
Lims Batch ID: 80127 Lims Sample ID: 3
Sublist: chrom-8260_14*sub32
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m
Last Update: 03-Apr-2013 12:44:48 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK035

First Level Reviewer: macenczaks Date: 01-Apr-2013 14:47:12

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	95	1229165	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	94	852072	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	94	390933	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.258	6.257	0.001	71	1558963	255.4	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	97	1692874	257.6	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	5973057	252.5	
$ 131 4-Bromofluorobenzene (Surr)	95	10.636	10.636	0.0	94	1968745	253.0	
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	99	1857149	264.7	
13 Chloromethane	50	1.643	1.643	0.0	100	2174787	239.7	
14 Vinyl chloride	62	1.773	1.773	0.0	99	1888946	258.5	
15 Bromomethane	94	2.116	2.116	0.0	91	587948	245.4	
16 Chloroethane	64	2.234	2.234	0.0	97	921111	271.1	
17 Dichlorofluoromethane	67	2.495	2.495	0.0	99	2500242	252.5	
18 Trichlorofluoromethane	101	2.542	2.542	0.0	99	2509228	269.1	
19 Ethyl ether	59	2.933	2.921	0.012	98	1352454	244.0	
20 Acrolein	56	3.086	3.086	0.0	96	2005921	2564.2	
21 1,1-Dichloroethene	96	3.205	3.205	0.001	96	1537559	272.7	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.252	3.240	0.012	92	1305863	263.4	
22 Acetone	43	3.311	3.311	0.0	99	788160	499.8	
24 Iodomethane	142	3.406	3.406	0.0	98	2485578	270.4	
26 Carbon disulfide	76	3.477	3.477	0.0	100	4455446	254.5	
29 3-Chloro-1-propene	76	3.749	3.749	0.0	87	940405	282.9	
28 Methyl acetate	43	3.832	3.820	0.012	97	5302324	1261.9	
30 Methylene Chloride	84	3.962	3.950	0.012	98	1523990	230.0	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	95	974925	2328.6	
32 Acrylonitrile	53	4.364	4.364	0.0	99	5148980	2542.9	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	95	1695682	261.1	
34 Methyl tert-butyl ether	73	4.424	4.411	0.013	93	3947410	269.3	
35 Hexane	86	4.802	4.802	0.0	96	471238	265.5	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
36 1,1-Dichloroethane	63	4.980	4.979	0.001	97	3229819	266.3	
37 Vinyl acetate	86	5.098	5.098	0.0	97	297151	311.9	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	90	1550962	271.6	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	86	1799354	257.3	
41 2-Butanone (MEK)	43	5.749	5.749	0.0	99	1272512	509.0	
47 Chlorobromomethane	128	5.985	5.973	0.012	97	831171	265.2	
48 Tetrahydrofuran	42	6.033	6.033	0.0	91	823102	481.9	
49 Chloroform	83	6.092	6.092	0.0	96	2786714	265.0	
50 1,1,1-Trichloroethane	97	6.269	6.257	0.012	95	2216376	271.5	
51 Cyclohexane	56	6.317	6.317	0.0	94	3277951	267.4	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	89	2206944	262.4	
53 Carbon tetrachloride	117	6.435	6.435	0.0	88	2302836	291.4	
54 Isobutyl alcohol	41	6.636	6.636	0.0	94	1115325	6545.1	
55 Benzene	78	6.648	6.648	0.0	97	6595955	253.1	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	94	2142294	255.3	
58 n-Heptane	100	6.944	6.944	0.0	97	556955	269.4	
60 Trichloroethene	130	7.287	7.287	0.0	97	1914749	251.2	
63 Methylcyclohexane	83	7.465	7.464	0.001	97	2939268	264.9	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	93	1727537	265.2	
65 Dibromomethane	93	7.607	7.606	0.001	89	805046	261.0	
66 1,4-Dioxane	88	7.630	7.630	0.0	97	234353	5022.9	
67 Dichlorobromomethane	83	7.760	7.760	0.0	98	1956685	259.1	
69 2-Chloroethyl vinyl ether	63	8.033	8.032	0.001	93	1407012	568.5	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.001	90	2366962	257.7	
71 4-Methyl-2-pentanone (MIBK)	43	8.305	8.304	0.001	98	2665512	515.3	
72 Toluene	91	8.459	8.458	0.001	97	7121115	248.0	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	98	1871674	257.1	
74 Ethyl methacrylate	69	8.731	8.730	0.001	92	1599198	280.0	
75 1,1,2-Trichloroethane	97	8.814	8.813	0.001	93	1107537	251.2	
77 Tetrachloroethene	164	8.932	8.932	0.0	98	1491026	252.3	
76 1,3-Dichloropropane	76	8.956	8.955	0.001	97	1938642	245.9	
78 2-Hexanone	43	9.015	9.014	0.001	99	1744579	508.3	
79 Chlorodibromomethane	129	9.145	9.145	0.0	91	1362354	255.4	
123 Ethylene Dibromide	107	9.251	9.251	0.0	99	1100376	258.8	
82 Chlorobenzene	112	9.666	9.665	0.001	93	4329447	243.5	
83 1,1,1,2-Tetrachloroethane	131	9.737	9.736	0.001	95	1549574	271.4	
84 Ethylbenzene	106	9.760	9.760	0.0	98	2428956	252.7	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	100	2957972	249.5	
85 o-Xylene	106	10.186	10.186	0.0	95	2765691	246.6	
86 Styrene	104	10.198	10.198	0.0	92	4607155	267.0	
87 Bromoform	173	10.364	10.363	0.001	98	762194	247.6	
88 Isopropylbenzene	105	10.494	10.494	0.0	96	7791108	263.1	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	91	1229747	269.1	
91 Bromobenzene	156	10.766	10.766	0.0	93	1681891	242.6	
93 trans-1,4-Dichloro-2-butene	53	10.790	10.789	0.001	90	425031	287.2	
92 1,2,3-Trichloropropane	110	10.790	10.789	0.001	81	378523	243.7	
94 N-Propylbenzene	120	10.849	10.849	0.0	98	2147763	260.6	
95 2-Chlorotoluene	126	10.932	10.920	0.012	97	1769074	250.2	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	93	6309206	267.2	
104 4-Chlorotoluene	126	11.014	11.014	0.0	98	1783699	247.6	
97 tert-Butylbenzene	119	11.275	11.275	0.0	91	5883385	264.6	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	71	6335442	264.2	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
99 sec-Butylbenzene	105	11.452	11.452	0.0	94	8270519	270.2	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	98	3282502	239.5	
101 4-Isopropyltoluene	119	11.571	11.570	0.001	96	7044257	268.0	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	96	3264493	236.7	
105 n-Butylbenzene	91	11.914	11.914	0.0	97	6019950	265.1	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	99	3062810	243.8	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	88	243982	207.9	
109 1,2,4-Trichlorobenzene	180	13.286	13.274	0.012	94	2036121	257.4	
110 Hexachlorobutadiene	225	13.405	13.404	0.001	98	965800	241.4	
111 Naphthalene	128	13.476	13.475	0.001	97	4297782	278.6	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	95	1714918	235.5	
S 137 Trihalomethanes, Total	1				0		1027.0	
S 11 1,2-Dichloroethene, Total	96				0		518.3	
S 9 1,3-Dichloropropene, Total	75				0		514.9	
S 114 Xylenes, Total	106				0		496.1	

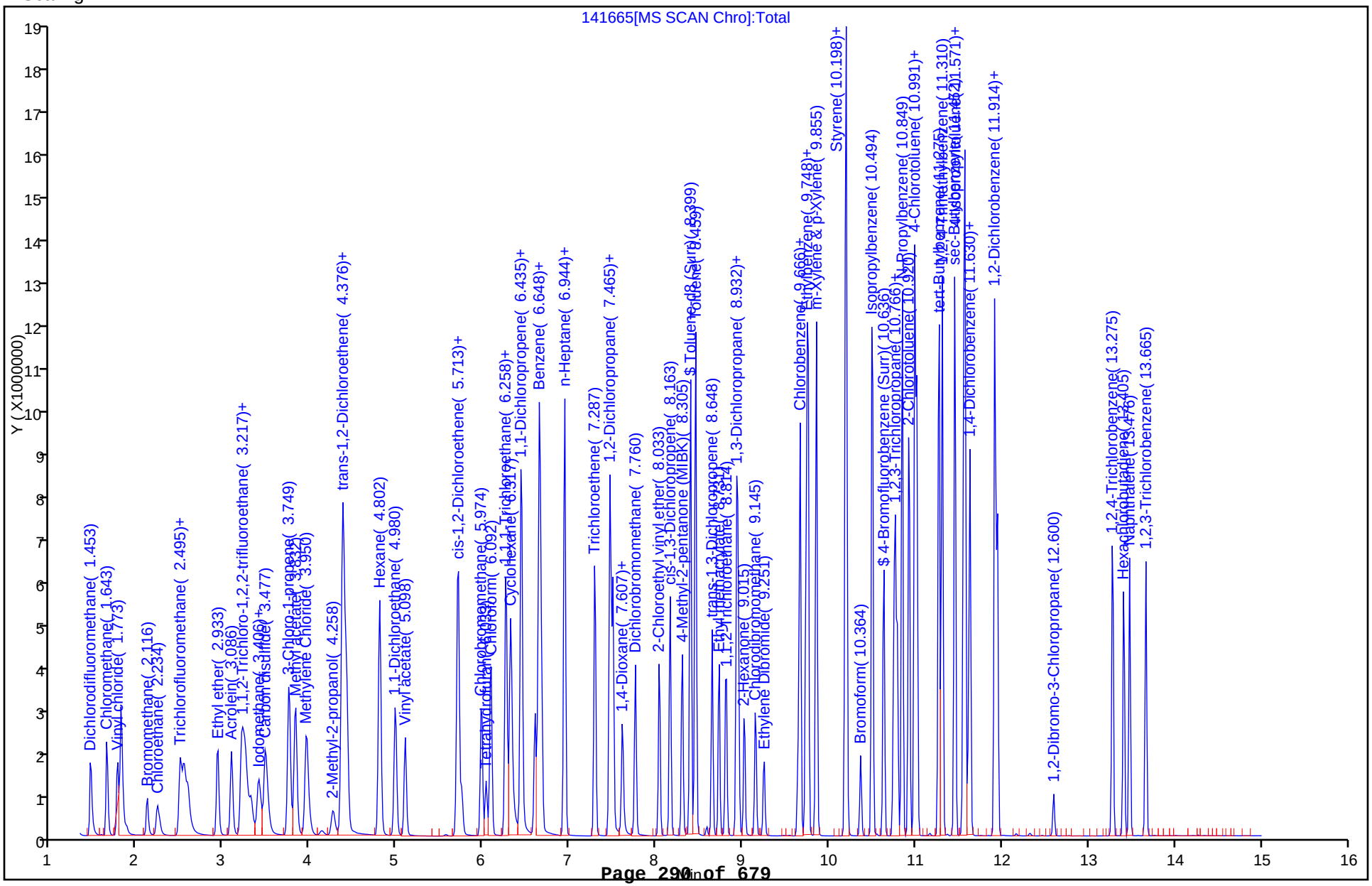
Report Date: 03-Apr-2013 12:44:48 Chrom Revision: 2.0 01-Feb-2013 10:03:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141665.D

Injection Date:	01-Apr-2013 14:03:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	3
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141666.D
Lims ID: IC Client ID:
Inject. Date: 01-Apr-2013 14:25:30 Dil. Factor: 1.0000
Sample Type: IC Calib Level: 8
Sample ID: ic
Misc. Info.: 240-0018434-004 =240-0018434-004
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 3
Lims Batch ID: 80127 Lims Sample ID: 4
Sublist: chrom-8260_14*sub32
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m
Last Update: 03-Apr-2013 12:44:49 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK035

First Level Reviewer: macenczaks Date: 01-Apr-2013 14:48:41

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	95	1259929	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	96	850515	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	398203	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.257	6.257	0.0	81	1265439	201.4	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	97	1361901	201.0	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	4826243	203.3	
$ 131 4-Bromofluorobenzene (Surr)	95	10.636	10.636	0.0	95	1600928	200.8	
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	99	1548996	215.4	
13 Chloromethane	50	1.643	1.643	0.0	100	1889964	203.3	
14 Vinyl chloride	62	1.773	1.773	0.0	99	1582302	211.3	
15 Bromomethane	94	2.116	2.116	0.0	90	467734	190.5	
16 Chloroethane	64	2.234	2.234	0.0	97	727475	208.9	
17 Dichlorofluoromethane	67	2.495	2.495	0.0	99	2021495	199.2	
18 Trichlorofluoromethane	101	2.542	2.542	0.0	99	2020341	211.3	
19 Ethyl ether	59	2.932	2.921	0.011	98	1083988	190.8	
20 Acrolein	56	3.086	3.086	0.0	94	1625125	2026.7	
21 1,1-Dichloroethene	96	3.205	3.205	0.001	97	1245442	215.5	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.252	3.240	0.012	92	1078206	212.2	
22 Acetone	43	3.311	3.311	0.0	99	641818	395.7	
24 Iodomethane	142	3.406	3.406	0.0	98	2062602	218.9	
26 Carbon disulfide	76	3.477	3.477	0.0	100	3637177	203.3	
29 3-Chloro-1-propene	76	3.749	3.749	0.0	83	764141	224.2	
28 Methyl acetate	43	3.832	3.820	0.012	97	4320590	1003.2	
30 Methylene Chloride	84	3.950	3.950	0.0	98	1249829	184.0	
31 2-Methyl-2-propanol	59	4.270	4.258	0.012	94	801288	1867.1	
32 Acrylonitrile	53	4.364	4.364	0.0	99	4188923	2018.3	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	96	1390446	208.8	
34 Methyl tert-butyl ether	73	4.423	4.411	0.012	93	3169088	211.0	
35 Hexane	86	4.802	4.802	0.0	95	380246	209.0	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
36 1,1-Dichloroethane	63	4.979	4.979	0.0	97	2605755	209.6	
37 Vinyl acetate	86	5.098	5.098	0.0	97	241734	247.5	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	90	1299900	222.1	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	86	1478270	206.2	
41 2-Butanone (MEK)	43	5.749	5.749	0.0	93	1026432	400.5	
47 Chlorobromomethane	128	5.985	5.973	0.012	97	681018	212.0	
48 Tetrahydrofuran	42	6.033	6.033	0.0	91	675319	385.7	
49 Chloroform	83	6.092	6.092	0.0	96	2257063	209.4	
50 1,1,1-Trichloroethane	97	6.269	6.257	0.012	95	1835461	219.4	
51 Cyclohexane	56	6.317	6.317	0.0	94	2670098	212.5	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	89	1780376	206.5	
53 Carbon tetrachloride	117	6.435	6.435	0.0	90	1840945	227.2	
54 Isobutyl alcohol	41	6.636	6.636	0.0	91	904777	5179.9	
55 Benzene	78	6.648	6.648	0.0	97	5376161	201.3	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	94	1734215	201.6	
58 n-Heptane	100	6.944	6.944	0.0	96	448298	211.6	
60 Trichloroethene	130	7.287	7.287	0.0	97	1549091	198.3	
63 Methylcyclohexane	83	7.464	7.464	0.0	97	2393962	210.5	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	94	1393475	208.7	
65 Dibromomethane	93	7.606	7.606	0.0	89	655473	207.3	
66 1,4-Dioxane	88	7.630	7.630	0.0	98	191864	4011.8	
67 Dichlorobromomethane	83	7.760	7.760	0.0	98	1574921	203.6	
69 2-Chloroethyl vinyl ether	63	8.032	8.032	0.0	93	1130814	445.8	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.001	90	1901930	202.3	
71 4-Methyl-2-pentanone (MIBK)	43	8.305	8.304	0.001	98	2172432	420.8	
72 Toluene	91	8.458	8.458	0.0	97	5722077	199.6	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	98	1490980	205.4	
74 Ethyl methacrylate	69	8.731	8.730	0.0	92	1289332	226.2	
75 1,1,2-Trichloroethane	97	8.813	8.813	0.0	92	909290	206.6	
77 Tetrachloroethene	164	8.932	8.932	0.0	97	1191518	202.0	
76 1,3-Dichloropropane	76	8.955	8.955	0.0	96	1581794	201.0	
78 2-Hexanone	43	9.014	9.014	0.0	99	1399595	408.6	
79 Chlorodibromomethane	129	9.145	9.145	0.0	91	1082498	204.0	
123 Ethylene Dibromide	107	9.251	9.251	0.0	98	903400	212.8	
82 Chlorobenzene	112	9.665	9.665	0.0	93	3526347	198.7	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	95	1261669	221.4	
84 Ethylbenzene	106	9.760	9.760	0.0	98	1951347	203.4	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	99	2379624	201.1	
85 o-Xylene	106	10.186	10.186	0.0	95	2279973	203.7	
86 Styrene	104	10.198	10.198	0.0	91	3810848	221.3	
87 Bromoform	173	10.363	10.363	0.0	97	603440	204.5	
88 Isopropylbenzene	105	10.494	10.494	0.0	96	6374950	215.7	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	91	994721	213.7	
91 Bromobenzene	156	10.766	10.766	0.0	91	1385417	196.2	
93 trans-1,4-Dichloro-2-butene	53	10.789	10.789	0.0	90	336946	223.5	
92 1,2,3-Trichloropropane	110	10.789	10.789	0.0	79	306535	193.8	
94 N-Propylbenzene	120	10.849	10.849	0.0	98	1737514	206.9	
95 2-Chlorotoluene	126	10.920	10.920	0.0	96	1451111	201.4	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	93	5146435	214.0	
104 4-Chlorotoluene	126	11.014	11.014	0.0	98	1452776	197.9	
97 tert-Butylbenzene	119	11.275	11.275	0.0	91	4834309	213.5	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	73	5167541	211.6	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
99 sec-Butylbenzene	105	11.452	11.452	0.0	94	6680041	214.2	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	98	2655040	190.2	
101 4-Isopropyltoluene	119	11.570	11.570	0.0	92	5818773	217.3	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	95	2667224	189.9	
105 n-Butylbenzene	91	11.914	11.914	0.0	97	4910129	212.3	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	99	2505481	195.8	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	86	190234	174.9	
109 1,2,4-Trichlorobenzene	180	13.274	13.274	0.0	92	1682390	208.8	
110 Hexachlorobutadiene	225	13.405	13.404	0.0	98	790485	194.0	
111 Naphthalene	128	13.476	13.475	0.001	97	3560189	226.6	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	96	1418552	199.7	
S 137 Trihalomethanes, Total	1				0		821.5	
S 11 1,2-Dichloroethene, Total	96				0		415.0	
S 9 1,3-Dichloropropene, Total	75				0		407.7	
S 114 Xylenes, Total	106				0		404.7	

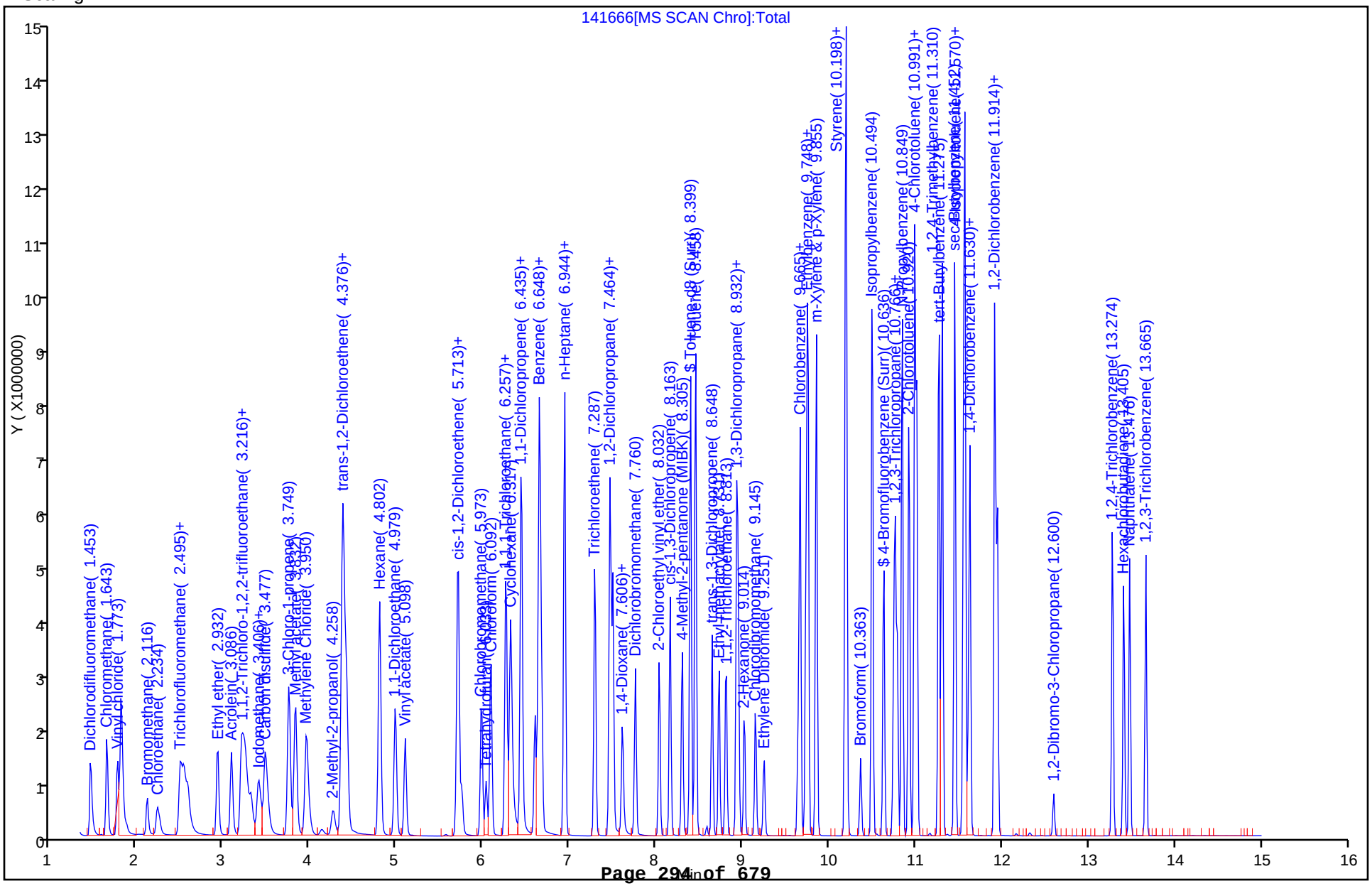
Report Date: 03-Apr-2013 12:44:49 Chrom Revision: 2.0 01-Feb-2013 10:03:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141666.D

Injection Date:	01-Apr-2013 14:25:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	4
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\NCChrom\ChromData\A3UX14\20130401-18434.b\141667.D		
Lims ID:	IC	Client ID:	
Inject. Date:	01-Apr-2013 14:46:30	Dil. Factor:	1.0000
Sample Type:	IC	Calib Level:	7
Sample ID:	ic		
Misc. Info.:	240-0018434-005 =240-0018434-005		
Operator:	002808	Instrument ID:	A3UX14
Purge Vol:	5.000 mL	ALS Bottle#:	4
Lims Batch ID:	80127	Lims Sample ID:	5
Sublist:	chrom-8260_14*sub32		
Detector:	MS SCAN		
Method:	\\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m		
Last Update:	03-Apr-2013 12:44:49	Calib Date:	01-Apr-2013 20:09:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D		
Limit Group:	MSV 8260DOD ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK035		
First Level Reviewer: macenczaks		Date:	02-Apr-2013 09:15:40

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	95	1276120	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	96	863273	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	94	394994	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.257	6.257	0.0	88	630308	97.1	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	97	679113	96.2	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	2421189	97.5	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.636	-0.012	91	818425	100.7	
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	99	764747	105.0	
13 Chloromethane	50	1.643	1.643	0.0	100	949269	100.8	
14 Vinyl chloride	62	1.773	1.773	0.0	99	791227	104.3	
15 Bromomethane	94	2.116	2.116	0.0	91	232002	93.3	
16 Chloroethane	64	2.234	2.234	0.0	97	336051	95.3	
17 Dichlorofluoromethane	67	2.495	2.495	0.0	99	1014504	98.7	
18 Trichlorofluoromethane	101	2.542	2.542	0.0	99	1015150	104.8	
19 Ethyl ether	59	2.932	2.921	0.011	98	541542	94.1	
20 Acrolein	56	3.086	3.086	0.0	96	813789	1002.0	
21 1,1-Dichloroethene	96	3.205	3.205	0.001	97	606092	103.5	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.252	3.240	0.012	85	529727	102.9	
22 Acetone	43	3.323	3.311	0.012	98	338437	202.8	
24 Iodomethane	142	3.406	3.406	0.0	98	1026112	107.5	
26 Carbon disulfide	76	3.489	3.477	0.012	100	1727805	97.0	
29 3-Chloro-1-propene	76	3.761	3.749	0.012	83	372076	107.8	
28 Methyl acetate	43	3.832	3.820	0.012	97	2158500	494.8	
30 Methylene Chloride	84	3.962	3.950	0.012	98	630017	91.6	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	94	441987	1016.8	
32 Acrylonitrile	53	4.364	4.364	0.0	99	2102664	1000.2	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	96	696061	103.2	
34 Methyl tert-butyl ether	73	4.423	4.411	0.012	88	1569755	103.2	
35 Hexane	86	4.802	4.802	0.0	95	185904	100.9	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
36 1,1-Dichloroethane	63	4.980	4.979	0.001	97	1290314	102.5	
37 Vinyl acetate	86	5.098	5.098	0.0	97	119739	121.0	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	86	657926	111.0	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	86	743893	102.4	
41 2-Butanone (MEK)	43	5.749	5.749	0.0	93	529140	203.9	
47 Chlorobromomethane	128	5.985	5.973	0.012	97	339369	104.3	
48 Tetrahydrofuran	42	6.033	6.033	0.0	90	343757	193.9	
49 Chloroform	83	6.092	6.092	0.0	96	1121062	102.7	
50 1,1,1-Trichloroethane	97	6.269	6.257	0.012	95	912874	107.7	
51 Cyclohexane	56	6.317	6.317	0.0	94	1341219	105.4	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	89	896731	102.7	
53 Carbon tetrachloride	117	6.435	6.435	0.0	81	890505	108.5	
54 Isobutyl alcohol	41	6.636	6.636	0.0	92	461032	2605.9	
55 Benzene	78	6.648	6.648	0.0	97	2697424	99.7	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	94	852106	97.8	
58 n-Heptane	100	6.944	6.944	0.0	95	220707	102.8	
60 Trichloroethene	130	7.287	7.287	0.0	96	775617	98.0	
63 Methylcyclohexane	83	7.464	7.464	0.0	96	1202266	104.4	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	93	695406	102.8	
65 Dibromomethane	93	7.606	7.606	0.0	93	324986	101.5	
66 1,4-Dioxane	88	7.630	7.630	0.0	98	98385	2031.1	
67 Dichlorobromomethane	83	7.760	7.760	0.0	98	747993	96.0	
69 2-Chloroethyl vinyl ether	63	8.032	8.032	0.0	93	559875	217.9	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.001	90	923818	97.5	
71 4-Methyl-2-pentanone (MIBK)	43	8.305	8.304	0.001	98	1085084	207.1	
72 Toluene	91	8.458	8.458	0.0	97	2866124	98.5	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	98	703694	96.0	
74 Ethyl methacrylate	69	8.731	8.730	0.001	93	639857	110.6	
75 1,1,2-Trichloroethane	97	8.813	8.813	0.0	93	449289	100.6	
77 Tetrachloroethene	164	8.932	8.932	0.0	98	598619	100.0	
76 1,3-Dichloropropane	76	8.955	8.955	0.0	96	780007	97.6	
78 2-Hexanone	43	9.015	9.014	0.001	99	708137	203.7	
79 Chlorodibromomethane	129	9.145	9.145	0.0	91	506273	95.8	
123 Ethylene Dibromide	107	9.251	9.251	0.0	99	452947	105.1	
82 Chlorobenzene	112	9.665	9.665	0.0	93	1741969	96.7	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	94	617998	106.8	
84 Ethylbenzene	106	9.760	9.760	0.0	98	977812	100.4	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	99	1191172	99.2	
85 o-Xylene	106	10.186	10.186	0.0	95	1134682	99.9	
86 Styrene	104	10.198	10.198	0.0	91	1863397	106.6	
87 Bromoform	173	10.364	10.363	0.001	97	262261	98.4	
88 Isopropylbenzene	105	10.494	10.494	0.0	97	3150029	105.0	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	91	491861	106.5	
91 Bromobenzene	156	10.766	10.766	0.0	92	686253	98.0	
93 trans-1,4-Dichloro-2-butene	53	10.789	10.789	0.0	89	161179	107.8	
92 1,2,3-Trichloropropane	110	10.789	10.789	0.0	79	156663	99.8	
94 N-Propylbenzene	120	10.849	10.849	0.0	98	874885	105.0	
95 2-Chlorotoluene	126	10.920	10.920	0.0	96	730772	102.3	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	93	2541770	106.5	
104 4-Chlorotoluene	126	11.014	11.014	0.0	97	726805	99.8	
97 tert-Butylbenzene	119	11.275	11.275	0.0	91	2394016	106.6	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	72	2536688	104.7	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
99 sec-Butylbenzene	105	11.452	11.452	0.0	94	3311093	107.1	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	91	1366763	98.7	
101 4-Isopropyltoluene	119	11.570	11.570	0.0	94	2854539	107.5	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	95	1319952	94.7	
105 n-Butylbenzene	91	11.914	11.914	0.0	97	2405787	104.8	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	99	1243139	97.9	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	86	83535	100.1	
109 1,2,4-Trichlorobenzene	180	13.274	13.274	0.0	94	780877	97.7	
110 Hexachlorobutadiene	225	13.405	13.404	0.001	98	350533	86.7	
111 Naphthalene	128	13.476	13.475	0.001	97	1654592	106.2	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	96	636994	102.3	
S 137 Trihalomethanes, Total	1				0		392.9	
S 11 1,2-Dichloroethene, Total	96				0		205.7	
S 9 1,3-Dichloropropene, Total	75				0		193.6	
S 114 Xylenes, Total	106				0		199.0	

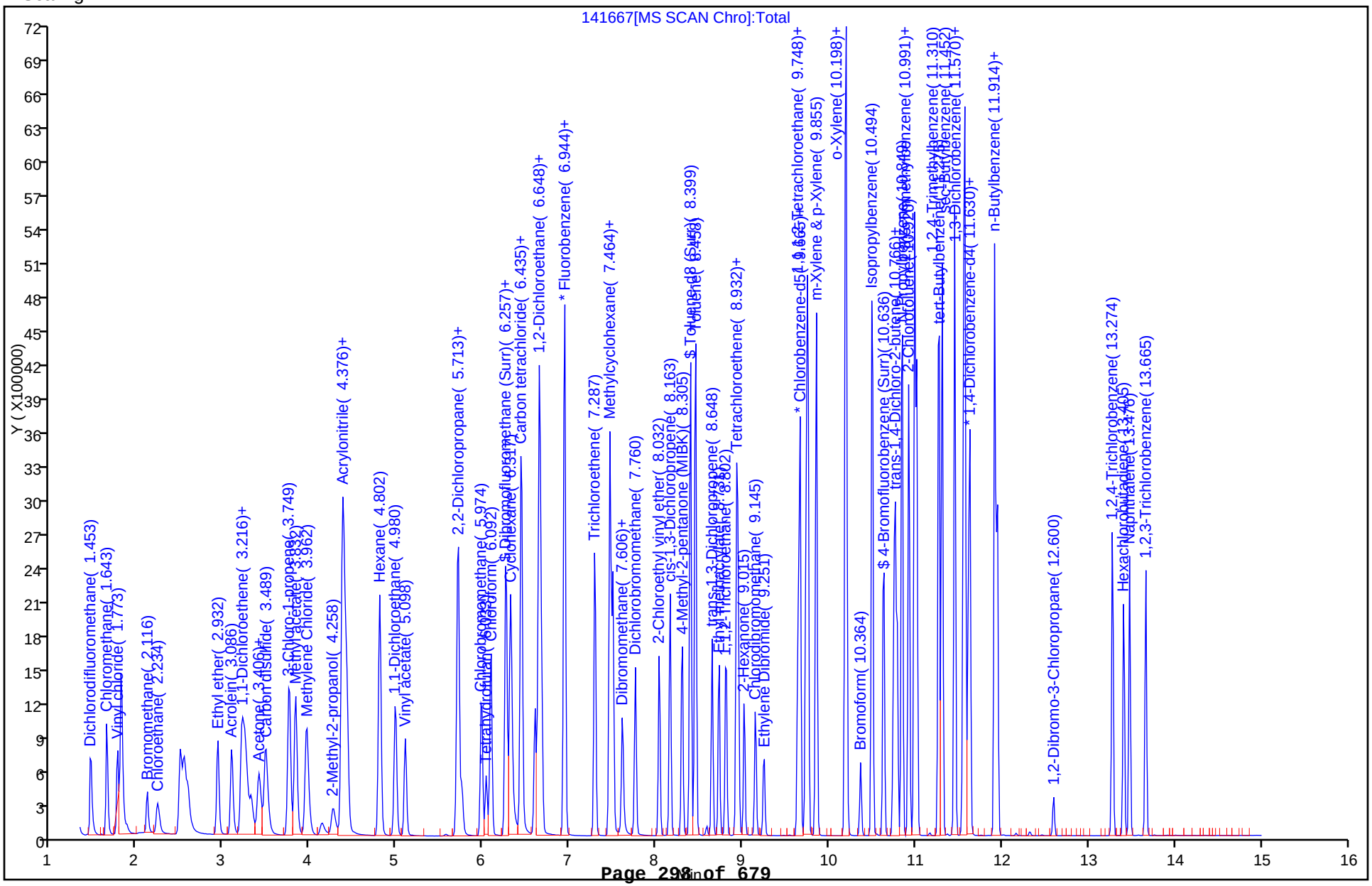
Report Date: 03-Apr-2013 12:44:50 Chrom Revision: 2.0 01-Feb-2013 10:03:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141667.D

Injection Date:	01-Apr-2013 14:46:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	5
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141668.D
Lims ID: ICIS Client ID:
Inject. Date: 01-Apr-2013 15:08:30 Dil. Factor: 1.0000
Sample Type: ICIS Calib Level: 6
Sample ID: icis
Misc. Info.: 240-0018434-006 =240-0018434-006
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 5
Lims Batch ID: 80127 Lims Sample ID: 6
Sublist: chrom-8260_14*sub32
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m
Last Update: 03-Apr-2013 13:56:24 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK035

First Level Reviewer: macenczaks Date: 03-Apr-2013 13:56:24

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	100	1285361	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	96	847501	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	381352	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.257	6.257	0.0	83	308631	45.2	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	97	335525	44.4	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	1200479	46.3	
$ 131 4-Bromofluorobenzene (Surr)	95	10.636	10.636	0.0	97	375791	44.8	
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	99	384066	52.4	
13 Chloromethane	50	1.643	1.643	0.0	100	482247	50.8	
14 Vinyl chloride	62	1.773	1.773	0.0	99	391674	51.3	
15 Bromomethane	94	2.116	2.116	0.0	89	114533	45.7	
16 Chloroethane	64	2.234	2.234	0.0	97	181388	51.0	
17 Dichlorofluoromethane	67	2.495	2.495	0.0	99	519005	50.1	
18 Trichlorofluoromethane	101	2.542	2.542	0.0	92	509898	52.3	
19 Ethyl ether	59	2.921	2.921	0.0	97	273001	47.1	
20 Acrolein	56	3.086	3.086	0.0	95	419888	513.3	
21 1,1-Dichloroethene	96	3.205	3.205	0.0	97	309321	52.5	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.240	3.240	0.0	91	266264	51.4	
22 Acetone	43	3.311	3.311	0.0	98	179967	104.0	
24 Iodomethane	142	3.406	3.406	0.0	98	505260	52.6	
26 Carbon disulfide	76	3.477	3.477	0.0	100	809709	46.8	
29 3-Chloro-1-propene	76	3.749	3.749	0.0	87	183822	52.9	
28 Methyl acetate	43	3.820	3.820	0.0	97	1099059	250.1	
30 Methylene Chloride	84	3.950	3.950	0.0	99	328593	47.4	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	94	210767	481.4	
32 Acrylonitrile	53	4.364	4.364	0.0	99	1053509	497.6	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	96	356326	52.5	
34 Methyl tert-butyl ether	73	4.411	4.411	0.0	93	785249	51.2	
35 Hexane	86	4.802	4.802	0.0	96	93183	50.2	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
36 1,1-Dichloroethane	63	4.979	4.979	0.0	97	654641	51.6	
37 Vinyl acetate	86	5.098	5.098	0.0	97	55896	56.1	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	85	311907	52.2	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	86	376473	51.5	
41 2-Butanone (MEK)	43	5.749	5.749	0.0	99	260176	99.5	
47 Chlorobromomethane	128	5.973	5.973	0.0	96	171657	52.4	
48 Tetrahydrofuran	42	6.033	6.033	0.0	91	171507	96.0	
49 Chloroform	83	6.092	6.092	0.0	96	579362	52.7	
50 1,1,1-Trichloroethane	97	6.257	6.257	0.0	96	446980	52.4	
51 Cyclohexane	56	6.317	6.317	0.0	94	682502	53.2	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	89	456847	51.9	
53 Carbon tetrachloride	117	6.435	6.435	0.0	78	427266	51.7	
54 Isobutyl alcohol	41	6.636	6.636	0.0	91	218358	1225.4	
55 Benzene	78	6.648	6.648	0.0	97	1376887	50.5	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	94	434871	49.6	
58 n-Heptane	100	6.944	6.944	0.0	93	113030	52.3	
60 Trichloroethene	130	7.287	7.287	0.0	97	400779	50.3	
63 Methylcyclohexane	83	7.464	7.464	0.0	96	623015	53.7	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	94	356825	52.4	
65 Dibromomethane	93	7.606	7.606	0.0	92	162976	50.5	
66 1,4-Dioxane	88	7.630	7.630	0.0	96	47479	973.1	
67 Dichlorobromomethane	83	7.760	7.760	0.0	98	361255	46.5	
69 2-Chloroethyl vinyl ether	63	8.032	8.032	0.0	93	272934	105.5	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.0	89	444436	47.1	
71 4-Methyl-2-pentanone (MIBK)	43	8.304	8.304	0.0	98	534541	103.9	
72 Toluene	91	8.458	8.458	0.0	97	1450184	50.8	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	98	330257	46.4	
74 Ethyl methacrylate	69	8.730	8.730	0.0	93	307669	54.2	
75 1,1,2-Trichloroethane	97	8.813	8.813	0.0	93	227277	51.8	
77 Tetrachloroethene	164	8.932	8.932	0.0	98	300695	51.2	
76 1,3-Dichloropropane	76	8.955	8.955	0.0	94	398186	50.8	
78 2-Hexanone	43	9.014	9.014	0.0	99	342035	100.2	
79 Chlorodibromomethane	129	9.145	9.145	0.0	91	230536	46.3	
123 Ethylene Dibromide	107	9.251	9.251	0.0	98	228134	53.9	
82 Chlorobenzene	112	9.665	9.665	0.0	94	883136	49.9	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	94	301455	53.1	
84 Ethylbenzene	106	9.760	9.760	0.0	98	492413	51.5	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	99	602270	51.1	
85 o-Xylene	106	10.186	10.186	0.0	94	575333	51.6	
86 Styrene	104	10.198	10.198	0.0	91	909029	53.0	
87 Bromoform	173	10.363	10.363	0.0	97	114519	47.6	
88 Isopropylbenzene	105	10.494	10.494	0.0	97	1557219	52.9	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	95	232504	52.2	
91 Bromobenzene	156	10.766	10.766	0.0	91	346479	51.2	
93 trans-1,4-Dichloro-2-butene	53	10.789	10.789	0.0	87	76700	53.1	
92 1,2,3-Trichloropropane	110	10.789	10.789	0.0	80	76505	50.5	
94 N-Propylbenzene	120	10.849	10.849	0.0	98	433915	54.0	
95 2-Chlorotoluene	126	10.920	10.920	0.0	96	360473	52.3	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	94	1233325	53.5	
104 4-Chlorotoluene	126	11.014	11.014	0.0	97	366523	52.1	
97 tert-Butylbenzene	119	11.275	11.275	0.0	91	1153651	53.2	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	73	1237447	52.9	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
99 sec-Butylbenzene	105	11.452	11.452	0.0	94	1591228	53.3	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	92	659542	49.3	
101 4-Isopropyltoluene	119	11.570	11.570	0.0	89	1357367	52.9	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	95	647811	48.2	
105 n-Butylbenzene	91	11.914	11.914	0.0	97	1155240	52.1	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	98	595262	48.6	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	82	32108	49.5	
109 1,2,4-Trichlorobenzene	180	13.274	13.274	0.0	94	336594	43.6	
110 Hexachlorobutadiene	225	13.404	13.404	0.0	98	172776	44.3	
111 Naphthalene	128	13.475	13.475	0.0	97	658860	43.8	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	96	260636	46.2	
S 137 Trihalomethanes, Total	1				0		193.1	
S 11 1,2-Dichloroethene, Total	96				0		103.9	
S 9 1,3-Dichloropropene, Total	75				0		93.5	
S 114 Xylenes, Total	106				0		102.6	

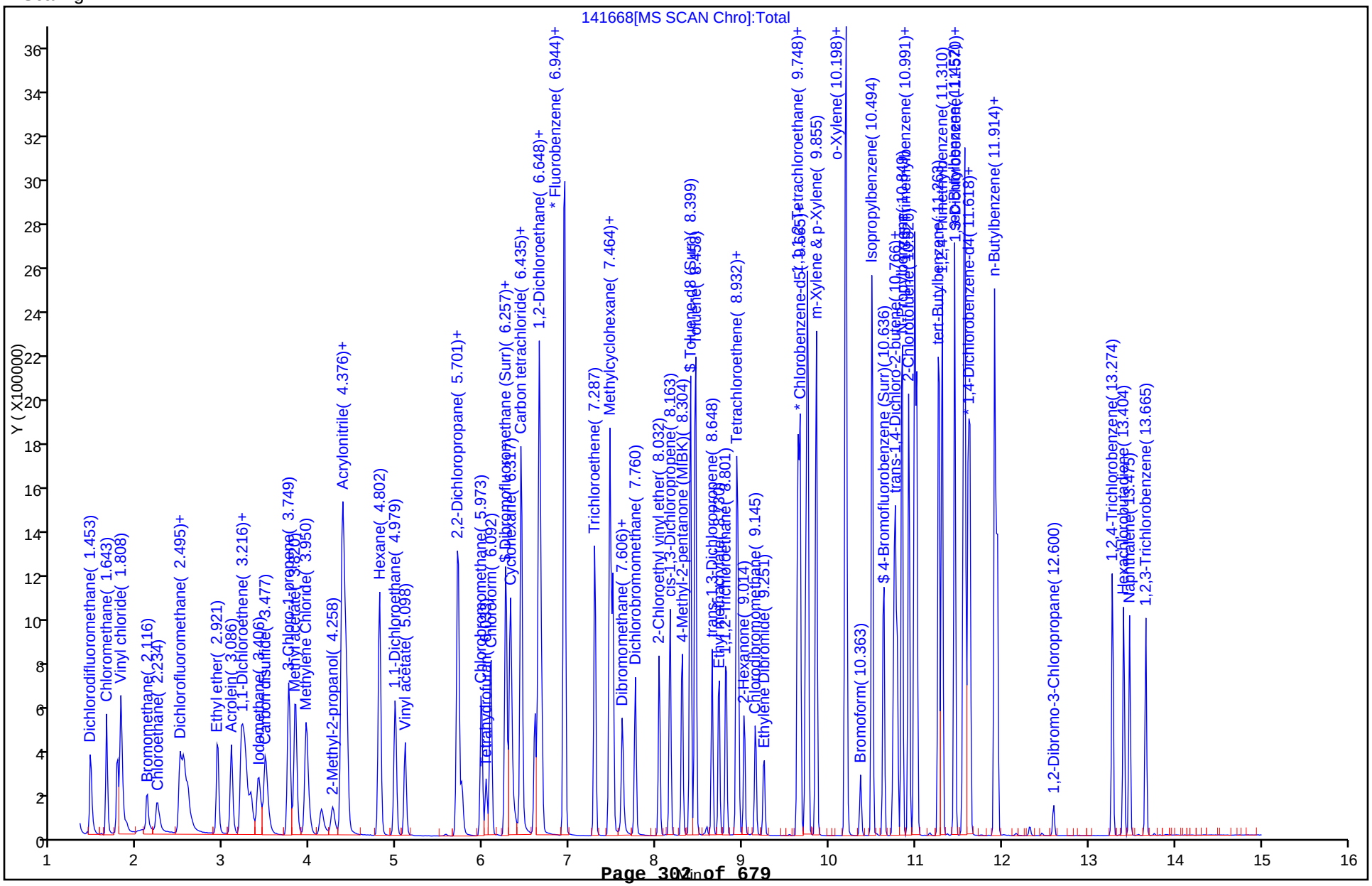
Report Date: 03-Apr-2013 13:56:26 Chrom Revision: 2.0 01-Feb-2013 10:03:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141668.D

Injection Date:	01-Apr-2013 15:08:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	6
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141669.D
Lims ID: IC Client ID:
Inject. Date: 01-Apr-2013 15:29:30 Dil. Factor: 1.0000
Sample Type: IC Calib Level: 5
Sample ID: ic
Misc. Info.: 240-0018434-007 =240-0018434-007
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 6
Lims Batch ID: 80127 Lims Sample ID: 7
Sublist: chrom-8260_14*sub32
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m
Last Update: 03-Apr-2013 12:44:51 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK035

First Level Reviewer: macenczaks Date: 02-Apr-2013 09:17:14

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	99	1260088	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	95	834369	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	369643	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.257	6.257	0.0	80	146298	19.8	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	99	167163	19.9	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	88	581877	19.8	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.636	-0.012	92	186058	20.1	
12 Dichlorodifluoromethane	85	1.465	1.453	0.012	98	150340	20.9	
13 Chloromethane	50	1.643	1.643	0.0	100	184845	19.9	
14 Vinyl chloride	62	1.773	1.773	0.0	98	150215	20.1	
15 Bromomethane	94	2.116	2.116	0.0	91	46385	18.9	
16 Chloroethane	64	2.222	2.234	-0.012	97	66418	19.1	
17 Dichlorofluoromethane	67	2.495	2.495	0.0	98	198146	19.5	
18 Trichlorofluoromethane	101	2.542	2.542	0.0	99	191645	20.0	
19 Ethyl ether	59	2.932	2.921	0.011	97	111184	19.6	
20 Acrolein	56	3.086	3.086	0.0	94	160333	199.9	
21 1,1-Dichloroethene	96	3.205	3.205	0.001	96	118436	20.5	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.252	3.240	0.012	90	101906	20.1	
22 Acetone	43	3.323	3.311	0.012	100	73127	39.2	
24 Iodomethane	142	3.406	3.406	0.0	98	190805	20.2	
26 Carbon disulfide	76	3.477	3.477	0.0	100	270446	18.0	
29 3-Chloro-1-propene	76	3.749	3.749	0.0	87	66288	19.4	
28 Methyl acetate	43	3.832	3.820	0.012	97	437383	101.5	
30 Methylene Chloride	84	3.962	3.950	0.012	98	138859	20.4	
31 2-Methyl-2-propanol	59	4.270	4.258	0.012	93	82181	191.5	
32 Acrylonitrile	53	4.364	4.364	0.0	99	414053	199.5	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	96	136663	20.5	
34 Methyl tert-butyl ether	73	4.423	4.411	0.012	92	302544	20.1	
35 Hexane	86	4.802	4.802	0.0	95	38311	21.1	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
36 1,1-Dichloroethane	63	4.980	4.979	0.001	97	253425	20.4	
37 Vinyl acetate	86	5.098	5.098	0.0	97	20238	20.7	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	83	113299	19.4	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	85	146833	20.5	
41 2-Butanone (MEK)	43	5.749	5.749	0.0	99	100893	39.4	
47 Chlorobromomethane	128	5.985	5.973	0.012	97	65302	20.3	
48 Tetrahydrofuran	42	6.033	6.033	0.0	90	68818	39.3	
49 Chloroform	83	6.092	6.092	0.0	96	221086	20.5	
50 1,1,1-Trichloroethane	97	6.269	6.257	0.012	95	162941	19.5	
51 Cyclohexane	56	6.317	6.317	0.0	94	265642	21.1	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	90	178238	20.7	
53 Carbon tetrachloride	117	6.435	6.435	0.0	86	153965	19.0	
54 Isobutyl alcohol	41	6.636	6.636	0.0	92	84736	485.1	
55 Benzene	78	6.648	6.648	0.0	97	538837	20.2	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	94	172468	20.0	
58 n-Heptane	100	6.944	6.944	0.0	94	43622	20.6	
60 Trichloroethene	130	7.287	7.287	0.0	97	157278	20.1	
63 Methylcyclohexane	83	7.464	7.464	0.0	96	242287	21.3	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	91	138377	20.7	
65 Dibromomethane	93	7.606	7.606	0.0	91	62992	19.9	
66 1,4-Dioxane	88	7.630	7.630	0.0	96	19929	416.7	
67 Dichlorobromomethane	83	7.760	7.760	0.0	97	124799	17.0	
69 2-Chloroethyl vinyl ether	63	8.032	8.032	0.0	92	106910	42.1	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.001	88	157008	17.6	
71 4-Methyl-2-pentanone (MIBK)	43	8.305	8.304	0.001	98	211843	41.8	
72 Toluene	91	8.458	8.458	0.0	97	566046	20.1	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	98	115389	17.1	
74 Ethyl methacrylate	69	8.731	8.730	0.001	92	116187	20.8	
75 1,1,2-Trichloroethane	97	8.802	8.813	-0.011	94	91031	21.1	
77 Tetrachloroethene	164	8.932	8.932	0.0	98	118145	20.4	
76 1,3-Dichloropropane	76	8.955	8.955	0.0	94	158534	20.5	
78 2-Hexanone	43	9.015	9.014	0.001	99	136713	40.7	
79 Chlorodibromomethane	129	9.145	9.145	0.0	91	76731	17.9	
123 Ethylene Dibromide	107	9.251	9.251	0.0	97	88124	21.2	
82 Chlorobenzene	112	9.665	9.665	0.0	93	349981	20.1	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	87	107708	19.3	
84 Ethylbenzene	106	9.748	9.760	-0.012	99	191237	20.3	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	98	234337	20.2	
85 o-Xylene	106	10.186	10.186	0.0	94	223532	20.4	
86 Styrene	104	10.198	10.198	0.0	92	350553	20.7	
87 Bromoform	173	10.363	10.363	0.0	96	36549	17.9	
88 Isopropylbenzene	105	10.494	10.494	0.0	97	586913	20.2	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	96	90265	20.9	
91 Bromobenzene	156	10.766	10.766	0.0	89	135151	20.6	
93 trans-1,4-Dichloro-2-butene	53	10.789	10.789	0.0	64	28206	20.2	
92 1,2,3-Trichloropropane	110	10.789	10.789	0.0	79	29138	19.8	
94 N-Propylbenzene	120	10.849	10.849	0.0	97	164862	21.2	
95 2-Chlorotoluene	126	10.920	10.920	0.0	96	136870	20.5	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	94	458973	20.6	
104 4-Chlorotoluene	126	11.014	11.014	0.0	97	138902	20.4	
97 tert-Butylbenzene	119	11.263	11.275	-0.012	91	431067	20.5	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	73	463568	20.4	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
99 sec-Butylbenzene	105	11.452	11.452	0.0	93	597026	20.6	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	92	259988	20.1	
101 4-Isopropyltoluene	119	11.570	11.570	0.0	83	511329	20.6	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	94	255782	19.6	
105 n-Butylbenzene	91	11.914	11.914	0.0	97	439842	20.5	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	98	231257	19.5	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	72	11502	21.0	
109 1,2,4-Trichlorobenzene	180	13.274	13.274	0.0	94	134816	18.0	
110 Hexachlorobutadiene	225	13.405	13.404	0.001	95	74937	19.8	
111 Naphthalene	128	13.476	13.475	0.001	97	266441	18.3	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	95	108714	19.8	
S 137 Trihalomethanes, Total	1				0		73.3	
S 11 1,2-Dichloroethene, Total	96				0		41.0	
S 9 1,3-Dichloropropene, Total	75				0		34.7	
S 114 Xylenes, Total	106				0		40.5	

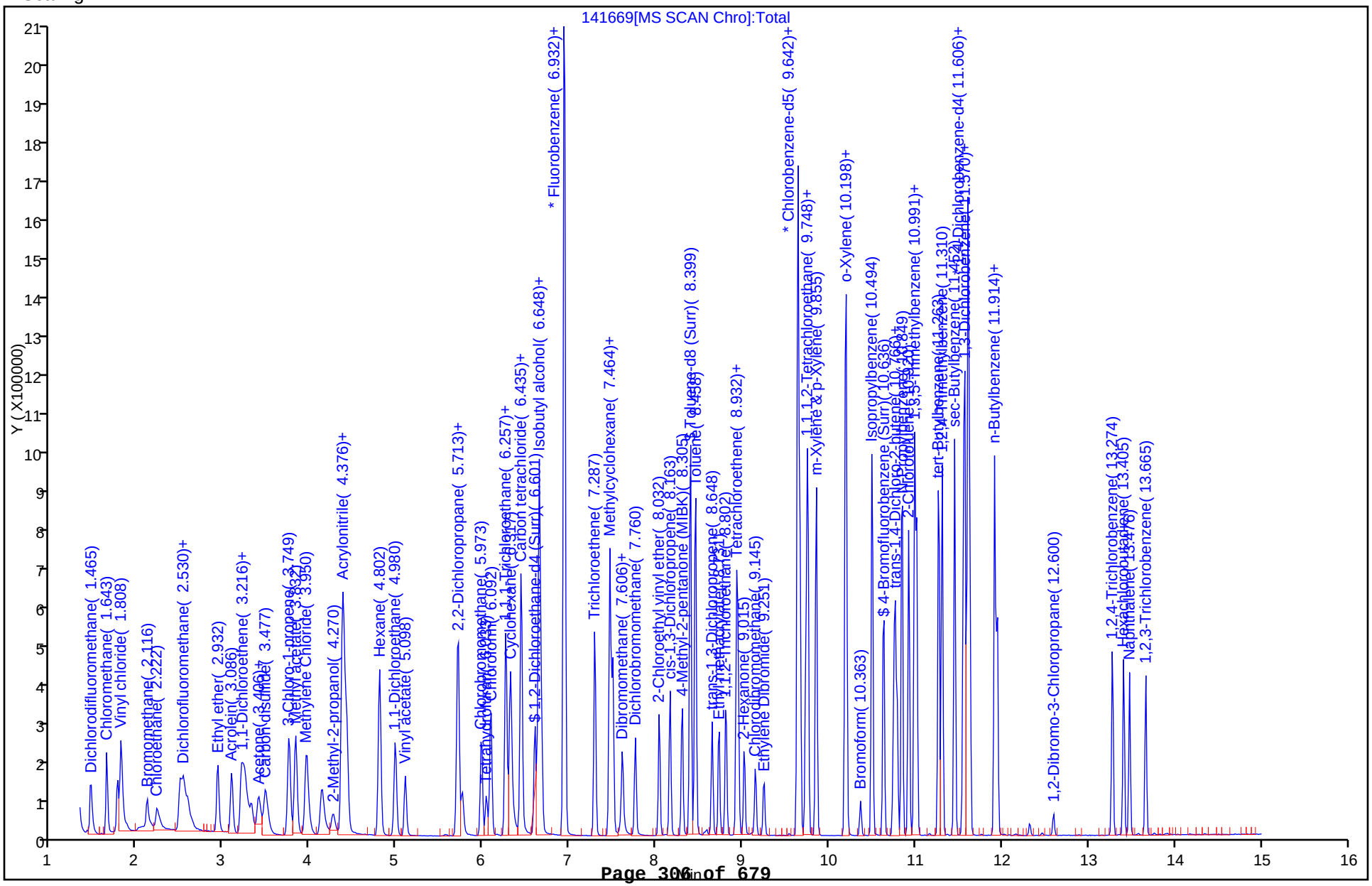
Report Date: 03-Apr-2013 12:44:51 Chrom Revision: 2.0 01-Feb-2013 10:03:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141669.D

Injection Date:	01-Apr-2013 15:29:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	7
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141670.D
Lims ID: IC Client ID:
Inject. Date: 01-Apr-2013 15:51:30 Dil. Factor: 1.0000
Sample Type: IC Calib Level: 4
Sample ID: ic
Misc. Info.: 240-0018434-008 =240-0018434-008
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 7
Lims Batch ID: 80127 Lims Sample ID: 8
Sublist: chrom-8260_14*sub32
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m
Last Update: 03-Apr-2013 12:44:52 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK035

First Level Reviewer: macenczaks Date: 02-Apr-2013 09:18:41

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	99	1331163	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	95	870767	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	98	396324	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.257	6.257	0.0	80	94284	10.5	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	98	111312	10.5	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	387397	10.5	
$ 131 4-Bromofluorobenzene (Surr)	95	10.636	10.636	0.0	97	125200	10.4	
12 Dichlorodifluoromethane	85	1.465	1.453	0.012	98	79303	10.4	
13 Chloromethane	50	1.643	1.643	0.0	89	96385	9.81	
14 Vinyl chloride	62	1.773	1.773	0.0	83	78146	9.87	
15 Bromomethane	94	2.116	2.116	0.0	90	22917	8.83	
16 Chloroethane	64	2.234	2.234	0.0	96	35264	9.58	
17 Dichlorofluoromethane	67	2.495	2.495	0.0	94	103470	9.65	
18 Trichlorofluoromethane	101	2.542	2.542	0.0	96	98339	9.74	
19 Ethyl ether	59	2.932	2.921	0.011	98	55319	9.22	
20 Acrolein	56	3.086	3.086	0.0	96	79077	93.3	
21 1,1-Dichloroethene	96	3.205	3.205	0.0	97	57564	9.43	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.252	3.240	0.012	88	49046	9.14	
22 Acetone	43	3.323	3.311	0.012	96	40463	17.4	
24 Iodomethane	142	3.406	3.406	0.0	96	94140	9.46	
26 Carbon disulfide	76	3.477	3.477	0.0	100	120702	9.36	
29 3-Chloro-1-propene	76	3.761	3.749	0.012	86	29497	8.19	
28 Methyl acetate	43	3.832	3.820	0.012	97	211623	46.5	
30 Methylene Chloride	84	3.962	3.950	0.012	94	75274	10.5	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	90	37847	83.5	
32 Acrylonitrile	53	4.364	4.364	0.0	99	202062	92.1	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	97	69076	9.82	
34 Methyl tert-butyl ether	73	4.423	4.411	0.012	91	147988	9.32	
35 Hexane	86	4.802	4.802	0.0	95	18891	9.83	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
36 1,1-Dichloroethane	63	4.979	4.979	0.0	97	122950	9.36	
37 Vinyl acetate	86	5.098	5.098	0.0	97	10377	10.1	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	78	52328	8.46	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	85	72998	9.64	
41 2-Butanone (MEK)	43	5.760	5.749	0.011	98	50186	18.5	
47 Chlorobromomethane	128	5.985	5.973	0.012	96	31707	9.34	
48 Tetrahydrofuran	42	6.033	6.033	0.0	90	33540	18.1	
49 Chloroform	83	6.092	6.092	0.0	96	107287	9.42	
50 1,1,1-Trichloroethane	97	6.257	6.257	0.0	94	76406	8.64	
51 Cyclohexane	56	6.317	6.317	0.0	94	131522	9.91	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	89	88740	9.74	
53 Carbon tetrachloride	117	6.435	6.435	0.0	87	70663	8.26	
54 Isobutyl alcohol	41	6.636	6.636	0.0	88	40734	220.7	
55 Benzene	78	6.648	6.648	0.0	98	271978	9.64	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	94	86284	9.49	
58 n-Heptane	100	6.944	6.944	0.0	92	21837	9.75	
60 Trichloroethene	130	7.287	7.287	0.0	96	77074	9.34	
63 Methylcyclohexane	83	7.464	7.464	0.0	96	119600	9.95	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	89	67507	9.57	
65 Dibromomethane	93	7.606	7.606	0.0	89	31110	9.31	
66 1,4-Dioxane	88	7.630	7.630	0.0	89	10340	204.6	
67 Dichlorobromomethane	83	7.760	7.760	0.0	97	56613	7.84	
69 2-Chloroethyl vinyl ether	63	8.032	8.032	0.0	93	51197	19.1	
70 cis-1,3-Dichloropropene	75	8.162	8.163	0.0	87	71109	8.12	
71 4-Methyl-2-pentanone (MIBK)	43	8.304	8.304	0.0	99	99480	18.8	
72 Toluene	91	8.458	8.458	0.0	98	283830	9.67	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	93	51586	7.91	
74 Ethyl methacrylate	69	8.730	8.730	0.0	93	53776	9.21	
75 1,1,2-Trichloroethane	97	8.813	8.813	0.0	94	43676	9.69	
77 Tetrachloroethene	164	8.932	8.932	0.0	97	61534	10.2	
76 1,3-Dichloropropane	76	8.955	8.955	0.0	95	78294	9.72	
78 2-Hexanone	43	9.014	9.014	0.0	98	68073	19.4	
79 Chlorodibromomethane	129	9.145	9.145	0.0	89	34113	9.56	
123 Ethylene Dibromide	107	9.251	9.251	0.0	97	41941	9.65	
82 Chlorobenzene	112	9.665	9.665	0.0	95	179576	9.88	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	88	49671	8.51	
84 Ethylbenzene	106	9.748	9.760	-0.012	99	96806	9.85	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	99	117256	9.68	
85 o-Xylene	106	10.186	10.186	0.0	95	112351	9.80	
86 Styrene	104	10.198	10.198	0.0	90	173395	9.83	
87 Bromoform	173	10.363	10.363	0.0	96	15062	8.86	
88 Isopropylbenzene	105	10.494	10.494	0.0	96	299925	9.91	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	97	45168	9.75	
91 Bromobenzene	156	10.766	10.766	0.0	90	68627	9.77	
93 trans-1,4-Dichloro-2-butene	53	10.789	10.789	0.0	74	13996	9.33	
92 1,2,3-Trichloropropane	110	10.789	10.789	0.0	72	15308	9.72	
94 N-Propylbenzene	120	10.849	10.849	0.0	98	84983	10.2	
95 2-Chlorotoluene	126	10.920	10.920	0.0	97	72221	10.1	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	94	237509	9.92	
104 4-Chlorotoluene	126	11.014	11.014	0.0	97	72680	9.95	
97 tert-Butylbenzene	119	11.263	11.275	-0.012	91	226540	10.1	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	77	240863	9.91	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
99 sec-Butylbenzene	105	11.452	11.452	0.0	94	308380	9.94	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	92	135378	9.75	
101 4-Isopropyltoluene	119	11.570	11.570	0.0	84	263424	9.88	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	93	135533	9.69	
105 n-Butylbenzene	91	11.914	11.914	0.0	97	229898	9.99	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	99	121248	9.52	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	63	5824	10.3	
109 1,2,4-Trichlorobenzene	180	13.274	13.274	0.0	94	82228	10.3	
110 Hexachlorobutadiene	225	13.404	13.404	0.0	98	44761	11.0	
111 Naphthalene	128	13.475	13.475	0.0	97	155447	9.94	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	96	66746	10.8	
S 137 Trihalomethanes, Total	1				0		35.7	
S 11 1,2-Dichloroethene, Total	96				0		19.5	
S 9 1,3-Dichloropropene, Total	75				0		16.0	
S 114 Xylenes, Total	106				0		19.5	

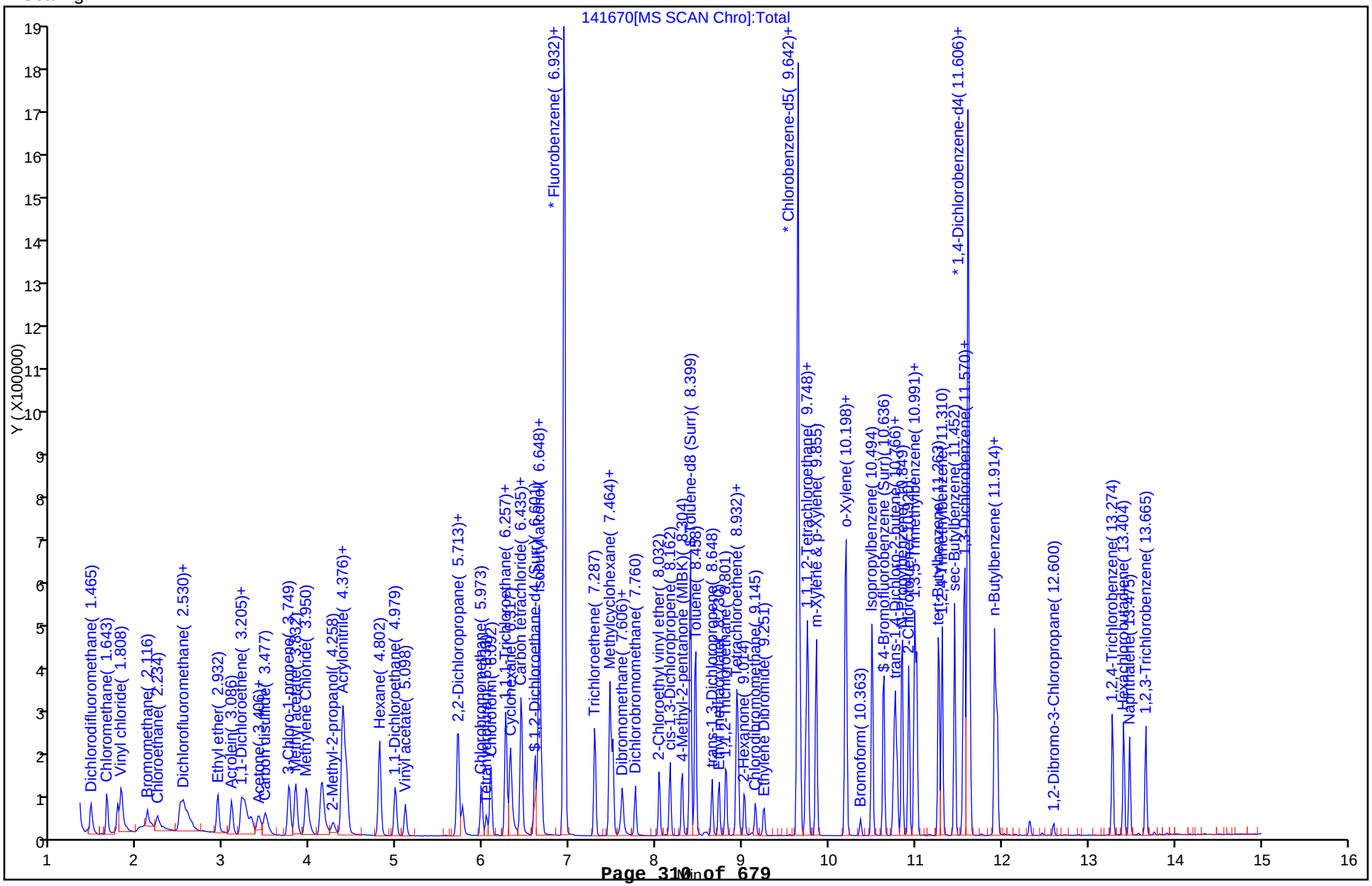
Report Date: 03-Apr-2013 12:44:52 Chrom Revision: 2.0 01-Feb-2013 10:03:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141670.D

Injection Date:	01-Apr-2013 15:51:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	8
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141671.D
Lims ID: IC Client ID:
Inject. Date: 01-Apr-2013 16:12:30 Dil. Factor: 1.0000
Sample Type: IC Calib Level: 3
Sample ID: ic
Misc. Info.: 240-0018434-009 =240-0018434-009
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 8
Lims Batch ID: 80127 Lims Sample ID: 9
Sublist: chrom-8260_14*sub32
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m
Last Update: 03-Apr-2013 12:44:53 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK035

First Level Reviewer: macenczaks Date: 02-Apr-2013 09:19:29

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	99	1263992	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	95	823672	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	384133	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.257	6.257	0.0	65	59709	5.71	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	98	71515	5.35	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	247665	5.17	
$ 131 4-Bromofluorobenzene (Surr)	95	10.636	10.636	0.0	94	81950	5.17	
12 Dichlorodifluoromethane	85	1.465	1.453	0.012	96	37785	5.24	
13 Chloromethane	50	1.643	1.643	0.0	100	44791	4.80	
14 Vinyl chloride	62	1.773	1.773	0.0	97	37022	4.93	
15 Bromomethane	94	2.116	2.116	0.0	84	11372	4.62	
16 Chloroethane	64	2.234	2.234	0.0	89	17000	4.87	
17 Dichlorofluoromethane	67	2.495	2.495	0.0	95	49773	4.89	
18 Trichlorofluoromethane	101	2.542	2.542	0.0	95	45747	4.77	
19 Ethyl ether	59	2.932	2.921	0.011	95	28137	4.94	
20 Acrolein	56	3.086	3.086	0.0	91	40200	50.0	
21 1,1-Dichloroethene	96	3.216	3.205	0.012	87	29452	5.08	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.252	3.240	0.012	83	23261	4.56	
22 Acetone	43	3.323	3.311	0.012	97	28343	11.1	
24 Iodomethane	142	3.406	3.406	0.0	97	45850	4.85	
26 Carbon disulfide	76	3.477	3.477	0.0	98	55727	6.13	
29 3-Chloro-1-propene	76	3.749	3.749	0.0	84	14025	4.10	
28 Methyl acetate	43	3.832	3.820	0.012	97	109236	25.3	
30 Methylene Chloride	84	3.962	3.950	0.012	98	41745	6.13	
31 2-Methyl-2-propanol	59	4.270	4.258	0.012	81	23079	53.6	
32 Acrylonitrile	53	4.364	4.364	0.0	98	102856	49.4	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	97	34102	5.11	
34 Methyl tert-butyl ether	73	4.423	4.411	0.012	92	74407	4.94	
35 Hexane	86	4.802	4.802	0.0	95	9535	5.22	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
36 1,1-Dichloroethane	63	4.979	4.979	0.0	96	60560	4.86	
37 Vinyl acetate	86	5.110	5.098	0.012	97	4426	4.52	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	83	24512	4.17	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	87	36773	5.11	
41 2-Butanone (MEK)	43	5.760	5.749	0.011	96	27138	10.6	
47 Chlorobromomethane	128	5.985	5.973	0.012	92	16473	5.11	
48 Tetrahydrofuran	42	6.044	6.033	0.011	88	17236	9.81	
49 Chloroform	83	6.092	6.092	0.0	96	53430	4.94	
50 1,1,1-Trichloroethane	97	6.269	6.257	0.012	87	35880	4.27	
51 Cyclohexane	56	6.317	6.317	0.0	94	62445	4.95	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	90	44314	5.12	
53 Carbon tetrachloride	117	6.435	6.435	0.0	83	32666	4.02	
54 Isobutyl alcohol	41	6.636	6.636	0.0	73	21481	122.6	
55 Benzene	78	6.648	6.648	0.0	97	138640	5.17	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	93	44154	5.12	
58 n-Heptane	100	6.944	6.944	0.0	79	10649	5.01	
60 Trichloroethene	130	7.287	7.287	0.0	97	40106	5.12	
63 Methylcyclohexane	83	7.464	7.464	0.0	95	59905	5.25	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	90	34166	5.10	
65 Dibromomethane	93	7.606	7.606	0.0	87	14731	4.64	
66 1,4-Dioxane	88	7.630	7.630	0.0	83	4718	98.3	
67 Dichlorobromomethane	83	7.760	7.760	0.0	96	26212	4.31	
69 2-Chloroethyl vinyl ether	63	8.032	8.032	0.0	91	23890	9.39	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.001	79	29809	4.14	
71 4-Methyl-2-pentanone (MIBK)	43	8.305	8.304	0.001	98	48609	9.72	
72 Toluene	91	8.458	8.458	0.0	97	142007	5.12	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	95	23647	4.35	
74 Ethyl methacrylate	69	8.731	8.730	0.0	89	25748	4.66	
75 1,1,2-Trichloroethane	97	8.802	8.813	-0.011	95	21785	5.11	
77 Tetrachloroethene	164	8.932	8.932	0.0	99	30153	5.28	
76 1,3-Dichloropropane	76	8.955	8.955	0.0	93	40174	5.27	
78 2-Hexanone	43	9.014	9.014	0.0	97	33674	10.2	
79 Chlorodibromomethane	129	9.145	9.145	0.0	88	14348	6.13	
123 Ethylene Dibromide	107	9.251	9.251	0.0	96	20005	4.87	
82 Chlorobenzene	112	9.665	9.665	0.0	93	88200	5.13	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	84	23823	4.32	
84 Ethylbenzene	106	9.760	9.760	0.0	97	47847	5.15	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	99	58542	5.11	
85 o-Xylene	106	10.186	10.186	0.0	95	56045	5.17	
86 Styrene	104	10.198	10.198	0.0	91	82843	4.97	
87 Bromoform	173	10.363	10.363	0.0	88	7271	5.94	
88 Isopropylbenzene	105	10.494	10.494	0.0	97	144321	5.04	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	86	21893	4.88	
91 Bromobenzene	156	10.766	10.766	0.0	90	35455	5.21	
93 trans-1,4-Dichloro-2-butene	53	10.789	10.789	0.0	51	6330	4.35	
92 1,2,3-Trichloropropane	110	10.789	10.789	0.0	74	7861	5.15	
94 N-Propylbenzene	120	10.849	10.849	0.0	98	42125	5.20	
95 2-Chlorotoluene	126	10.920	10.920	0.0	96	36261	5.22	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	96	116348	5.01	
104 4-Chlorotoluene	126	11.014	11.014	0.0	97	37191	5.25	
97 tert-Butylbenzene	119	11.275	11.275	0.0	90	111555	5.11	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	73	119371	5.07	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
99 sec-Butylbenzene	105	11.452	11.452	0.0	93	153156	5.09	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	83	71345	5.30	
101 4-Isopropyltoluene	119	11.570	11.570	0.0	77	128602	4.98	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	91	69736	5.15	
105 n-Butylbenzene	91	11.914	11.914	0.0	97	114399	5.13	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	97	66313	5.37	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	46	2490	4.47	
109 1,2,4-Trichlorobenzene	180	13.274	13.274	0.0	94	44661	5.75	
110 Hexachlorobutadiene	225	13.405	13.404	0.0	96	23922	6.09	
111 Naphthalene	128	13.476	13.475	0.001	96	87532	5.78	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	95	40647	6.18	
S 137 Trihalomethanes, Total	1				0		21.3	
S 11 1,2-Dichloroethene, Total	96				0		10.2	
S 9 1,3-Dichloropropene, Total	75				0		8.49	
S 114 Xylenes, Total	106				0		10.3	

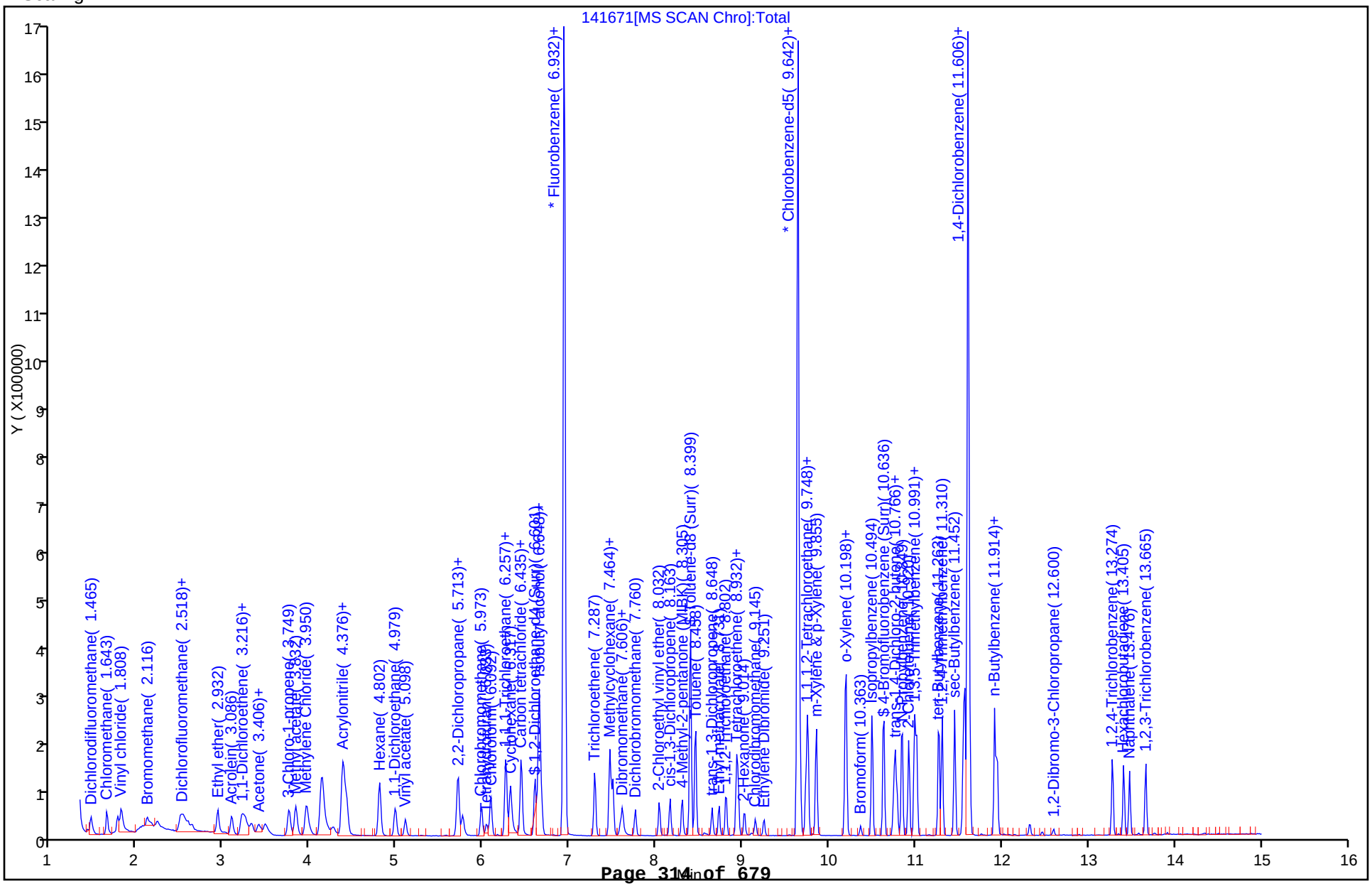
Report Date: 03-Apr-2013 12:44:53 Chrom Revision: 2.0 01-Feb-2013 10:03:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141671.D

Injection Date:	01-Apr-2013 16:12:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	9
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141672.D
Lims ID: IC Client ID:
Inject. Date: 01-Apr-2013 16:34:30 Dil. Factor: 1.0000
Sample Type: IC Calib Level: 2
Sample ID: ic
Misc. Info.: 240-0018434-010 =240-0018434-010
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 9
Lims Batch ID: 80127 Lims Sample ID: 10
Sublist: chrom-8260_14*sub32
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m
Last Update: 03-Apr-2013 12:44:54 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK035

First Level Reviewer: macenczaks Date: 02-Apr-2013 09:20:12

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	100	1197493	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	95	789352	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	370952	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.258	6.257	0.001	58	34767	1.99	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	97	45486	1.79	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	148798	1.04	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.636	-0.012	91	49084	1.00	
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	94	12576	1.84	
13 Chloromethane	50	1.643	1.643	0.0	88	16733	1.89	
14 Vinyl chloride	62	1.761	1.773	-0.012	81	12858	1.81	
15 Bromomethane	94	2.104	2.116	-0.012	88	5800	2.49	
16 Chloroethane	64	2.223	2.234	-0.011	68	6607	2.00	
17 Dichlorofluoromethane	67	2.495	2.495	0.0	88	19185	1.99	
18 Trichlorofluoromethane	101	2.530	2.542	-0.012	73	17300	1.90	
19 Ethyl ether	59	2.921	2.921	0.0	95	11391	2.11	
20 Acrolein	56	3.086	3.086	0.0	92	15999	21.0	
21 1,1-Dichloroethene	96	3.205	3.205	0.001	94	9746	1.77	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.240	3.240	0.0	68	7677	1.59	
22 Acetone	43	3.311	3.311	0.0	95	16595	4.32	
24 Iodomethane	142	3.406	3.406	0.0	92	16717	1.87	
26 Carbon disulfide	76	3.477	3.477	0.0	97	19157	4.18	
29 3-Chloro-1-propene	76	3.749	3.749	0.0	75	4769	1.47	
28 Methyl acetate	43	3.832	3.820	0.012	96	42269	10.3	
30 Methylene Chloride	84	3.950	3.950	0.0	93	22345	3.46	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	72	8538	20.9	
32 Acrylonitrile	53	4.364	4.364	0.0	99	41601	21.1	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	92	11699	1.85	
34 Methyl tert-butyl ether	73	4.423	4.411	0.012	90	28623	2.00	
35 Hexane	86	4.790	4.802	-0.012	94	3406	1.97	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
36 1,1-Dichloroethane	63	4.980	4.979	0.001	89	24191	2.05	
37 Vinyl acetate	86	5.098	5.098	0.0	90	1788	1.93	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	59	9082	1.63	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	86	12856	1.89	
41 2-Butanone (MEK)	43	5.761	5.749	0.012	53	10771	4.42	
47 Chlorobromomethane	128	5.985	5.973	0.012	87	5903	1.93	
48 Tetrahydrofuran	42	6.033	6.033	0.0	86	7302	4.39	
49 Chloroform	83	6.092	6.092	0.0	94	19920	1.94	
50 1,1,1-Trichloroethane	97	6.269	6.257	0.012	52	12255	1.54	
51 Cyclohexane	56	6.317	6.317	0.0	93	22347	1.87	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	86	15293	1.87	
53 Carbon tetrachloride	117	6.435	6.435	0.0	49	9381	1.22	
54 Isobutyl alcohol	41	6.636	6.636	0.0	35	8364	50.4	
55 Benzene	78	6.648	6.648	0.0	95	50055	1.97	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	90	16727	2.05	
58 n-Heptane	100	6.944	6.944	0.0	62	3750	1.86	
60 Trichloroethene	130	7.287	7.287	0.0	96	15249	2.05	
63 Methylcyclohexane	83	7.465	7.464	0.001	93	18586	1.72	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	82	11822	1.86	
65 Dibromomethane	93	7.607	7.606	0.0	83	6061	2.02	
66 1,4-Dioxane	88	7.642	7.630	0.012	55	1926	42.4	
67 Dichlorobromomethane	83	7.760	7.760	0.0	91	8854	2.15	
69 2-Chloroethyl vinyl ether	63	8.033	8.032	0.001	80	8079	3.35	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.001	73	9636	2.07	
71 4-Methyl-2-pentanone (MIBK)	43	8.305	8.304	0.001	95	18879	3.94	
72 Toluene	91	8.458	8.458	0.0	89	52939	1.99	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	86	7347	2.09	
74 Ethyl methacrylate	69	8.731	8.730	0.001	86	8269	1.56	
75 1,1,2-Trichloroethane	97	8.802	8.813	-0.011	89	7657	1.87	
77 Tetrachloroethene	164	8.932	8.932	0.0	95	10795	1.97	
76 1,3-Dichloropropane	76	8.944	8.955	-0.011	93	14556	1.99	
78 2-Hexanone	43	9.015	9.014	0.001	92	12238	3.85	
79 Chlorodibromomethane	129	9.145	9.145	0.0	66	5069	4.40	
123 Ethylene Dibromide	107	9.239	9.251	-0.012	87	6989	1.77	
82 Chlorobenzene	112	9.665	9.665	0.0	95	33145	2.01	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	82	7392	1.40	
84 Ethylbenzene	106	9.748	9.760	-0.012	98	18051	2.03	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	98	21230	1.93	
85 o-Xylene	106	10.186	10.186	0.0	94	19856	1.91	
86 Styrene	104	10.198	10.198	0.0	86	27767	1.74	
87 Bromoform	173	10.364	10.363	0.001	68	2183	3.85	
88 Isopropylbenzene	105	10.494	10.494	0.0	95	49077	1.79	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	89	7892	1.82	
91 Bromobenzene	156	10.766	10.766	0.0	88	13197	2.01	
93 trans-1,4-Dichloro-2-butene	53	10.790	10.789	0.001	43	2356	1.68	
92 1,2,3-Trichloropropane	110	10.790	10.789	0.001	61	2717	1.84	
94 N-Propylbenzene	120	10.849	10.849	0.0	96	13330	1.70	
95 2-Chlorotoluene	126	10.920	10.920	0.0	95	12250	1.83	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	91	39724	1.77	
104 4-Chlorotoluene	126	11.014	11.014	0.0	96	13481	1.97	
97 tert-Butylbenzene	119	11.263	11.275	-0.012	90	36637	1.74	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	72	41691	1.83	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
99 sec-Butylbenzene	105	11.452	11.452	0.0	89	52109	1.79	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	77	25995	2.00	
101 4-Isopropyltoluene	119	11.571	11.570	0.001	61	44003	1.76	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	80	27755	2.12	
105 n-Butylbenzene	91	11.914	11.914	0.0	94	38190	1.77	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	95	24504	2.06	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	16	1173	1.98	
109 1,2,4-Trichlorobenzene	180	13.274	13.274	0.0	91	17452	2.33	
110 Hexachlorobutadiene	225	13.405	13.404	0.001	88	8472	2.23	
111 Naphthalene	128	13.476	13.475	0.001	94	37781	2.58	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	91	15921	1.49	
S 137 Trihalomethanes, Total	1				0		12.3	
S 11 1,2-Dichloroethene, Total	96				0		3.74	
S 9 1,3-Dichloropropene, Total	75				0		4.16	
S 114 Xylenes, Total	106				0		3.84	

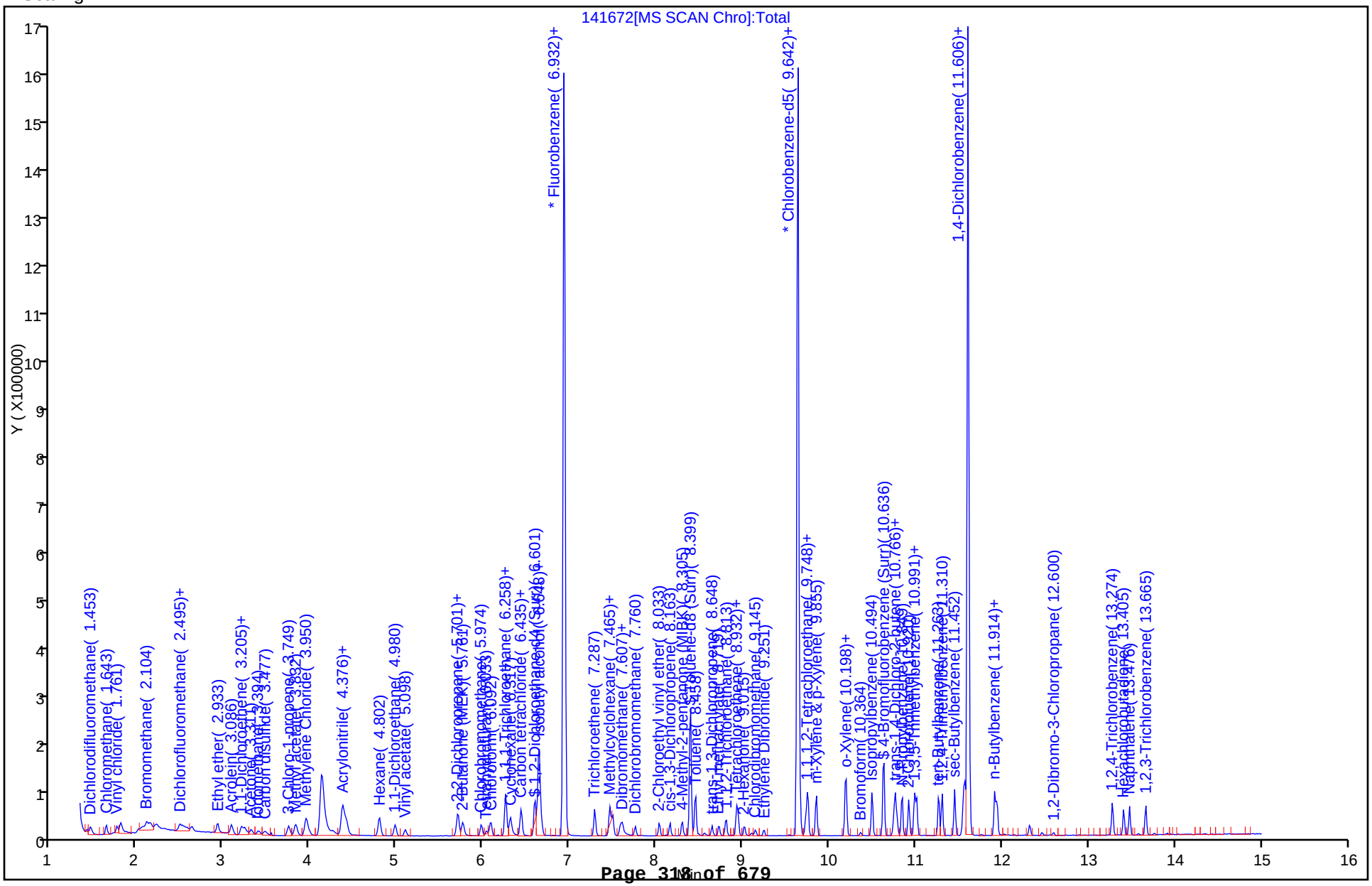
Report Date: 03-Apr-2013 12:44:54 Chrom Revision: 2.0 01-Feb-2013 10:03:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141672.D

Injection Date:	01-Apr-2013 16:34:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	10
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141673.D
Lims ID: IC Client ID:
Inject. Date: 01-Apr-2013 16:55:30 Dil. Factor: 1.0000
Sample Type: IC Calib Level: 1
Sample ID: ic
Misc. Info.: 240-0018434-011 =240-0018434-011
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 10
Lims Batch ID: 80127 Lims Sample ID: 11
Sublist: chrom-8260_14*sub32
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m
Last Update: 03-Apr-2013 12:44:54 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK035

First Level Reviewer: macenczaks Date: 02-Apr-2013 09:21:12

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	100	1241738	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	95	822415	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	381634	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.258	6.257	0.001	56	29574	0.9196	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	93	39627	0.6338	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	92	139921	0.3591	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.636	-0.012	89	45432	0.3204	
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	69	5995	0.8460	
13 Chloromethane	50	1.643	1.643	0.0	99	10249	1.12	
14 Vinyl chloride	62	1.761	1.773	-0.012	71	7109	0.9630	
15 Bromomethane	94	2.116	2.116	0.0	76	2964	1.22	
16 Chloroethane	64	2.222	2.234	-0.012	56	3485	1.02	
17 Dichlorofluoromethane	67	2.495	2.495	0.0	66	10916	1.09	
18 Trichlorofluoromethane	101	2.530	2.542	-0.012	65	8393	0.8908	
19 Ethyl ether	59	2.921	2.921	0.0	91	6966	1.24	
20 Acrolein	56	3.086	3.086	0.0	75	8467	10.7	
21 1,1-Dichloroethene	96	3.205	3.205	0.001	78	4996	0.8771	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.252	3.240	0.012	32	2980	0.5951	
22 Acetone	43	3.323	3.311	0.012	95	14683	2.71	
24 Iodomethane	142	3.394	3.406	-0.012	76	7765	0.8362	
26 Carbon disulfide	76	3.477	3.477	0.0	93	8780	3.56	
29 3-Chloro-1-propene	76	3.737	3.749	-0.012	77	2430	0.7235	
28 Methyl acetate	43	3.832	3.820	0.012	94	21386	5.04	
30 Methylene Chloride	84	3.950	3.950	0.0	93	16679	2.49	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	47	5264	12.4	
32 Acrylonitrile	53	4.364	4.364	0.0	99	20805	10.2	
33 trans-1,2-Dichloroethene	96	4.376	4.388	-0.012	90	5750	0.8763	
34 Methyl tert-butyl ether	73	4.412	4.411	0.001	86	13065	0.8824	
35 Hexane	86	4.802	4.802	0.0	91	1463	0.8158	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
36 1,1-Dichloroethane	63	4.980	4.979	0.001	72	10792	0.8807	
37 Vinyl acetate	86	5.098	5.098	0.0	89	731	0.7594	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	44	4185	0.7255	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	79	6591	0.9328	
41 2-Butanone (MEK)	43	5.761	5.749	0.012	23	7694	3.05	
47 Chlorobromomethane	128	5.974	5.973	0.001	83	2694	0.8507	
48 Tetrahydrofuran	42	6.033	6.033	0.0	91	4053	2.35	
49 Chloroform	83	6.080	6.092	-0.012	86	9406	0.8853	
50 1,1,1-Trichloroethane	97	6.258	6.257	0.001	22	5736	0.6956	
51 Cyclohexane	56	6.317	6.317	0.0	85	9617	0.7765	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	81	7521	0.8853	
53 Carbon tetrachloride	117	6.435	6.435	0.0	55	4533	0.5677	
54 Isobutyl alcohol	41	6.636	6.636	0.0	49	4531	26.3	
55 Benzene	78	6.648	6.648	0.0	93	25803	0.9802	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	77	8511	1.00	
58 n-Heptane	100	6.944	6.944	0.0	35	1780	0.8524	
60 Trichloroethene	130	7.287	7.287	0.0	89	7919	1.03	
63 Methylcyclohexane	83	7.464	7.464	0.0	85	8970	0.8002	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	79	5770	0.8767	
65 Dibromomethane	93	7.606	7.606	0.0	77	3208	1.03	
66 1,4-Dioxane	88	7.642	7.630	0.012	33	845	17.9	
67 Dichlorobromomethane	83	7.760	7.760	0.0	67	4134	1.49	
69 2-Chloroethyl vinyl ether	63	8.032	8.032	0.0	74	4097	1.64	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.001	61	4615	1.49	
71 4-Methyl-2-pentanone (MIBK)	43	8.305	8.304	0.001	87	8983	1.80	
72 Toluene	91	8.458	8.458	0.0	90	28207	1.02	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	68	3446	1.49	
74 Ethyl methacrylate	69	8.731	8.730	0.001	70	4876	0.8847	
75 1,1,2-Trichloroethane	97	8.802	8.813	-0.011	86	3993	0.9381	
77 Tetrachloroethene	164	8.932	8.932	0.0	85	4998	0.8763	
76 1,3-Dichloropropane	76	8.944	8.955	-0.011	87	7389	0.9709	
78 2-Hexanone	43	9.026	9.014	0.012	85	6470	1.95	
79 Chlorodibromomethane	129	9.145	9.145	0.0	43	2731	3.91	
123 Ethylene Dibromide	107	9.251	9.251	0.0	62	3642	0.8873	
82 Chlorobenzene	112	9.665	9.665	0.0	86	17859	1.04	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	61	3649	0.6621	
84 Ethylbenzene	106	9.748	9.760	-0.012	97	8296	0.8941	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	96	11656	1.02	
85 o-Xylene	106	10.186	10.186	0.0	92	10585	0.9778	
86 Styrene	104	10.198	10.198	0.0	84	13609	0.8172	
87 Bromoform	173	10.364	10.363	0.001	40	1033	3.32	
88 Isopropylbenzene	105	10.494	10.494	0.0	91	24447	0.8554	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	70	3757	0.8422	
91 Bromobenzene	156	10.766	10.766	0.0	83	6712	0.99	
93 trans-1,4-Dichloro-2-butene	53	10.790	10.789	0.001	31	1361	0.9421	
92 1,2,3-Trichloropropane	110	10.790	10.789	0.001	62	1715	1.13	
94 N-Propylbenzene	120	10.849	10.849	0.0	94	6651	0.8265	
95 2-Chlorotoluene	126	10.920	10.920	0.0	93	6471	0.9373	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	89	18793	0.8153	
104 4-Chlorotoluene	126	11.014	11.014	0.0	94	6526	0.9278	
97 tert-Butylbenzene	119	11.263	11.275	-0.012	84	17886	0.8241	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	72	19626	0.8384	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
99 sec-Butylbenzene	105	11.452	11.452	0.0	81	23052	0.7714	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	84	14442	1.08	
101 4-Isopropyltoluene	119	11.570	11.570	0.0	52	20874	0.8134	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	65	15539	1.15	
105 n-Butylbenzene	91	11.914	11.914	0.0	92	18916	0.8532	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	87	13103	1.07	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	1	530	0.6151	
109 1,2,4-Trichlorobenzene	180	13.274	13.274	0.0	85	9471	1.23	
110 Hexachlorobutadiene	225	13.405	13.404	0.001	76	3896	1.00	
111 Naphthalene	128	13.476	13.475	0.001	92	19876	1.32	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	86	8317	-0.1018	
S 137 Trihalomethanes, Total	1				0		9.60	
S 11 1,2-Dichloroethene, Total	96				0		1.81	
S 9 1,3-Dichloropropene, Total	75				0		2.98	
S 114 Xylenes, Total	106				0		2.00	

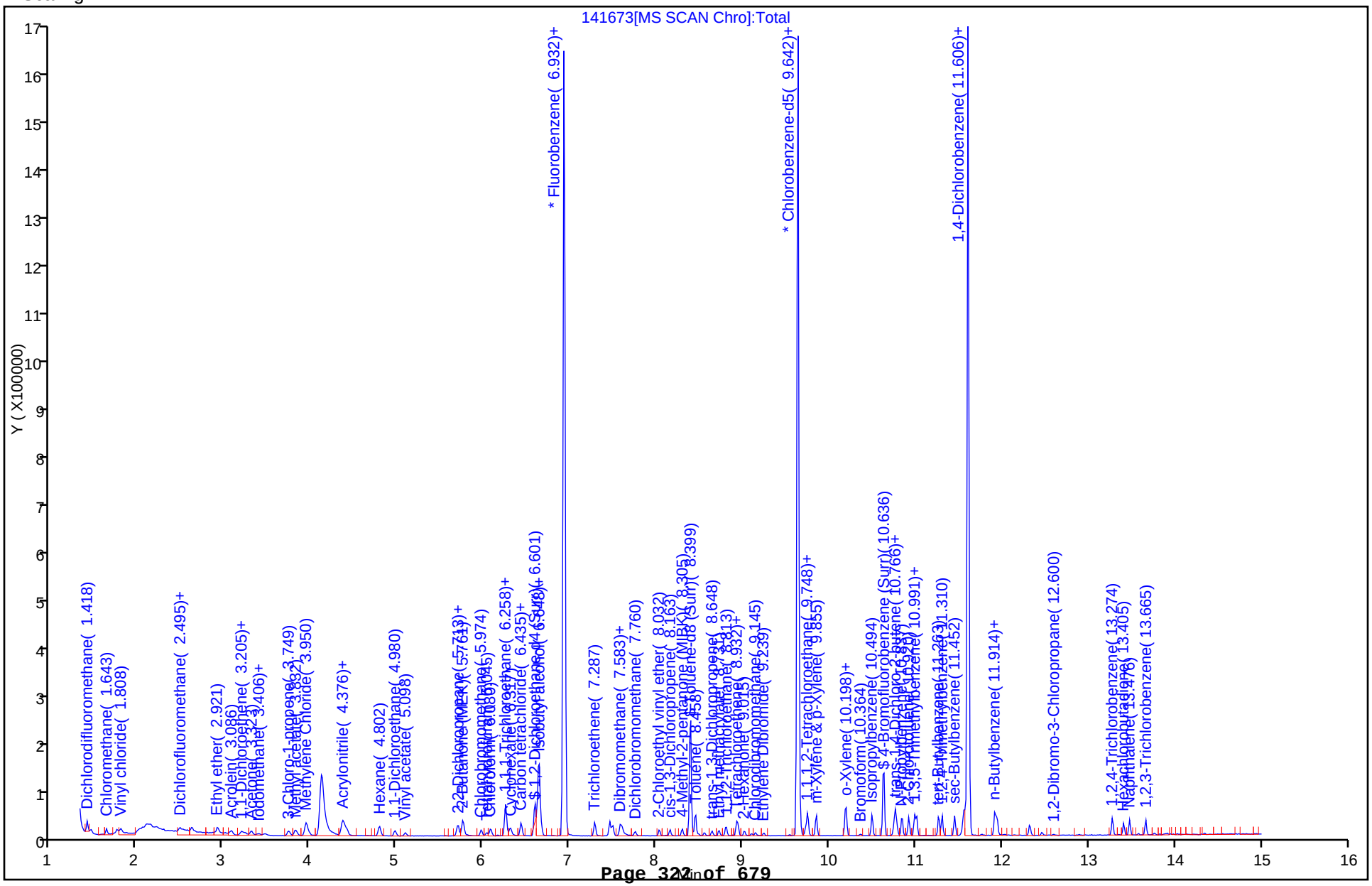
Report Date: 03-Apr-2013 12:44:55 Chrom Revision: 2.0 01-Feb-2013 10:03:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141673.D

Injection Date:	01-Apr-2013 16:55:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	11
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Lab Sample ID: ICV 240-80127/21 Calibration Date: 04/01/2013 20:31

Instrument ID: A3UX14 Calib Start Date: 04/01/2013 14:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/01/2013 16:55

Lab File ID: 141683.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2854	0.2297	0.1000	0.0402	0.0500	-19.5	20.0
Chloromethane	Ave	0.3690	0.3167	0.1000	0.0429	0.0500	-14.2	20.0
Vinyl chloride	Ave	0.2972	0.2719	0.1000	0.0457	0.0500	-8.5	20.0
Bromomethane	Ave	0.0974	0.0871	0.0500	0.0447	0.0500	-10.6	20.0
Chloroethane	Ave	0.1382	0.1318	0.0500	0.0477	0.0500	-4.7	20.0
Trichlorofluoromethane	Ave	0.3794	0.3607	0.1000	0.0475	0.0500	-4.9	20.0
1,1-Dichloroethene	Ave	0.2294	0.2378	0.1000	0.0518	0.0500	3.7	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2017	0.1982	0.0500	0.0491	0.0500	-1.7	20.0
Acetone	Lin1		0.0619	0.0500	0.0911	0.100	-8.9	20.0
Iodomethane	Ave	0.3739	0.3785		0.0506	0.0500	1.2	20.0
Carbon disulfide	Lin1		0.5736	0.1000	0.0429	0.0500	-14.3	20.0
Methyl acetate	Ave	0.1709	0.1755	0.1000	0.103	0.100	2.7	20.0
Methylene Chloride	Ave	0.2696	0.2573	0.1000	0.0477	0.0500	-4.6	20.0
2-Methyl-2-propanol	Ave	0.0170	0.0148		0.870	1.00	-13.0	20.0
trans-1,2-Dichloroethene	Ave	0.2642	0.2709	0.1000	0.0513	0.0500	2.5	20.0
Methyl tert-butyl ether	Ave	0.5962	0.5956	0.1000	0.0500	0.0500	-0.1	20.0
1,1-Dichloroethane	Ave	0.4934	0.4913	0.1000	0.0498	0.0500	-0.4	20.0
Vinyl acetate	Ave	0.0388	0.0307		0.0396	0.0500	-20.8*	20.0
2,2-Dichloropropane	Ave	0.2323	0.2190		0.0471	0.0500	-5.7	20.0
cis-1,2-Dichloroethene	Ave	0.2845	0.2842	0.1000	0.0499	0.0500	-0.1	20.0
2-Butanone (MEK)	Ave	0.1017	0.0919	0.0500	0.0903	0.100	-9.7	20.0
Bromochloromethane	Ave	0.1275	0.1302		0.0510	0.0500	2.1	20.0
Chloroform	Ave	0.4278	0.4312	0.2000	0.0504	0.0500	0.8	20.0
1,1,1-Trichloroethane	Ave	0.3321	0.3372	0.1000	0.0508	0.0500	1.5	20.0
Cyclohexane	Ave	0.4987	0.5398	0.1000	0.0541	0.0500	8.2	20.0
1,1-Dichloropropene	Ave	0.3421	0.3701		0.0541	0.0500	8.2	20.0
Carbon tetrachloride	Ave	0.3215	0.3152	0.1000	0.0490	0.0500	-2.0	20.0
Benzene	Ave	1.060	1.052	0.5000	0.0496	0.0500	-0.8	20.0
1,2-Dichloroethane	Ave	0.3414	0.3389	0.1000	0.0496	0.0500	-0.7	20.0
Trichloroethene	Ave	0.3101	0.2902	0.2000	0.0468	0.0500	-6.4	20.0
Methylcyclohexane	Ave	0.4513	0.4848	0.1000	0.0537	0.0500	7.4	20.0
1,2-Dichloropropane	Ave	0.2650	0.2696	0.1000	0.0509	0.0500	1.7	20.0
Dibromomethane	Ave	0.1255	0.1246		0.0496	0.0500	-0.7	20.0
Bromodichloromethane	Lin1		0.2542	0.1000	0.0422	0.0500	-15.7	20.0
cis-1,3-Dichloropropene	Lin1		0.3220	0.1500	0.0439	0.0500	-12.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3035	0.2833	0.0500	0.0933	0.100	-6.7	20.0
Toluene	Ave	1.685	1.653	0.4000	0.0490	0.0500	-1.9	20.0
trans-1,3-Dichloropropene	Lin1		0.3803	0.1000	0.0453	0.0500	-9.3	20.0
1,1,2-Trichloroethane	Ave	0.2588	0.2571	0.1000	0.0497	0.0500	-0.6	20.0
Tetrachloroethene	Ave	0.3468	0.3407	0.2000	0.0491	0.0500	-1.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Lab Sample ID: ICV 240-80127/21 Calibration Date: 04/01/2013 20:31

Instrument ID: A3UX14 Calib Start Date: 04/01/2013 14:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/01/2013 16:55

Lab File ID: 141683.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3-Dichloropropane	Ave	0.4627	0.4576		0.0494	0.0500	-1.1	20.0
2-Hexanone	Ave	0.2014	0.1854	0.0500	0.0921	0.100	-7.9	20.0
Dibromochloromethane	Lin1		0.2523		0.0432	0.0500	-13.7	20.0
1,2-Dibromoethane	Ave	0.2495	0.2589		0.0519	0.0500	3.8	20.0
Chlorobenzene	Ave	1.043	0.9871	0.3000	0.0473	0.0500	-5.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3351	0.3377		0.0504	0.0500	0.8	20.0
Ethylbenzene	Ave	0.5641	0.5575		0.0494	0.0500	-1.2	20.0
m-Xylene & p-Xylene	Ave	0.6957	0.6826		0.0981	0.100	-1.9	20.0
o-Xylene	Ave	0.6581	0.6583		0.0500	0.0500	0.0	20.0
Styrene	Ave	1.012	1.043	0.3000	0.0515	0.0500	3.0	20.0
Bromoform	Qua		0.1228	0.1000	0.0437	0.0500	-12.5	20.0
Isopropylbenzene	Ave	1.738	1.765	0.1000	0.0508	0.0500	1.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5845	0.5974	0.3000	0.0511	0.0500	2.2	20.0
Bromobenzene	Ave	0.8866	0.8304		0.0468	0.0500	-6.3	20.0
1,2,3-Trichloropropane	Ave	0.1986	0.1948		0.0490	0.0500	-1.9	20.0
N-Propylbenzene	Ave	1.054	1.022		0.0485	0.0500	-3.0	20.0
2-Chlorotoluene	Ave	0.9045	0.8732		0.0483	0.0500	-3.5	20.0
1,3,5-Trimethylbenzene	Ave	3.020	2.982		0.0494	0.0500	-1.3	20.0
4-Chlorotoluene	Ave	0.9215	0.8745		0.0474	0.0500	-5.1	20.0
tert-Butylbenzene	Ave	2.843	2.811		0.0494	0.0500	-1.2	20.0
1,2,4-Trimethylbenzene	Ave	3.067	2.954		0.0482	0.0500	-3.7	20.0
sec-Butylbenzene	Ave	3.915	3.893		0.0497	0.0500	-0.6	20.0
1,3-Dichlorobenzene	Ave	1.753	1.587	0.6000	0.0453	0.0500	-9.5	20.0
4-Isopropyltoluene	Ave	3.362	3.152		0.0469	0.0500	-6.2	20.0
1,4-Dichlorobenzene	Ave	1.764	1.584	0.5000	0.0449	0.0500	-10.2	20.0
n-Butylbenzene	Ave	2.905	2.739		0.0472	0.0500	-5.7	20.0
1,2-Dichlorobenzene	Ave	1.607	1.466	0.4000	0.0456	0.0500	-8.8	20.0
1,2-Dibromo-3-Chloropropane	Qua		0.0709	0.0500	0.0430	0.0500	-14.0	20.0
1,2,4-Trichlorobenzene	Ave	1.012	0.7934	0.2000	0.0392	0.0500	-21.6*	20.0
Hexachlorobutadiene	Ave	0.5116	0.4134		0.0404	0.0500	-19.2	20.0
Naphthalene	Ave	1.973	1.551		0.0393	0.0500	-21.4*	20.0
1,2,3-Trichlorobenzene	Qua		0.6091		0.0414	0.0500	-17.3	20.0
Dibromofluoromethane (Surr)	Lin1		0.2247		0.0420	0.0500	-16.0	20.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2501		0.0423	0.0500	-15.4	20.0
Toluene-d8 (Surr)	Lin1		1.335		0.0433	0.0500	-13.4	20.0
4-Bromofluorobenzene (Surr)	Lin1		0.9283		0.0419	0.0500	-16.2	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141683.D
Lims ID: ICV Client ID:
Inject. Date: 01-Apr-2013 20:31:30 Dil. Factor: 1.0000
Sample Type: ICV
Sample ID: icv
Misc. Info.: 240-0018434-021 =240-0018434-021
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 20
Lims Batch ID: 80127 Lims Sample ID: 21
Sublist:
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m
Last Update: 03-Apr-2013 12:45:02 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK035

First Level Reviewer: macenczaks Date: 02-Apr-2013 09:38:05

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	100	1276199	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	96	859219	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	98	404592	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.258	6.257	0.001	80	286768	42.0	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	97	319139	42.3	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	84	1147344	43.3	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.636	-0.012	91	375582	41.9	
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	98	293101	40.2	
13 Chloromethane	50	1.643	1.643	0.0	100	404181	42.9	
14 Vinyl chloride	62	1.773	1.773	0.0	99	346969	45.7	
15 Bromomethane	94	2.116	2.116	0.0	90	111138	44.7	
16 Chloroethane	64	2.234	2.234	0.0	97	168145	47.7	
18 Trichlorofluoromethane	101	2.542	2.542	0.0	93	460341	47.5	
20 Acrolein	56	3.086	3.086	0.0	94	324022	398.9	
21 1,1-Dichloroethene	96	3.205	3.205	0.001	97	303450	51.8	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.252	3.240	0.012	85	252938	49.1	
22 Acetone	43	3.311	3.311	0.0	99	157939	91.1	
24 Iodomethane	142	3.406	3.406	0.0	99	483077	50.6	
26 Carbon disulfide	76	3.477	3.477	0.0	100	732079	42.9	
27 Acetonitrile	41	3.737	3.737	0.0	99	286996	419.6	
28 Methyl acetate	43	3.832	3.820	0.012	97	447810	102.7	
30 Methylene Chloride	84	3.950	3.950	0.0	98	328327	47.7	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	93	378099	869.8	
32 Acrylonitrile	53	4.364	4.364	0.0	97	193545	92.1	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	97	345779	51.3	
34 Methyl tert-butyl ether	73	4.412	4.411	0.001	90	760094	50.0	
35 Hexane	86	4.802	4.802	0.0	96	94823	51.4	
36 1,1-Dichloroethane	63	4.980	4.979	0.001	97	627007	49.8	
37 Vinyl acetate	86	5.098	5.098	0.0	97	39184	39.6	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
43 2,2-Dichloropropane	77	5.701	5.701	0.0	82	279438	47.1	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	86	362635	49.9	
41 2-Butanone (MEK)	43	5.749	5.749	0.0	93	234517	90.3	
47 Chlorobromomethane	128	5.985	5.973	0.012	97	166137	51.0	
48 Tetrahydrofuran	42	6.033	6.033	0.0	89	83039	46.8	
49 Chloroform	83	6.092	6.092	0.0	96	550238	50.4	
50 1,1,1-Trichloroethane	97	6.269	6.257	0.012	95	430275	50.8	
51 Cyclohexane	56	6.317	6.317	0.0	94	688929	54.1	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	89	472258	54.1	
53 Carbon tetrachloride	117	6.435	6.435	0.0	72	402239	49.0	
55 Benzene	78	6.648	6.648	0.0	98	1342259	49.6	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	95	432552	49.6	
60 Trichloroethene	130	7.287	7.287	0.0	96	370349	46.8	
63 Methylcyclohexane	83	7.465	7.464	0.001	96	618655	53.7	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	91	343996	50.9	
65 Dibromomethane	93	7.607	7.606	0.001	88	158987	49.6	
66 1,4-Dioxane	88	7.630	7.630	0.0	98	117195	2419.3	
67 Dichlorobromomethane	83	7.760	7.760	0.0	97	324447	42.2	
69 2-Chloroethyl vinyl ether	63	8.033	8.032	0.001	93	252372	98.2	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.001	89	410888	43.9	
71 4-Methyl-2-pentanone (MIBK)	43	8.305	8.304	0.001	99	486852	93.3	
72 Toluene	91	8.459	8.458	0.001	97	1420233	49.0	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	98	326728	45.3	
74 Ethyl methacrylate	69	8.731	8.730	0.001	93	311908	54.2	
75 1,1,2-Trichloroethane	97	8.802	8.813	-0.011	94	220939	49.7	
77 Tetrachloroethene	164	8.932	8.932	0.0	97	292762	49.1	
76 1,3-Dichloropropane	76	8.956	8.955	0.001	96	393155	49.4	
78 2-Hexanone	43	9.015	9.014	0.001	99	318593	92.1	
79 Chlorodibromomethane	129	9.145	9.145	0.0	91	216818	43.2	
123 Ethylene Dibromide	107	9.251	9.251	0.0	98	222489	51.9	
82 Chlorobenzene	112	9.665	9.665	0.0	91	848162	47.3	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	91	290116	50.4	
84 Ethylbenzene	106	9.748	9.760	-0.012	99	478990	49.4	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	99	1173071	98.1	
85 o-Xylene	106	10.186	10.186	0.0	94	565603	50.0	
86 Styrene	104	10.198	10.198	0.0	92	896185	51.5	
87 Bromoform	173	10.364	10.363	0.001	97	105550	43.7	
88 Isopropylbenzene	105	10.494	10.494	0.0	97	1516816	50.8	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	95	241682	51.1	
91 Bromobenzene	156	10.766	10.766	0.0	90	335952	46.8	
93 trans-1,4-Dichloro-2-butene	53	10.790	10.789	0.001	63	72282	47.2	
92 1,2,3-Trichloropropane	110	10.790	10.789	0.001	81	78828	49.0	
94 N-Propylbenzene	120	10.849	10.849	0.0	98	413692	48.5	
95 2-Chlorotoluene	126	10.920	10.920	0.0	96	353300	48.3	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	94	1206330	49.4	
104 4-Chlorotoluene	126	11.014	11.014	0.0	97	353809	47.4	
97 tert-Butylbenzene	119	11.275	11.275	0.0	91	1137147	49.4	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	73	1195091	48.2	
99 sec-Butylbenzene	105	11.452	11.452	0.0	93	1575175	49.7	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	92	641905	45.3	
101 4-Isopropyltoluene	119	11.571	11.570	0.001	89	1275303	46.9	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	95	640979	44.9	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
105 n-Butylbenzene	91	11.914	11.914	0.0	97	1108371	47.2	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	99	592949	45.6	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	80	28669	43.0	
108 1,3,5-Trichlorobenzene	180	12.778	12.778	0.0	98	394177	41.5	
109 1,2,4-Trichlorobenzene	180	13.275	13.274	0.001	92	320984	39.2	
110 Hexachlorobutadiene	225	13.405	13.404	0.001	98	167276	40.4	
111 Naphthalene	128	13.476	13.475	0.001	97	627465	39.3	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	96	246450	41.4	
S 11 1,2-Dichloroethene, Total	96				0		101.2	
S 114 Xylenes, Total	106				0		148.1	

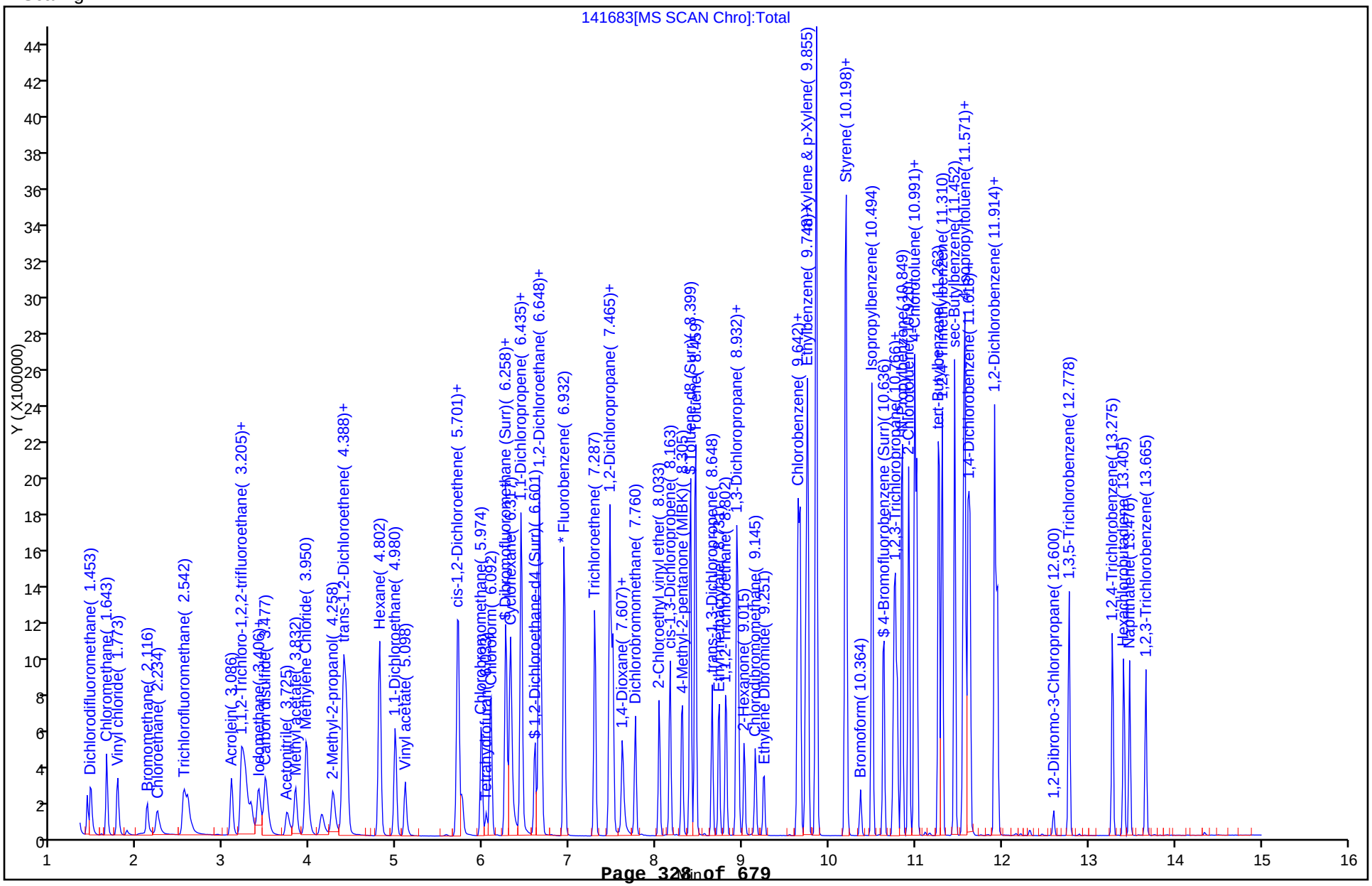
Report Date: 03-Apr-2013 12:45:04 Chrom Revision: 2.0 01-Feb-2013 10:03:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141683.D

Injection Date:	01-Apr-2013 20:31:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	21
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Lab Sample ID: CCV 240-80741/3 Calibration Date: 04/05/2013 10:59

Instrument ID: A3UX14 Calib Start Date: 04/01/2013 14:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/01/2013 16:55

Lab File ID: 141798.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2854	0.2905	0.1000	0.0509	0.0500	1.8	20.0
Chloromethane	Ave	0.3690	0.3629	0.1000	0.0492	0.0500	-1.7	20.0
Vinyl chloride	Ave	0.2972	0.3148	0.1000	0.0529	0.0500	5.9	20.0
Bromomethane	Ave	0.0974	0.1058	0.0500	0.0543	0.0500	8.6	20.0
Chloroethane	Ave	0.1382	0.1441	0.0500	0.0521	0.0500	4.2	20.0
Dichlorofluoromethane	Ave	0.4028	0.4801		0.0596	0.0500	19.2	20.0
Trichlorofluoromethane	Ave	0.3794	0.4450	0.1000	0.0587	0.0500	17.3	20.0
1,1-Dichloroethene	Ave	0.2294	0.2304	0.1000	0.0502	0.0500	0.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2017	0.2056	0.0500	0.0510	0.0500	2.0	20.0
Acetone	Lin1		0.0634	0.0500	0.0935	0.100	-6.5	20.0
Iodomethane	Ave	0.3739	0.3872		0.0518	0.0500	3.6	20.0
Carbon disulfide	Lin1		0.5404	0.1000	0.0406	0.0500	-18.9	20.0
Methyl acetate	Ave	0.1709	0.1625	0.1000	0.238	0.250	-4.9	20.0
Methylene Chloride	Ave	0.2696	0.2549	0.1000	0.0473	0.0500	-5.5	20.0
2-Methyl-2-propanol	Ave	0.0170	0.0153		0.448	0.500	-10.4	20.0
trans-1,2-Dichloroethene	Ave	0.2642	0.2625	0.1000	0.0497	0.0500	-0.7	20.0
Methyl tert-butyl ether	Ave	0.5962	0.5721	0.1000	0.0480	0.0500	-4.0	20.0
1,1-Dichloroethane	Ave	0.4934	0.4873	0.1000	0.0494	0.0500	-1.2	20.0
Vinyl acetate	Ave	0.0388	0.0351		0.0452	0.0500	-9.5	20.0
2,2-Dichloropropane	Ave	0.2323	0.2092		0.0450	0.0500	-9.9	20.0
cis-1,2-Dichloroethene	Ave	0.2845	0.2760	0.1000	0.0485	0.0500	-3.0	20.0
2-Butanone (MEK)	Ave	0.1017	0.0975	0.0500	0.0959	0.100	-4.1	20.0
Bromochloromethane	Ave	0.1275	0.1258		0.0493	0.0500	-1.4	20.0
Chloroform	Ave	0.4278	0.4258	0.2000	0.0498	0.0500	-0.5	20.0
1,1,1-Trichloroethane	Ave	0.3321	0.3203	0.1000	0.0482	0.0500	-3.5	20.0
Cyclohexane	Ave	0.4987	0.5028	0.1000	0.0504	0.0500	0.8	20.0
1,1-Dichloropropene	Ave	0.3421	0.3428		0.0501	0.0500	0.2	20.0
Carbon tetrachloride	Ave	0.3215	0.3156	0.1000	0.0491	0.0500	-1.8	20.0
Benzene	Ave	1.060	1.046	0.5000	0.0493	0.0500	-1.3	20.0
1,2-Dichloroethane	Ave	0.3414	0.3349	0.1000	0.0490	0.0500	-1.9	20.0
Trichloroethene	Ave	0.3101	0.2980	0.2000	0.0481	0.0500	-3.9	20.0
Methylcyclohexane	Ave	0.4513	0.4408	0.1000	0.0488	0.0500	-2.3	20.0
1,2-Dichloropropane	Ave	0.2650	0.2707	0.1000	0.0511	0.0500	2.1	20.0
Dibromomethane	Ave	0.1255	0.1240		0.0494	0.0500	-1.2	20.0
Bromodichloromethane	Lin1		0.2663	0.1000	0.0441	0.0500	-11.7	20.0
cis-1,3-Dichloropropene	Lin1		0.3265	0.1500	0.0445	0.0500	-11.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3035	0.2916	0.0500	0.0961	0.100	-3.9	20.0
Toluene	Ave	1.685	1.666	0.4000	0.0494	0.0500	-1.2	20.0
trans-1,3-Dichloropropene	Lin1		0.3639	0.1000	0.0434	0.0500	-13.1	20.0
1,1,2-Trichloroethane	Ave	0.2588	0.2584	0.1000	0.0499	0.0500	-0.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Lab Sample ID: CCV 240-80741/3 Calibration Date: 04/05/2013 10:59

Instrument ID: A3UX14 Calib Start Date: 04/01/2013 14:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/01/2013 16:55

Lab File ID: 141798.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrachloroethene	Ave	0.3468	0.3478	0.2000	0.0501	0.0500	0.3	20.0
1,3-Dichloropropane	Ave	0.4627	0.4613		0.0499	0.0500	-0.3	20.0
2-Hexanone	Ave	0.2014	0.1946	0.0500	0.0966	0.100	-3.4	20.0
Dibromochloromethane	Lin1		0.2513		0.0430	0.0500	-14.0	20.0
1,2-Dibromoethane	Ave	0.2495	0.2527		0.0506	0.0500	1.3	20.0
Chlorobenzene	Ave	1.043	1.027	0.3000	0.0492	0.0500	-1.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3351	0.3392		0.0506	0.0500	1.2	20.0
Ethylbenzene	Ave	0.5641	0.5855		0.0519	0.0500	3.8	20.0
m-Xylene & p-Xylene	Ave	0.6957	0.6920		0.0497	0.0500	-0.5	20.0
o-Xylene	Ave	0.6581	0.6626		0.0503	0.0500	0.7	20.0
Styrene	Ave	1.012	1.072	0.3000	0.0529	0.0500	5.9	20.0
Bromoform	Qua		0.1247	0.1000	0.0444	0.0500	-11.3	20.0
Isopropylbenzene	Ave	1.738	1.807	0.1000	0.0520	0.0500	4.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5845	0.5807	0.3000	0.0497	0.0500	-0.7	20.0
Bromobenzene	Ave	0.8866	0.8451		0.0477	0.0500	-4.7	20.0
1,2,3-Trichloropropane	Ave	0.1986	0.1871		0.0471	0.0500	-5.8	20.0
N-Propylbenzene	Ave	1.054	1.082		0.0513	0.0500	2.6	20.0
2-Chlorotoluene	Ave	0.9045	0.8952		0.0495	0.0500	-1.0	20.0
1,3,5-Trimethylbenzene	Ave	3.020	3.069		0.0508	0.0500	1.6	20.0
4-Chlorotoluene	Ave	0.9215	0.9197		0.0499	0.0500	-0.2	20.0
tert-Butylbenzene	Ave	2.843	2.796		0.0492	0.0500	-1.7	20.0
1,2,4-Trimethylbenzene	Ave	3.067	3.102		0.0506	0.0500	1.1	20.0
sec-Butylbenzene	Ave	3.915	3.953		0.0505	0.0500	1.0	20.0
1,3-Dichlorobenzene	Ave	1.753	1.663	0.6000	0.0474	0.0500	-5.1	20.0
4-Isopropyltoluene	Ave	3.362	3.400		0.0506	0.0500	1.1	20.0
1,4-Dichlorobenzene	Ave	1.764	1.641	0.5000	0.0465	0.0500	-7.0	20.0
n-Butylbenzene	Ave	2.905	2.922		0.0503	0.0500	0.6	20.0
1,2-Dichlorobenzene	Ave	1.607	1.490	0.4000	0.0464	0.0500	-7.3	20.0
1,2-Dibromo-3-Chloropropane	Qua		0.0729	0.0500	0.0440	0.0500	-12.0	20.0
1,2,4-Trichlorobenzene	Ave	1.012	0.8341	0.2000	0.0412	0.0500	-17.5	20.0
Hexachlorobutadiene	Ave	0.5116	0.4298		0.0420	0.0500	-16.0	20.0
Naphthalene	Ave	1.973	1.520		0.0385	0.0500	-23.0*	20.0
1,2,3-Trichlorobenzene	Qua		0.6320		0.0429	0.0500	-14.3	20.0
Dibromofluoromethane (Surr)	Lin1		0.2440		0.0459	0.0500	-8.1	20.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2728		0.0466	0.0500	-6.7	20.0
Toluene-d8 (Surr)	Lin1		1.439		0.0471	0.0500	-5.8	20.0
4-Bromofluorobenzene (Surr)	Lin1		1.004		0.0458	0.0500	-8.4	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141798.D
Lims ID: ccvis Client ID:
Inject. Date: 05-Apr-2013 10:59:30 Dil. Factor: 1.0000
Sample Type: CCVIS
Sample ID: ccvis
Misc. Info.: 240-0018585-003 =240-0018585-003
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 2
Lims Batch ID: 80741 Lims Sample ID: 3
Sublist: chrom-8260_14*sub32
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130405-18585.b\8260_14.m
Last Update: 08-Apr-2013 09:54:38 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK033

First Level Reviewer: macenczaks Date: 05-Apr-2013 11:17:57

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	96	1173634	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	96	797196	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	380223	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.257	6.257	0.0	83	286306	45.9	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	98	320146	46.6	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	1146940	47.1	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.624	0.0	94	381599	45.8	
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	99	340967	50.9	
13 Chloromethane	50	1.643	1.643	0.0	100	425882	49.2	
14 Vinyl chloride	62	1.761	1.761	0.0	99	369399	52.9	
15 Bromomethane	94	2.104	2.104	0.0	89	124210	54.3	
16 Chloroethane	64	2.211	2.211	0.0	97	169072	52.1	
17 Dichlorofluoromethane	67	2.483	2.483	0.0	98	563445	59.6	
18 Trichlorofluoromethane	101	2.530	2.530	0.0	98	522257	58.7	
19 Ethyl ether	59	2.932	2.932	0.0	97	254759	48.1	
20 Acrolein	56	3.086	3.086	0.0	92	270943	362.7	
21 1,1-Dichloroethene	96	3.205	3.205	0.0	98	270457	50.2	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.228	3.228	0.0	93	241333	51.0	
22 Acetone	43	3.311	3.311	0.0	98	148807	93.5	
24 Iodomethane	142	3.394	3.394	0.0	99	454446	51.8	
26 Carbon disulfide	76	3.477	3.477	0.0	100	634229	40.6	
29 3-Chloro-1-propene	76	3.749	3.749	0.0	82	155264	48.9	
28 Methyl acetate	43	3.832	3.832	0.0	97	953754	237.7	
30 Methylene Chloride	84	3.950	3.950	0.0	97	299126	47.3	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	92	179130	448.1	
32 Acrylonitrile	53	4.364	4.364	0.0	99	903095	467.1	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	96	308016	49.7	
34 Methyl tert-butyl ether	73	4.412	4.412	0.0	93	671460	48.0	
35 Hexane	86	4.802	4.802	0.0	96	81274	48.0	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
36 1,1-Dichloroethane	63	4.979	4.979	0.0	97	571862	49.4	
37 Vinyl acetate	86	5.098	5.098	0.0	97	41161	45.2	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	75	245534	45.0	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	86	323922	48.5	
41 2-Butanone (MEK)	43	5.749	5.749	0.0	99	228859	95.9	
47 Chlorobromomethane	128	5.973	5.973	0.0	96	147588	49.3	
48 Tetrahydrofuran	42	6.033	6.033	0.0	91	147536	90.5	
49 Chloroform	83	6.092	6.092	0.0	96	499753	49.8	
50 1,1,1-Trichloroethane	97	6.257	6.257	0.0	95	375934	48.2	
51 Cyclohexane	56	6.317	6.317	0.0	95	590067	50.4	
53 Carbon tetrachloride	117	6.435	6.435	0.0	76	370366	49.1	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	89	402363	50.1	
54 Isobutyl alcohol	41	6.636	6.636	0.0	88	200113	1229.9	
55 Benzene	78	6.648	6.648	0.0	98	1227276	49.3	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	95	392991	49.0	
58 n-Heptane	100	6.944	6.944	0.0	93	98625	50.0	
60 Trichloroethene	130	7.287	7.287	0.0	96	349748	48.1	
63 Methylcyclohexane	83	7.464	7.464	0.0	96	517276	48.8	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	91	317710	51.1	
65 Dibromomethane	93	7.606	7.606	0.0	95	145561	49.4	
66 1,4-Dioxane	88	7.630	7.630	0.0	98	45239	1015.5	
67 Dichlorobromomethane	83	7.760	7.760	0.0	98	312559	44.1	
69 2-Chloroethyl vinyl ether	63	8.032	8.032	0.0	93	202397	85.7	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.0	90	383204	44.5	
71 4-Methyl-2-pentanone (MIBK)	43	8.293	8.293	0.0	99	464892	96.1	
72 Toluene	91	8.458	8.458	0.0	97	1327778	49.4	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	98	290087	43.4	
74 Ethyl methacrylate	69	8.731	8.731	0.0	92	271797	50.9	
75 1,1,2-Trichloroethane	97	8.802	8.802	0.0	95	206000	49.9	
77 Tetrachloroethene	164	8.932	8.932	0.0	98	277262	50.1	
76 1,3-Dichloropropane	76	8.944	8.944	0.0	98	367753	49.9	
78 2-Hexanone	43	9.015	9.015	0.0	99	310310	96.6	
79 Chlorodibromomethane	129	9.145	9.145	0.0	91	200336	43.0	
123 Ethylene Dibromide	107	9.239	9.239	0.0	98	201472	50.6	
82 Chlorobenzene	112	9.665	9.665	0.0	95	818991	49.2	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	86	270374	50.6	
84 Ethylbenzene	106	9.748	9.748	0.0	99	466777	51.9	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	99	551643	49.7	
85 o-Xylene	106	10.186	10.186	0.0	93	528227	50.3	
86 Styrene	104	10.198	10.198	0.0	92	854413	52.9	
87 Bromoform	173	10.363	10.363	0.0	97	99445	44.4	
88 Isopropylbenzene	105	10.494	10.494	0.0	96	1440183	52.0	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	95	220781	49.7	
91 Bromobenzene	156	10.766	10.766	0.0	90	321312	47.7	
93 trans-1,4-Dichloro-2-butene	53	10.789	10.789	0.0	88	69680	48.4	
92 1,2,3-Trichloropropane	110	10.789	10.789	0.0	74	71119	47.1	
94 N-Propylbenzene	120	10.849	10.849	0.0	97	411215	51.3	
95 2-Chlorotoluene	126	10.920	10.920	0.0	96	340377	49.5	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	93	1167043	50.8	
104 4-Chlorotoluene	126	11.014	11.014	0.0	97	349676	49.9	
97 tert-Butylbenzene	119	11.263	11.263	0.0	92	1063094	49.2	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	77	1179323	50.6	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
99 sec-Butylbenzene	105	11.452	11.452	0.0	94	1503202	50.5	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	92	632204	47.4	
101 4-Isopropyltoluene	119	11.570	11.570	0.0	89	1292693	50.6	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	95	623853	46.5	
105 n-Butylbenzene	91	11.914	11.914	0.0	97	1111141	50.3	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	99	566592	46.4	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	83	27706	44.0	
109 1,2,4-Trichlorobenzene	180	13.274	13.274	0.0	91	317143	41.2	
110 Hexachlorobutadiene	225	13.405	13.405	0.0	97	163434	42.0	
111 Naphthalene	128	13.476	13.476	0.0	97	577920	38.5	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	94	240311	42.9	
S 137 Trihalomethanes, Total	1				0		181.2	
S 11 1,2-Dichloroethene, Total	96				0		98.2	
S 9 1,3-Dichloropropene, Total	75				0		88.0	
S 114 Xylenes, Total	106				0		100.1	

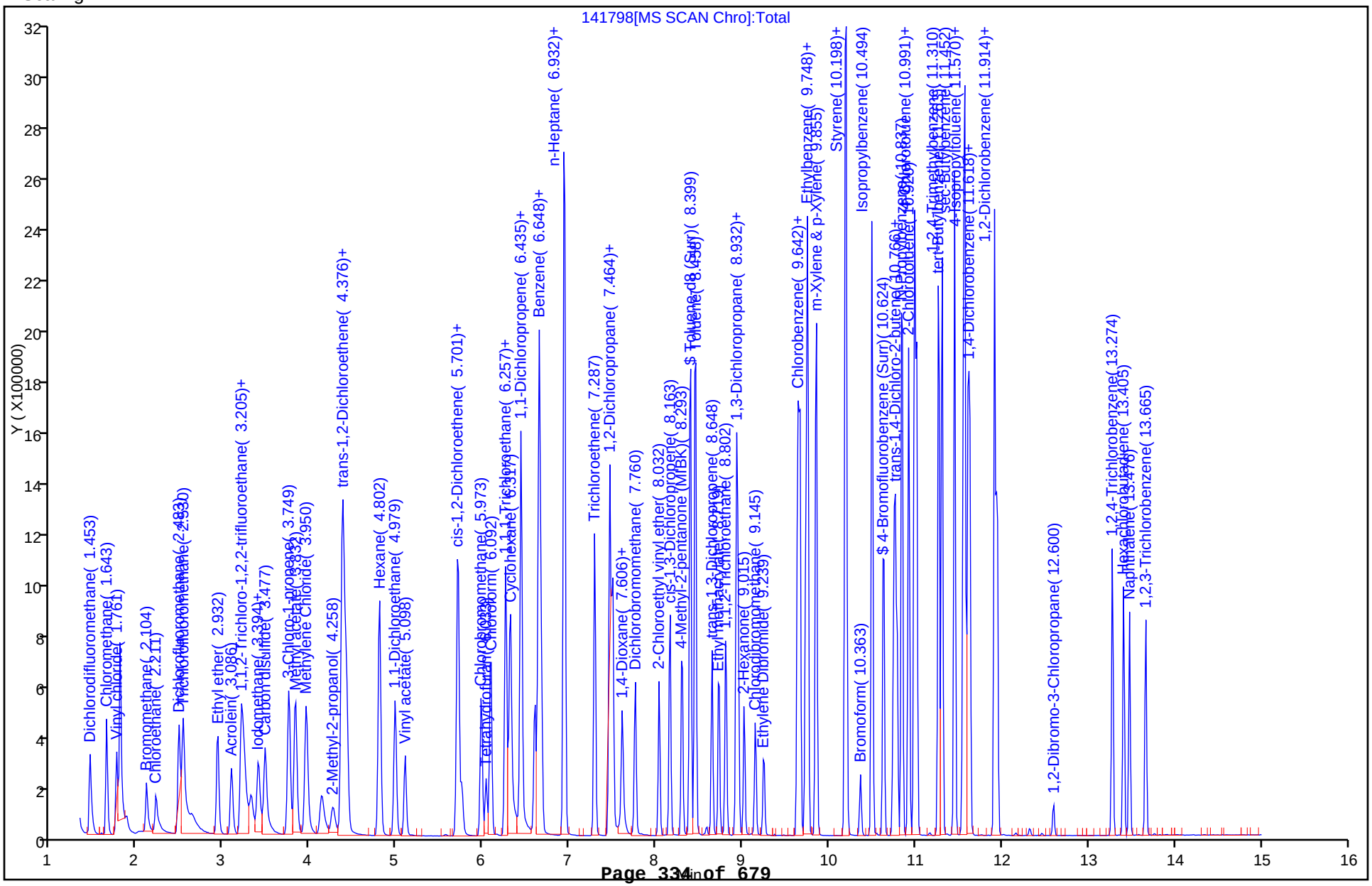
Report Date: 08-Apr-2013 09:54:39 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141798.D

Injection Date:	05-Apr-2013 10:59:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	3
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Lab Sample ID: CCV 240-80741/4 Calibration Date: 04/05/2013 11:21

Instrument ID: A3UX14 Calib Start Date: 04/01/2013 14:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/01/2013 16:55

Lab File ID: 141799.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Lin1		0.2331		0.0437	0.0500	-12.6	20.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2840		0.0488	0.0500	-2.4	20.0
Toluene-d8 (Surr)	Lin1		1.437		0.0471	0.0500	-5.9	20.0
4-Bromofluorobenzene (Surr)	Lin1		1.019		0.0466	0.0500	-6.9	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141799.D
Lims ID: ccv
Client ID:
Inject. Date: 05-Apr-2013 11:21:30
Dil. Factor: 1.0000
Sample Type: CCV
Sample ID: ccv
Misc. Info.: 240-0018585-004 =240-0018585-004
Operator: 002808
Instrument ID: A3UX14
Purge Vol: 5.000 mL
ALS Bottle#: 3
Lims Batch ID: 80741
Lims Sample ID: 4
Sublist: chrom-8260_14*sub34
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130405-18585.b\8260_14.m
Last Update: 08-Apr-2013 09:54:39
Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard
Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE
ID Type: Deconvolution ID
Column Type: DB-624
Column Dia: 0.18 mm
Process Host: XAWRK033

First Level Reviewer: macenczaks
Date: 05-Apr-2013 11:51:03

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	100	1169885	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	89	775392	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	350507	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.258	6.258	0.0	65	272672	43.7	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	95	332184	48.8	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	1114529	47.1	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.624	0.0	92	357090	46.6	
133 Benzyl chloride	126		0.000					
27 Acetonitrile	41	3.725	3.725	0.0	100	312143	497.8	
39 2-Chloro-1,3-butadiene	53	5.098	5.098	0.0	95	581016	53.3	
38 Isopropyl ether	87	5.122	5.122	0.0	95	273019	50.8	
40 Tert-butyl ethyl ether	59	5.571	5.571	0.0	98	919741	51.0	
61 Ethyl acrylate	55		5.605					9
44 Propionitrile	54	5.808	5.808	0.0	98	347150	479.6	
45 Ethyl acetate	43	5.843	5.843	0.0	99	514258	99.1	
46 Methacrylonitrile	41	5.985	5.985	0.0	96	1751686	512.4	
57 Tert-amyl methyl ether	73	6.790	6.790	0.0	92	649398	50.7	
59 n-Butanol	56	7.263	7.263	0.0	95	136444	1237.9	
64 Methyl methacrylate	41	7.618	7.618	0.0	93	476744	103.3	
68 2-Nitropropane	41	7.961	7.961	0.0	99	76968	97.0	
132 n-Butyl acetate	43	9.121	9.121	0.0	0	365789	0	
89 Cyclohexanone	55	10.577	10.577	0.0	95	69867	532.3	
103 1,2,3-Trimethylbenzene	105	11.665	11.665	0.0	98	1074625	52.3	
108 1,3,5-Trichlorobenzene	180	12.777	12.777	0.0	98	425824	51.8	
113 2-Methylnaphthalene	142	14.339	14.339	0.0	89	703569	83.3	

QC Flag Legend

Processing Flags
9 - Failed A Reference Spectral Test

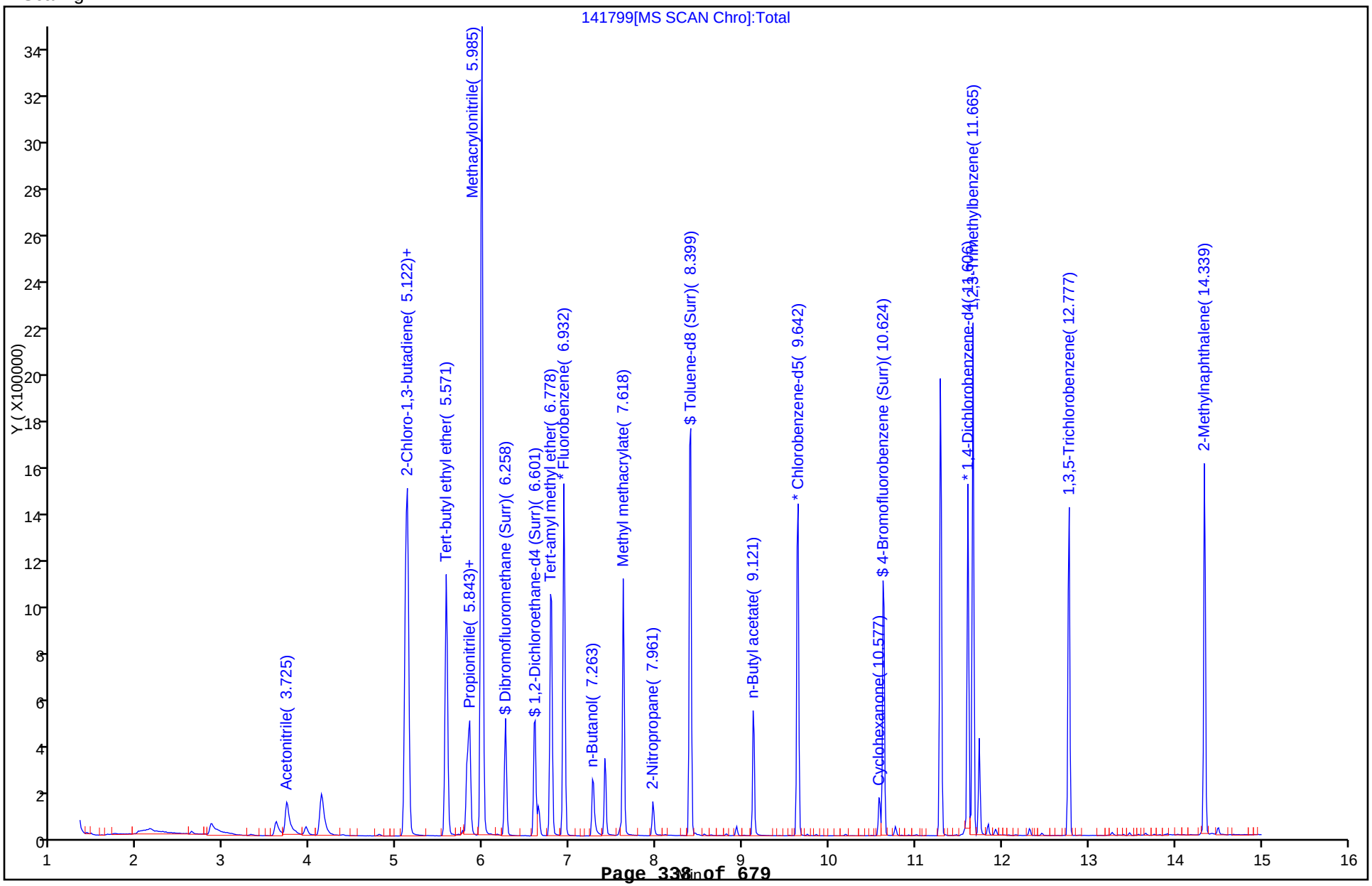
Report Date: 08-Apr-2013 09:54:39 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141799.D

Injection Date:	05-Apr-2013 11:21:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	4
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Lab Sample ID: CCV 240-80741/4 Calibration Date: 04/05/2013 11:21

Instrument ID: A3UX14 Calib Start Date: 04/01/2013 17:17

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/01/2013 20:09

Lab File ID: 141799.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Cyclohexanone	Ave	0.0085	0.0090		0.532	0.500	6.5	20.0
1,2,3-Trimethylbenzene	Ave	2.929	3.066		0.0523	0.0500	4.7	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141799.D
Lims ID: ccv
Client ID:
Inject. Date: 05-Apr-2013 11:21:30
Dil. Factor: 1.0000
Sample Type: CCV
Sample ID: ccv
Misc. Info.: 240-0018585-004 =240-0018585-004
Operator: 002808
Instrument ID: A3UX14
Purge Vol: 5.000 mL
ALS Bottle#: 3
Lims Batch ID: 80741
Lims Sample ID: 4
Sublist: chrom-8260_14*sub34
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130405-18585.b\8260_14.m
Last Update: 08-Apr-2013 09:54:39
Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard
Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE
ID Type: Deconvolution ID
Column Type: DB-624
Column Dia: 0.18 mm
Process Host: XAWRK033

First Level Reviewer: macenczaks
Date: 05-Apr-2013 11:51:03

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	100	1169885	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	89	775392	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	350507	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.258	6.258	0.0	65	272672	43.7	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	95	332184	48.8	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	1114529	47.1	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.624	0.0	92	357090	46.6	
133 Benzyl chloride	126		0.000					
27 Acetonitrile	41	3.725	3.725	0.0	100	312143	497.8	
39 2-Chloro-1,3-butadiene	53	5.098	5.098	0.0	95	581016	53.3	
38 Isopropyl ether	87	5.122	5.122	0.0	95	273019	50.8	
40 Tert-butyl ethyl ether	59	5.571	5.571	0.0	98	919741	51.0	
61 Ethyl acrylate	55		5.605					9
44 Propionitrile	54	5.808	5.808	0.0	98	347150	479.6	
45 Ethyl acetate	43	5.843	5.843	0.0	99	514258	99.1	
46 Methacrylonitrile	41	5.985	5.985	0.0	96	1751686	512.4	
57 Tert-amyl methyl ether	73	6.790	6.790	0.0	92	649398	50.7	
59 n-Butanol	56	7.263	7.263	0.0	95	136444	1237.9	
64 Methyl methacrylate	41	7.618	7.618	0.0	93	476744	103.3	
68 2-Nitropropane	41	7.961	7.961	0.0	99	76968	97.0	
132 n-Butyl acetate	43	9.121	9.121	0.0	0	365789	0	
89 Cyclohexanone	55	10.577	10.577	0.0	95	69867	532.3	
103 1,2,3-Trimethylbenzene	105	11.665	11.665	0.0	98	1074625	52.3	
108 1,3,5-Trichlorobenzene	180	12.777	12.777	0.0	98	425824	51.8	
113 2-Methylnaphthalene	142	14.339	14.339	0.0	89	703569	83.3	

QC Flag Legend

Processing Flags
9 - Failed A Reference Spectral Test

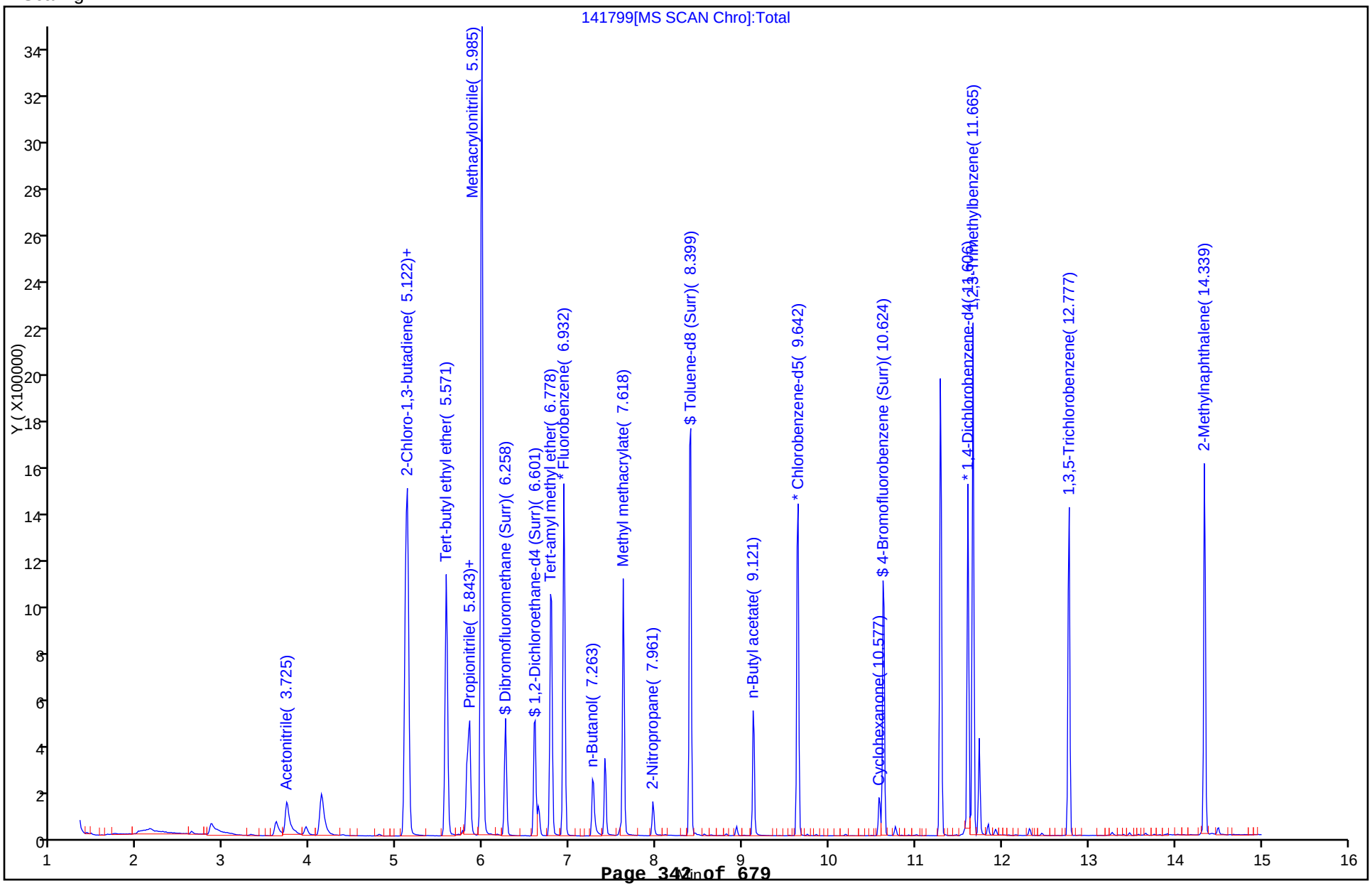
Report Date: 08-Apr-2013 09:54:39 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141799.D

Injection Date:	05-Apr-2013 11:21:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	4
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\NCChrom\ChromData\A3UX14\20130401-18434.b\BFB14383.D		
Lims ID:	BFB	Client ID:	
Inject. Date:	01-Apr-2013 13:20:30	Dil. Factor:	1.0000
Sample Type:	BFB		
Sample ID:	BFB		
Misc. Info.:	240-0018434-001		
Operator:	002808	Instrument ID:	A3UX14
Purge Vol:	5.000 mL	ALS Bottle#:	1
Lims Batch ID:	80127	Lims Sample ID:	1
Detector:	MS SCAN		
Method:	\\NCChrom\ChromData\A3UX14\20130401-18434.b\8260_14.m		
Last Update:	03-Apr-2013 12:44:46	Calib Date:	01-Apr-2013 20:09:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D		
Limit Group:	MSV 8260DOD ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK035		
First Level Reviewer: macenczaks		Date:	02-Apr-2013 10:43:28

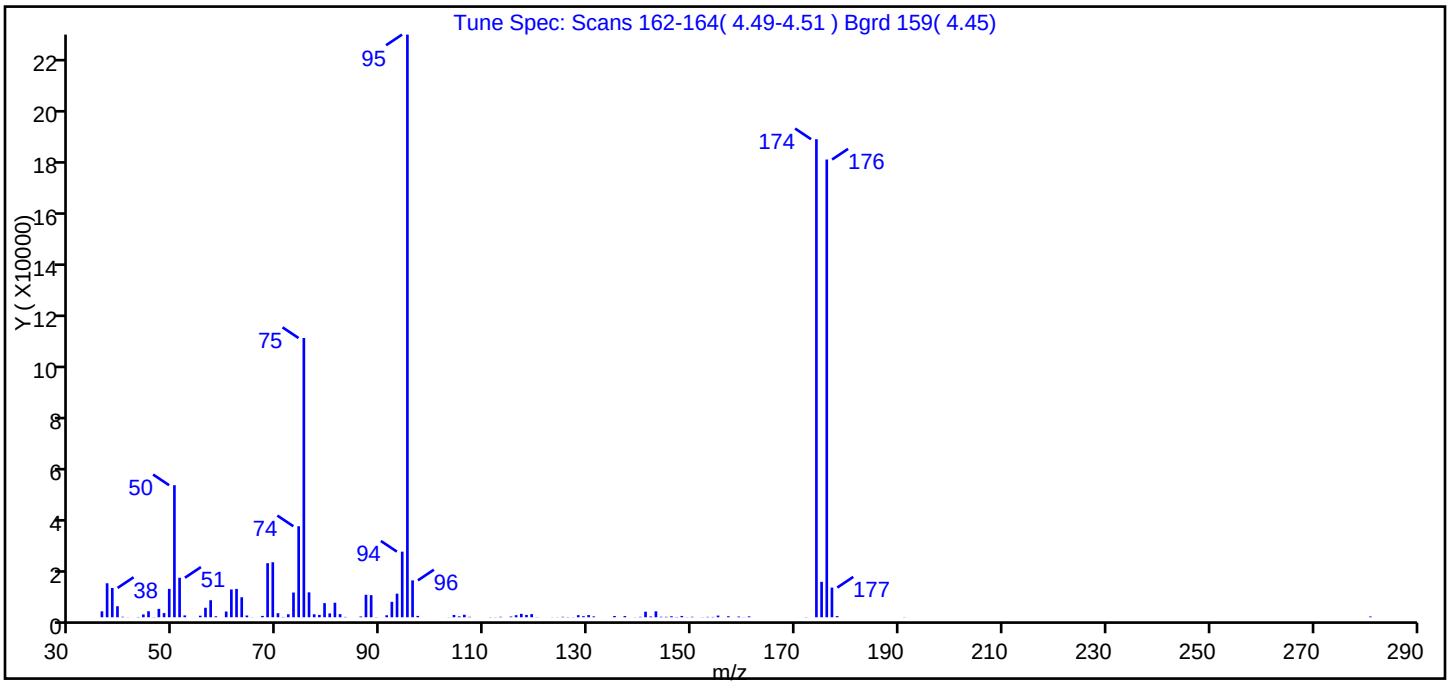
Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
$ 4 BFB	95	4.502	4.502	0.0	0	510476	0	

MS Tune Report

TestAmerica Canton

Data File:	\\NCChrom\ChromData\A3UX14\20130401-18434.b\BFB14383.D		
Injection Date:	01-Apr-2013 13:20:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80127	Lims Sample ID:	1
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm
Tune Method:	BFB Method 8260		

$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.67
75	30.00 - 60.00% of mass 95	47.93
96	5.00 - 9.00% of mass 95	6.33
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	82.05
175	5.00 - 9.00% of mass 174	6.08 (7.41)
176	95.00 - 101.00% of mass 174	78.56 (95.75)
177	5.00 - 9.00% of mass 176	5.10 (6.49)

Data File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\BFB14383.D\8260_14.rslt\spectra.d
Injection Date: 01-Apr-2013 13:20:30
Spectrum: Tune Spec: Scans 162-164(4.49-4.51) Bgrd 159(4.45)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 107

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2255	68.00	20616	103.00	54	141.00	2117
37.00	12962	69.00	20968	104.00	863	142.00	298
38.00	11178	70.00	1549	105.00	334	143.00	2272
39.00	4202	71.00	114	106.00	948	144.00	196
40.00	185	72.00	1137	107.00	163	145.00	176
41.00	50	73.00	9423	111.00	79	146.00	379
43.00	103	74.00	34688	112.00	60	147.00	111
44.00	1075	75.00	106432	113.00	173	148.00	505
45.00	2286	76.00	9495	115.00	278	149.00	63
46.00	74	77.00	1138	116.00	786	150.00	183
47.00	3194	78.00	897	117.00	1307	152.00	56
48.00	1596	79.00	5386	118.00	866	153.00	151
49.00	10819	80.00	1472	119.00	1201	154.00	125
50.00	50336	81.00	5537	120.00	64	155.00	642
51.00	15062	82.00	1187	123.00	56	157.00	387
52.00	705	83.00	134	124.00	54	159.00	280
55.00	584	86.00	300	125.00	175	160.00	55
56.00	3625	87.00	8573	126.00	95	161.00	339
57.00	6493	88.00	8429	127.00	52	172.00	82
58.00	374	89.00	74	128.00	797	174.00	182208
60.00	2180	91.00	762	129.00	402	175.00	13498
61.00	10592	92.00	5880	130.00	837	176.00	174464
62.00	10806	93.00	8993	131.00	334	177.00	11316
63.00	7621	94.00	25008	135.00	486	178.00	441
64.00	671	95.00	222080	137.00	457	191.00	67
65.00	52	96.00	14056	139.00	52	281.00	289
67.00	512	97.00	515	140.00	175		

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\NCChrom\ChromData\A3UX14\20130405-18585.b\BFB14388.D		
Lims ID:	BFB	Client ID:	
Inject. Date:	05-Apr-2013 10:16:30	Dil. Factor:	1.0000
Sample Type:	BFB		
Sample ID:	BFB		
Misc. Info.:	240-0018585-001 =240-0018585-001		
Operator:	002808	Instrument ID:	A3UX14
Purge Vol:	5.000 mL	ALS Bottle#:	1
Lims Batch ID:	80741	Lims Sample ID:	1
Detector:	MS SCAN		
Method:	\\NCChrom\ChromData\A3UX14\20130405-18585.b\8260_14.m		
Last Update:	08-Apr-2013 09:54:37	Calib Date:	01-Apr-2013 20:09:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D		
Limit Group:	MSV 8260DOD ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK033		
First Level Reviewer: macenczaks		Date:	05-Apr-2013 11:18:11

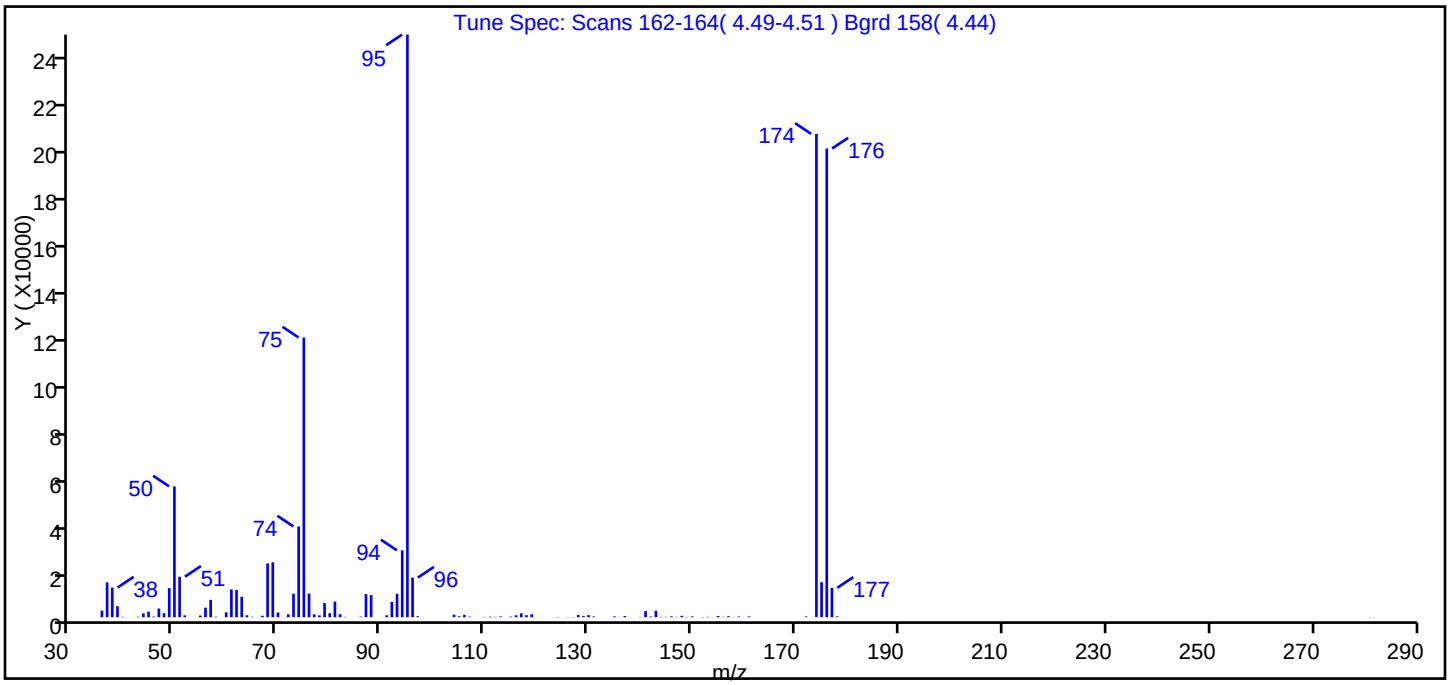
Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
$ 4 BFB	95	4.502	4.502	0.0	0	583143	0	

MS Tune Report

TestAmerica Canton

Data File:	\\NCChrom\ChromData\A3UX14\20130405-18585.b\BFB14388.D		
Injection Date:	05-Apr-2013 10:16:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	1
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm
Tune Method:	BFB Method 8260		

$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.46
75	30.00 - 60.00% of mass 95	48.01
96	5.00 - 9.00% of mass 95	6.81
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	82.97
175	5.00 - 9.00% of mass 174	6.01 (7.25)
176	95.00 - 101.00% of mass 174	80.45 (96.97)
177	5.00 - 9.00% of mass 176	5.05 (6.28)

Report Date: 08-Apr-2013 09:54:38 Chrom Revision: 2.0 01-Apr-2013 21:16:10

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\BFB14388.D\8260_14.rslt\spectra.d
Injection Date: 05-Apr-2013 10:16:30
Spectrum: Tune Spec: Scans 162-164(4.49-4.51) Bgrd 158(4.44)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2811	68.00	22800	104.00	1085	143.00	2744
37.00	14806	69.00	23264	105.00	407	144.00	162
38.00	12601	70.00	2012	106.00	980	145.00	182
39.00	4686	71.00	51	107.00	237	146.00	383
40.00	157	72.00	1241	110.00	139	147.00	143
43.00	218	73.00	9977	111.00	257	148.00	633
44.00	1656	74.00	38472	112.00	150	149.00	137
45.00	2341	75.00	118520	113.00	326	150.00	375
46.00	280	76.00	10021	115.00	284	152.00	115
47.00	3697	77.00	1240	116.00	826	153.00	151
48.00	1697	78.00	782	117.00	1667	154.00	53
49.00	12344	79.00	6021	118.00	877	155.00	549
50.00	55440	80.00	1707	119.00	1265	156.00	154
51.00	17184	81.00	6632	124.00	121	157.00	444
52.00	796	82.00	1298	126.00	115	158.00	79
55.00	720	83.00	163	127.00	106	159.00	302
56.00	4083	86.00	265	128.00	947	161.00	358
57.00	7367	87.00	9814	129.00	489	172.00	328
58.00	224	88.00	9390	130.00	890	174.00	204800
60.00	2084	91.00	833	131.00	330	175.00	14846
61.00	11805	92.00	6500	135.00	368	176.00	198592
62.00	11555	93.00	9974	136.00	67	177.00	12469
63.00	8679	94.00	28352	137.00	525	178.00	362
64.00	854	95.00	246848	140.00	141	281.00	97
65.00	175	96.00	16808	141.00	2623		
67.00	645	97.00	424	142.00	300		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-22660-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-80741/30

Matrix: Solid | Lab File ID: 141803.D

Analysis Method: 8260B/DoD | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/05/2013 13:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 80741 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-64-1	Acetone	8.60	J	20	6.3	6.3
71-43-2	Benzene	0.50	U	5.0	0.50	0.23
74-97-5	Bromochloromethane	1.0	U	5.0	1.0	0.71
75-27-4	Bromodichloromethane	0.50	U	5.0	0.50	0.28
75-25-2	Bromoform	0.50	U	5.0	0.50	0.33
74-83-9	Bromomethane	1.0	U	5.0	1.0	0.54
78-93-3	2-Butanone (MEK)	2.0	U	20	2.0	1.4
75-15-0	Carbon disulfide	0.50	U	5.0	0.50	0.44
56-23-5	Carbon tetrachloride	0.50	U	5.0	0.50	0.37
108-90-7	Chlorobenzene	0.50	U	5.0	0.50	0.33
75-00-3	Chloroethane	1.0	U	5.0	1.0	0.86
67-66-3	Chloroform	0.50	U	5.0	0.50	0.29
74-87-3	Chloromethane	0.50	U	5.0	0.50	0.41
10061-01-5	cis-1,3-Dichloropropene	0.50	U	5.0	0.50	0.34
124-48-1	Dibromochloromethane	1.0	U	5.0	1.0	0.55
106-93-4	1,2-Dibromoethane	1.0	U	5.0	1.0	0.50
75-34-3	1,1-Dichloroethane	0.50	U	5.0	0.50	0.36
107-06-2	1,2-Dichloroethane	0.50	U	5.0	0.50	0.34
75-35-4	1,1-Dichloroethene	1.0	U	5.0	1.0	0.52
540-59-0	1,2-Dichloroethene, Total	1.0	U	10	1.0	0.77
78-87-5	1,2-Dichloropropane	1.0	U	5.0	1.0	0.69
100-41-4	Ethylbenzene	0.50	U	5.0	0.50	0.26
591-78-6	2-Hexanone	1.0	U	20	1.0	0.63
75-09-2	Methylene Chloride	3.55	J	5.0	1.0	0.67
108-10-1	4-Methyl-2-pentanone (MIBK)	1.0	U	20	1.0	0.54
100-42-5	Styrene	0.50	U	5.0	0.50	0.15
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	5.0	0.50	0.34
127-18-4	Tetrachloroethene	1.0	U	5.0	1.0	0.52
108-88-3	Toluene	0.50	U	5.0	0.50	0.27
10061-02-6	trans-1,3-Dichloropropene	1.0	U	5.0	1.0	0.54
71-55-6	1,1,1-Trichloroethane	1.0	U	5.0	1.0	0.56
79-00-5	1,1,2-Trichloroethane	0.50	U	5.0	0.50	0.39
79-01-6	Trichloroethene	0.50	U	5.0	0.50	0.42
75-01-4	Vinyl chloride	0.50	U	5.0	0.50	0.39
1330-20-7	Xylenes, Total	1.5	U	10	1.5	0.67

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-80741/30

Matrix: Solid Lab File ID: 141803.D

Analysis Method: 8260B/DoD Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/05/2013 13:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 80741 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		85-120
1868-53-7	Dibromofluoromethane (Surr)	89		59-138
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		61-130
2037-26-5	Toluene-d8 (Surr)	101		85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141803.D
Lims ID: mb Client ID:
Inject. Date: 05-Apr-2013 13:05:30 Dil. Factor: 1.0000
Sample Type: MB
Sample ID: mb
Misc. Info.: 240-0018585-030 =240-0018585-030
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 6
Lims Batch ID: 80741 Lims Sample ID: 30
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130405-18585.b\8260_14.m
Last Update: 08-Apr-2013 09:54:39 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK033

First Level Reviewer: macenczaks Date: 05-Apr-2013 13:24:22

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	100	1131638	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	93	750297	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	98	351042	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.258	6.258	0.0	59	267264	44.3	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.589	6.601	-0.012	94	330569	50.3	
$ 7 Toluene-d8 (Surr)	98	8.388	8.399	-0.011	94	1143488	50.3	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.624	0.0	93	357179	46.5	
135 1,4-Dichlorobutane	1		0.000					
136 Hexachloroethane TIC	1		0.000					
133 Benzyl chloride	126		0.000					
138 Butyl Methacrylate TIC	1		0.000					
143 1,3-Butadiene TIC	1		0.000					
141 Isobutylene TIC	1		0.000					
142 1,3-Diethylbenzene TIC	1		0.000					
134 Chlorodifluoromethane TIC	1		0.000					
12 Dichlorodifluoromethane	85		1.453					9
13 Chloromethane	50		1.643					9
14 Vinyl chloride	62		1.761					
15 Bromomethane	94		2.104					
16 Chloroethane	64		2.211					
17 Dichlorofluoromethane	67		2.483					
18 Trichlorofluoromethane	101		2.530					
25 Methylal	45		2.932					9
19 Ethyl ether	59	2.921	2.932	-0.011	66	2362	0.4629	
20 Acrolein	56		3.086					9
21 1,1-Dichloroethene	96		3.205					
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.228					
22 Acetone	43	3.311	3.311	0.0	94	21825	8.60	
24 Iodomethane	142		3.394					
26 Carbon disulfide	76		3.477					

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
27 Acetonitrile	41		3.725					
29 3-Chloro-1-propene	76		3.749					
28 Methyl acetate	43		3.832					9
30 Methylene Chloride	84	3.938	3.950	-0.012	97	21685	3.55	
31 2-Methyl-2-propanol	59		4.258					
32 Acrylonitrile	53		4.364					
33 trans-1,2-Dichloroethene	96		4.388					
34 Methyl tert-butyl ether	73		4.412					
35 Hexane	86	4.790	4.802	-0.012	74	734	0.4491	
36 1,1-Dichloroethane	63		4.979					
37 Vinyl acetate	86		5.098					
39 2-Chloro-1,3-butadiene	53		5.098					
38 Isopropyl ether	87		5.122					
40 Tert-butyl ethyl ether	59		5.571					
61 Ethyl acrylate	55		5.605					
43 2,2-Dichloropropane	77		5.701					9
42 cis-1,2-Dichloroethene	96		5.713					
41 2-Butanone (MEK)	43		5.749					9
44 Propionitrile	54		5.808					
45 Ethyl acetate	43		5.843					9
47 Chlorobromomethane	128		5.973					
46 Methacrylonitrile	41		5.985					9
48 Tetrahydrofuran	42		6.033					9
49 Chloroform	83		6.092					9
50 1,1,1-Trichloroethane	97		6.257					
51 Cyclohexane	56		6.317					
53 Carbon tetrachloride	117		6.435					
52 1,1-Dichloropropene	75		6.435					
54 Isobutyl alcohol	41		6.636					
55 Benzene	78		6.648					9
56 1,2-Dichloroethane	62		6.672					
57 Tert-amyl methyl ether	73		6.790					
58 n-Heptane	100		6.944					
80 Tetrahydrothiophene	60		7.255					
59 n-Butanol	56		7.263					
60 Trichloroethene	130		7.287					9
63 Methylcyclohexane	83		7.464					
62 1,2-Dichloropropane	63		7.500					9
65 Dibromomethane	93		7.606					
64 Methyl methacrylate	41		7.618					9
66 1,4-Dioxane	88		7.630					
67 Dichlorobromomethane	83		7.760					
68 2-Nitropropane	41		7.961					
69 2-Chloroethyl vinyl ether	63		8.032					
70 cis-1,3-Dichloropropene	75		8.163					
71 4-Methyl-2-pentanone (MIBK)	43		8.293					9
72 Toluene	91		8.458					
73 trans-1,3-Dichloropropene	75		8.648					
74 Ethyl methacrylate	69		8.731					9
75 1,1,2-Trichloroethane	97		8.802					
77 Tetrachloroethene	164		8.932					9
76 1,3-Dichloropropane	76		8.944					

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
78 2-Hexanone	43		9.015					
132 n-Butyl acetate	43		9.121					14
79 Chlorodibromomethane	129		9.145					
123 Ethylene Dibromide	107		9.239					
81 1-Chlorohexane	91	9.630	9.594	0.036	13	1614	0	
82 Chlorobenzene	112		9.665					9
83 1,1,1,2-Tetrachloroethane	131		9.736					
84 Ethylbenzene	106		9.748					
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	67	1224	0.1172	
85 o-Xylene	106		10.186					9
86 Styrene	104		10.198					9
87 Bromoform	173		10.363					
88 Isopropylbenzene	105		10.494					9
89 Cyclohexanone	55		10.577					
90 1,1,2,2-Tetrachloroethane	83		10.742					
91 Bromobenzene	156		10.766					9
93 trans-1,4-Dichloro-2-butene	53		10.789					
92 1,2,3-Trichloropropane	110		10.789					
94 N-Propylbenzene	120		10.849					9
95 2-Chlorotoluene	126		10.920					9
96 1,3,5-Trimethylbenzene	105		10.991					9
104 4-Chlorotoluene	126		11.014					9
97 tert-Butylbenzene	119		11.263					9
98 1,2,4-Trimethylbenzene	105		11.310					9
99 sec-Butylbenzene	105		11.452					9
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	1	1269	0.1031	
101 4-Isopropyltoluene	119		11.570					
102 1,4-Dichlorobenzene	146		11.630					9
103 1,2,3-Trimethylbenzene	105		11.665					9
105 n-Butylbenzene	91		11.914					9
106 1,2-Dichlorobenzene	146		11.949					9
107 1,2-Dibromo-3-Chloropropane	157		12.600					
108 1,3,5-Trichlorobenzene	180		12.777					9
109 1,2,4-Trichlorobenzene	180	13.275	13.274	0.001	28	1250	0.1760	
110 Hexachlorobutadiene	225		13.405					
111 Naphthalene	128	13.476	13.476	0.0	52	4846	0.3499	
112 1,2,3-Trichlorobenzene	180		13.665					9
113 2-Methylnaphthalene	142	14.351	14.339	0.012	20	1857	0.2196	
A 140 C6-C10	1	7.589	3.915 - 11.263		0	1164416	0	
A 139 C6-C12	1	8.388	3.915 - 12.860		0	1435202	0	
S 137 Trihalomethanes, Total	1		0.000					
S 11 1,2-Dichloroethene, Total	96		1.140					
S 9 1,3-Dichloropropene, Total	75		6.760					
S 114 Xylenes, Total	106				0		0.1172	

QC Flag Legend

Processing Flags
1 - Missing Peaks
4 - Failed Signal Ratio Test
9 - Failed A Reference Spectral Test

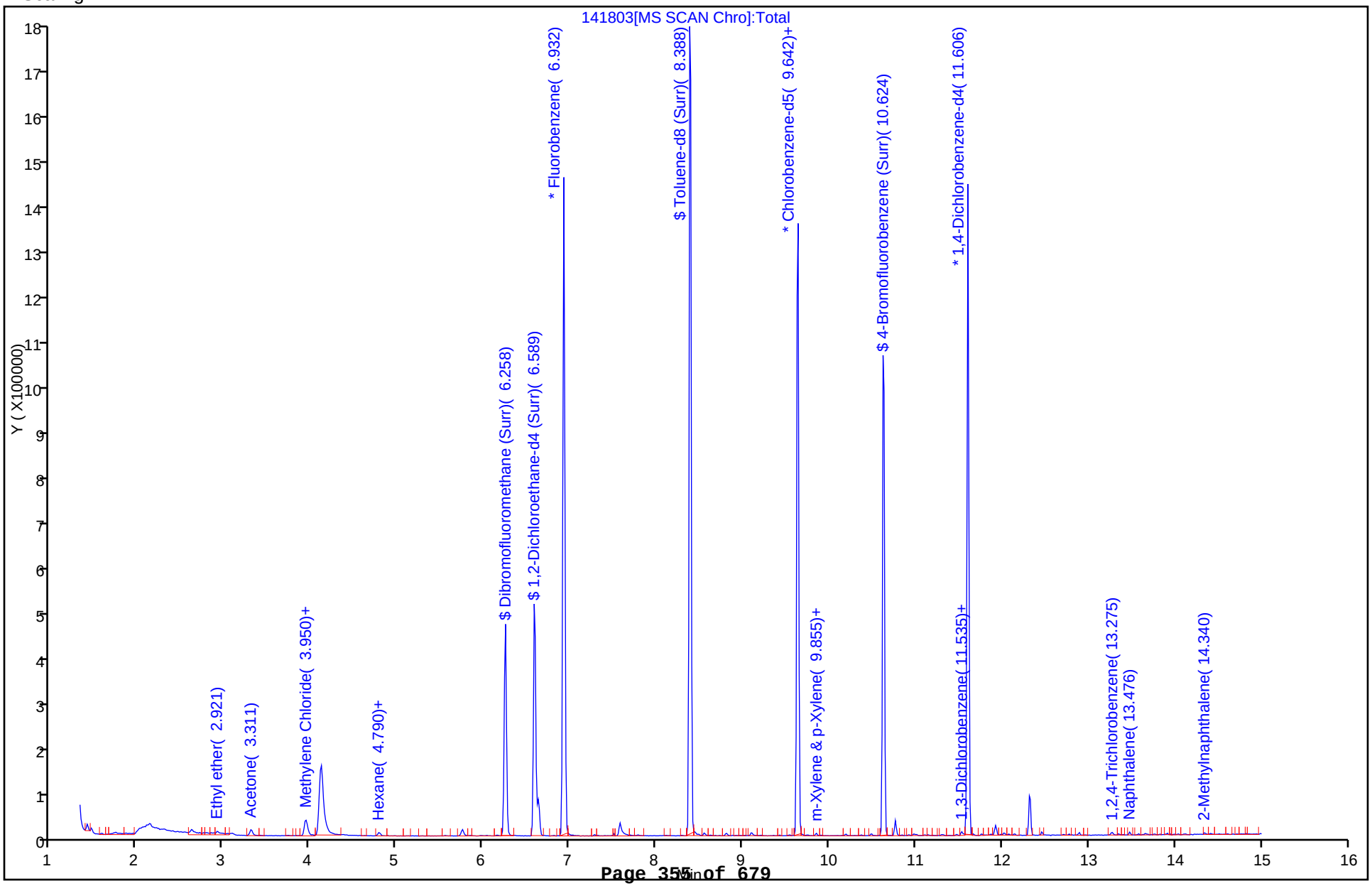
Report Date: 08-Apr-2013 09:54:42 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141803.D

Injection Date:	05-Apr-2013 13:05:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	30
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



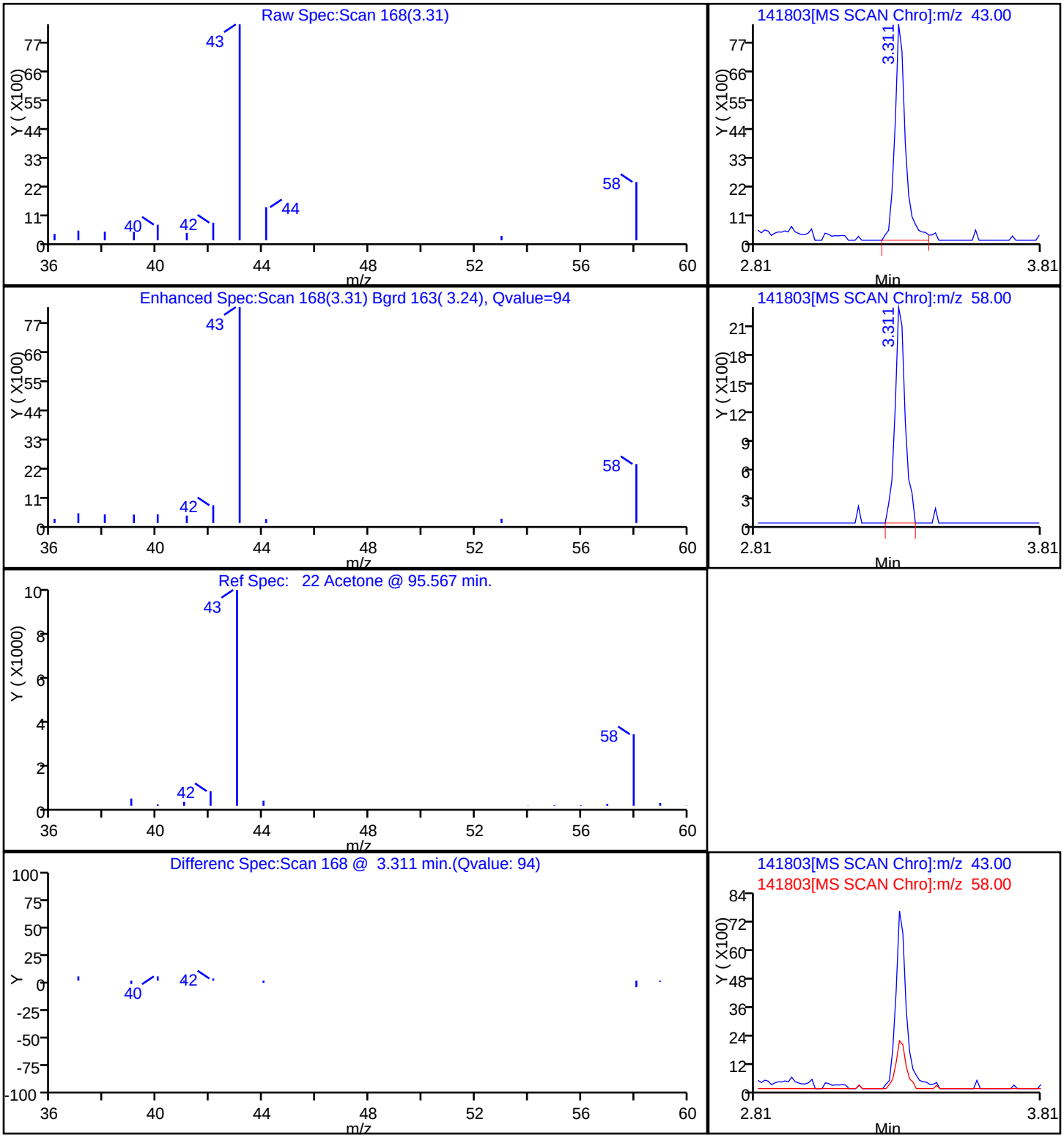
Report Date: 08-Apr-2013 09:54:42 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141803.D

Injection Date:	05-Apr-2013 13:05:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	30
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

22 Acetone



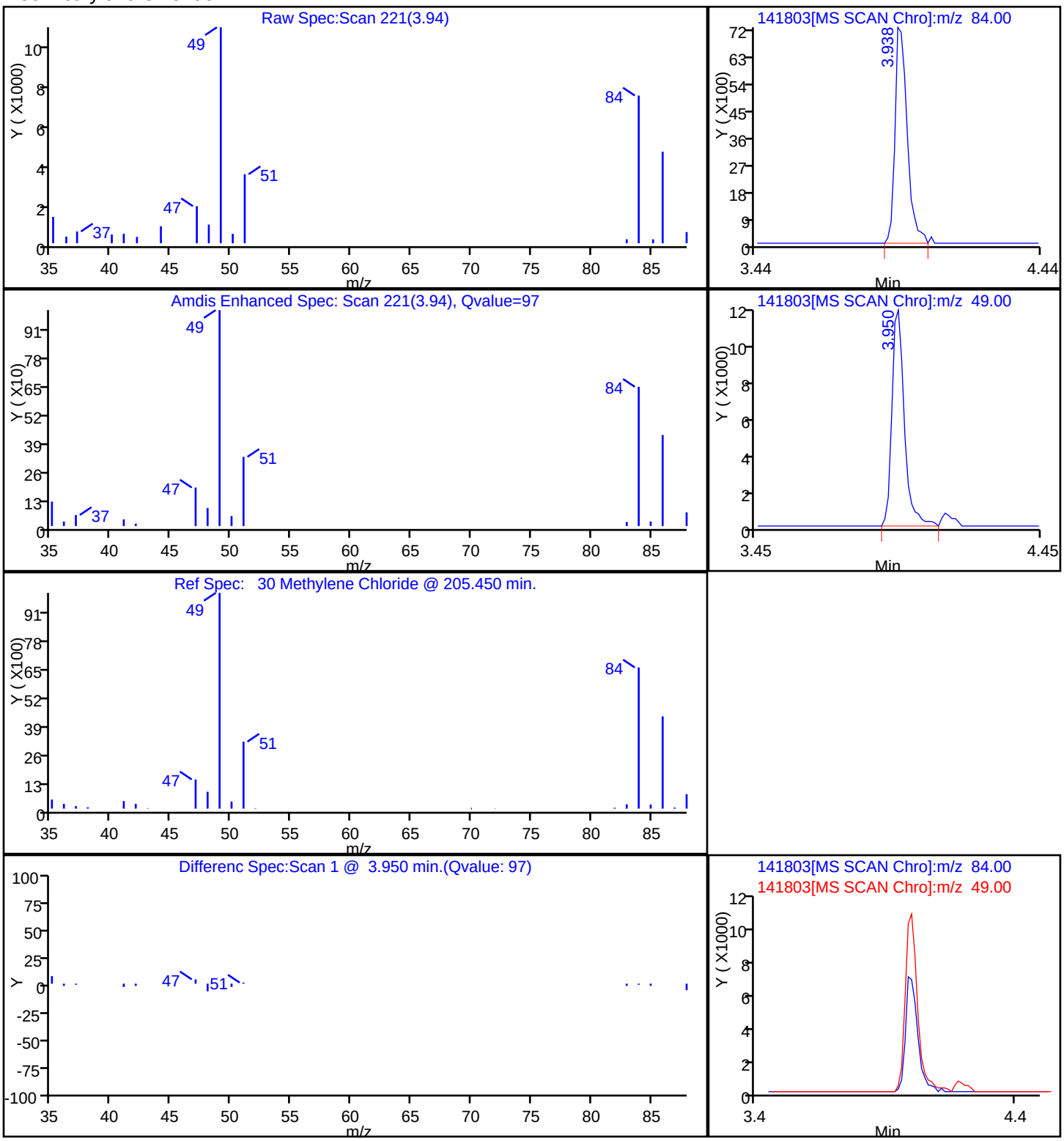
Report Date: 08-Apr-2013 09:54:42 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141803.D

Injection Date:	05-Apr-2013 13:05:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	30
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

30 Methylene Chloride



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-22660-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-80741/6

Matrix: Solid | Lab File ID: 141801.D

Analysis Method: 8260B/DoD | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/05/2013 12:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 80741 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-64-1	Acetone	104		20	6.3	6.3
71-43-2	Benzene	49.6		5.0	0.50	0.23
74-97-5	Bromochloromethane	49.8		5.0	1.0	0.71
75-27-4	Bromodichloromethane	43.0		5.0	0.50	0.28
75-25-2	Bromoform	44.6		5.0	0.50	0.33
74-83-9	Bromomethane	55.2		5.0	1.0	0.54
78-93-3	2-Butanone (MEK)	91.9		20	2.0	1.4
75-15-0	Carbon disulfide	37.1		5.0	0.50	0.44
56-23-5	Carbon tetrachloride	49.8		5.0	0.50	0.37
108-90-7	Chlorobenzene	50.2		5.0	0.50	0.33
75-00-3	Chloroethane	56.8		5.0	1.0	0.86
67-66-3	Chloroform	51.0		5.0	0.50	0.29
74-87-3	Chloromethane	47.7		5.0	0.50	0.41
10061-01-5	cis-1,3-Dichloropropene	44.0		5.0	0.50	0.34
124-48-1	Dibromochloromethane	44.0		5.0	1.0	0.55
106-93-4	1,2-Dibromoethane	52.7		5.0	1.0	0.50
75-34-3	1,1-Dichloroethane	48.7		5.0	0.50	0.36
107-06-2	1,2-Dichloroethane	49.8		5.0	0.50	0.34
75-35-4	1,1-Dichloroethene	48.1		5.0	1.0	0.52
540-59-0	1,2-Dichloroethene, Total	101		10	1.0	0.77
78-87-5	1,2-Dichloropropane	50.6		5.0	1.0	0.69
100-41-4	Ethylbenzene	51.9		5.0	0.50	0.26
591-78-6	2-Hexanone	93.3		20	1.0	0.63
75-09-2	Methylene Chloride	49.8		5.0	1.0	0.67
108-10-1	4-Methyl-2-pentanone (MIBK)	95.0		20	1.0	0.54
100-42-5	Styrene	52.8		5.0	0.50	0.15
79-34-5	1,1,2,2-Tetrachloroethane	53.1		5.0	0.50	0.34
127-18-4	Tetrachloroethene	51.7		5.0	1.0	0.52
108-88-3	Toluene	51.0		5.0	0.50	0.27
10061-02-6	trans-1,3-Dichloropropene	46.6		5.0	1.0	0.54
71-55-6	1,1,1-Trichloroethane	49.5		5.0	1.0	0.56
79-00-5	1,1,2-Trichloroethane	51.5		5.0	0.50	0.39
79-01-6	Trichloroethene	48.1		5.0	0.50	0.42
75-01-4	Vinyl chloride	52.7		5.0	0.50	0.39
1330-20-7	Xylenes, Total	156		10	1.5	0.67

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-80741/6

Matrix: Solid Lab File ID: 141801.D

Analysis Method: 8260B/DoD Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/05/2013 12:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 80741 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		85-120
1868-53-7	Dibromofluoromethane (Surr)	93		59-138
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		61-130
2037-26-5	Toluene-d8 (Surr)	95		85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141801.D
Lims ID: LCS Client ID:
Inject. Date: 05-Apr-2013 12:04:30 Dil. Factor: 1.0000
Sample Type: LCS
Sample ID: lcs
Misc. Info.: 240-0018585-006 =240-0018585-006
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 5
Lims Batch ID: 80741 Lims Sample ID: 6
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130405-18585.b\8260_14.m
Last Update: 08-Apr-2013 09:54:39 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK033

First Level Reviewer: macenczaks Date: 05-Apr-2013 12:26:32

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	100	1163312	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	96	769543	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	355535	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.258	6.258	0.0	83	285878	46.3	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	98	316987	46.6	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	1115723	47.5	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.624	0.0	95	358322	46.0	
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	99	323835	48.8	
13 Chloromethane	50	1.643	1.643	0.0	100	409410	47.7	
14 Vinyl chloride	62	1.761	1.761	0.0	99	364302	52.7	
15 Bromomethane	94	2.104	2.104	0.0	91	125134	55.2	
16 Chloroethane	64	2.211	2.211	0.0	97	182554	56.8	
18 Trichlorofluoromethane	101	2.530	2.530	0.0	99	495813	56.2	
20 Acrolein	56	3.086	3.086	0.0	96	355412	480.0	
21 1,1-Dichloroethene	96	3.205	3.205	0.0	98	256622	48.1	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.228	3.228	0.0	67	222614	47.4	
22 Acetone	43	3.311	3.311	0.0	99	163311	104.3	
24 Iodomethane	142	3.394	3.394	0.0	98	425432	48.9	
26 Carbon disulfide	76	3.477	3.477	0.0	100	571205	37.1	
27 Acetonitrile	41	3.725	3.725	0.0	99	268289	430.3	
28 Methyl acetate	43	3.832	3.832	0.0	97	381983	96.1	
30 Methylene Chloride	84	3.950	3.950	0.0	98	312030	49.8	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	92	327218	825.8	
32 Acrylonitrile	53	4.364	4.364	0.0	97	180003	93.9	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	96	311979	50.8	
34 Methyl tert-butyl ether	73	4.412	4.412	0.0	93	657184	47.4	
35 Hexane	86	4.802	4.802	0.0	96	76554	45.6	
36 1,1-Dichloroethane	63	4.980	4.979	0.001	97	559366	48.7	
37 Vinyl acetate	86	5.098	5.098	0.0	97	39264	43.5	
43 2,2-Dichloropropane	77	5.701	5.701	0.0	81	240799	44.6	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	86	331181	50.0	
41 2-Butanone (MEK)	43	5.749	5.749	0.0	99	217425	91.9	
47 Chlorobromomethane	128	5.974	5.973	0.001	97	147807	49.8	
48 Tetrahydrofuran	42	6.033	6.033	0.0	91	71569	44.3	
49 Chloroform	83	6.080	6.092	-0.012	97	508062	51.0	
50 1,1,1-Trichloroethane	97	6.258	6.257	0.001	94	382188	49.5	
51 Cyclohexane	56	6.317	6.317	0.0	95	597704	51.5	
53 Carbon tetrachloride	117	6.435	6.435	0.0	76	372893	49.8	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	88	430772	54.1	
55 Benzene	78	6.648	6.648	0.0	98	1223330	49.6	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	95	395229	49.8	
60 Trichloroethene	130	7.287	7.287	0.0	96	347037	48.1	
63 Methylcyclohexane	83	7.465	7.464	0.001	95	537190	51.2	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	93	311752	50.6	
65 Dibromomethane	93	7.607	7.606	0.001	95	145233	49.7	
66 1,4-Dioxane	88	7.630	7.630	0.0	98	105504	2389.3	
67 Dichlorobromomethane	83	7.760	7.760	0.0	97	301761	43.0	
69 2-Chloroethyl vinyl ether	63	8.033	8.032	0.001	92	197986	84.5	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.0	90	375003	44.0	
71 4-Methyl-2-pentanone (MIBK)	43	8.293	8.293	0.0	99	443978	95.0	
72 Toluene	91	8.459	8.458	0.001	97	1322272	51.0	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	99	300948	46.6	
74 Ethyl methacrylate	69	8.731	8.731	0.001	91	276825	53.7	
75 1,1,2-Trichloroethane	97	8.802	8.802	0.0	94	205294	51.5	
77 Tetrachloroethene	164	8.932	8.932	0.0	98	276006	51.7	
76 1,3-Dichloropropane	76	8.944	8.944	0.0	98	358683	50.4	
78 2-Hexanone	43	9.015	9.015	0.001	99	289263	93.3	
79 Chlorodibromomethane	129	9.145	9.145	0.0	90	198216	44.0	
123 Ethylene Dibromide	107	9.240	9.239	0.001	98	202261	52.7	
82 Chlorobenzene	112	9.666	9.665	0.001	95	805293	50.2	
83 1,1,1,2-Tetrachloroethane	131	9.737	9.736	0.0	87	268676	52.1	
84 Ethylbenzene	106	9.748	9.748	0.0	99	450346	51.9	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	99	1099657	102.7	
85 o-Xylene	106	10.186	10.186	0.0	94	535084	52.8	
86 Styrene	104	10.198	10.198	0.0	92	823220	52.8	
87 Bromoform	173	10.364	10.363	0.001	97	96534	44.6	
88 Isopropylbenzene	105	10.494	10.494	0.0	96	1427745	53.4	
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	92	220647	53.1	
91 Bromobenzene	156	10.766	10.766	0.0	89	314867	49.9	
93 trans-1,4-Dichloro-2-butene	53	10.790	10.789	0.001	83	67145	49.9	
92 1,2,3-Trichloropropane	110	10.790	10.789	0.001	72	68690	48.6	
94 N-Propylbenzene	120	10.849	10.849	0.0	96	392579	52.4	
95 2-Chlorotoluene	126	10.920	10.920	0.0	96	334786	52.1	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	94	1133707	52.8	
104 4-Chlorotoluene	126	11.014	11.014	0.0	97	332204	50.7	
97 tert-Butylbenzene	119	11.263	11.263	0.0	91	1063647	52.6	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	77	1101458	50.5	
99 sec-Butylbenzene	105	11.452	11.452	0.0	94	1479968	53.2	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	99	604100	48.5	
101 4-Isopropyltoluene	119	11.571	11.570	0.001	90	1200873	50.2	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	96	608129	48.5	
105 n-Butylbenzene	91	11.914	11.914	0.0	97	1074891	52.0	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	98	547566	47.9	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	81	24804	42.4	
108 1,3,5-Trichlorobenzene	180	12.778	12.777	0.001	94	378999	45.5	
109 1,2,4-Trichlorobenzene	180	13.275	13.274	0.001	94	298875	41.6	
110 Hexachlorobutadiene	225	13.405	13.405	0.001	98	157641	43.3	
111 Naphthalene	128	13.476	13.476	0.0	97	566412	40.4	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	96	223804	42.7	
S 11 1,2-Dichloroethene, Total	96				0		100.8	
S 114 Xylenes, Total	106				0		155.5	

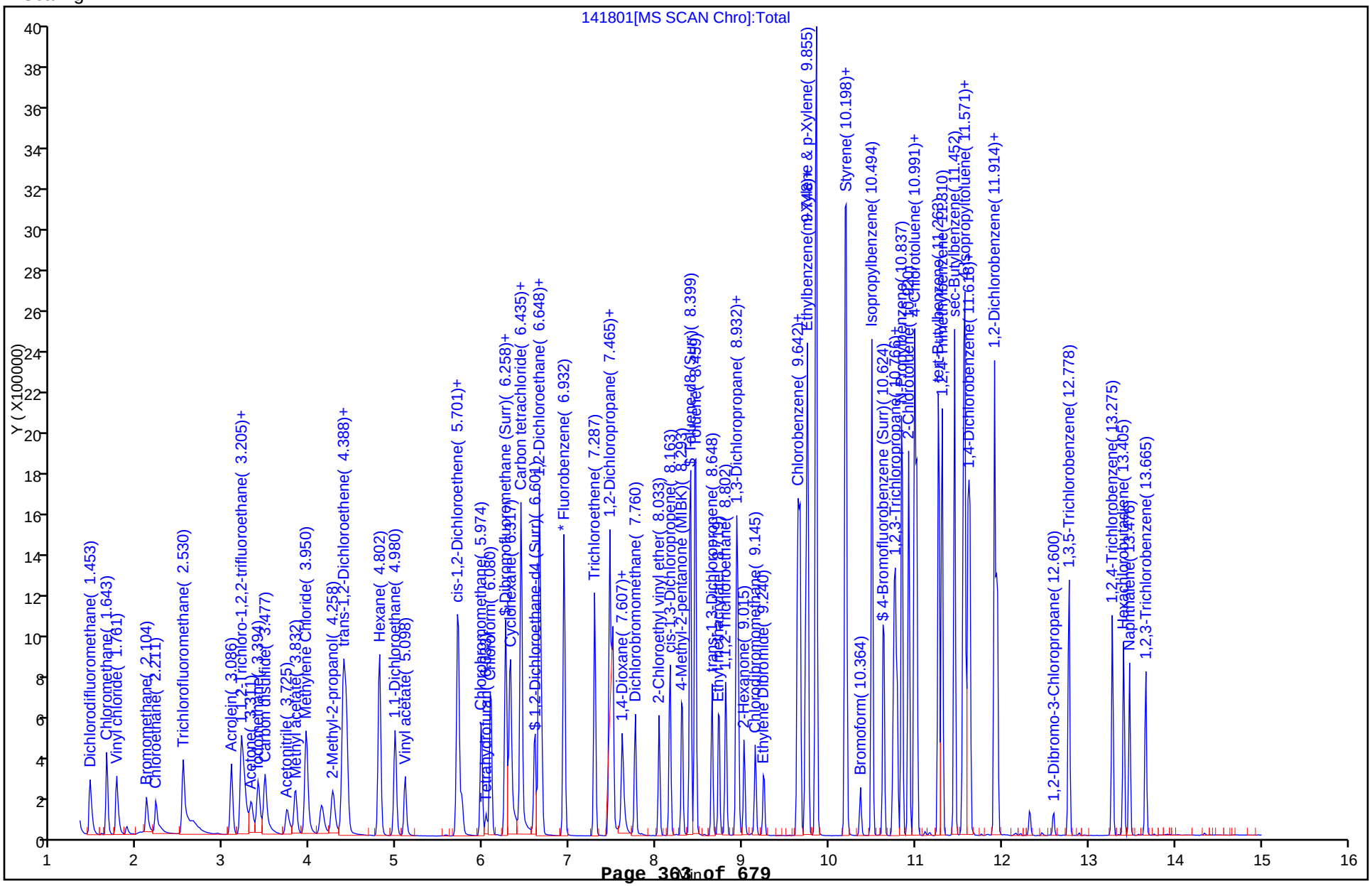
Report Date: 08-Apr-2013 09:54:41 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141801.D

Injection Date:	05-Apr-2013 12:04:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	6
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-22660-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-80741/5

Matrix: Solid | Lab File ID: 141800.D

Analysis Method: 8260B/DoD | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/05/2013 11:42

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 80741 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-64-1	Acetone	0.0186	^	0.010	0.0010	0.0011
71-43-2	Benzene	0.00533		0.0010	0.00025	0.00013
74-97-5	Bromochloromethane	0.00483		0.0010	0.00050	0.00029
75-27-4	Bromodichloromethane	0.00429		0.0010	0.00025	0.00015
75-25-2	Bromoform	0.00586		0.0010	0.00050	0.00064
74-83-9	Bromomethane	0.00623		0.0010	0.00050	0.00041
78-93-3	2-Butanone (MEK)	0.0100		0.010	0.00050	0.00057
75-15-0	Carbon disulfide	0.00579		0.0010	0.00025	0.00013
56-23-5	Carbon tetrachloride	0.00412		0.0010	0.00025	0.00013
108-90-7	Chlorobenzene	0.00529		0.0010	0.00025	0.00015
75-00-3	Chloroethane	0.00471		0.0010	0.0050	0.00029
67-66-3	Chloroform	0.00523		0.0010	0.00025	0.00016
74-87-3	Chloromethane	0.00546		0.0010	0.00050	0.00030
10061-01-5	cis-1,3-Dichloropropene	0.00429		0.0010	0.00025	0.00014
124-48-1	Dibromochloromethane	0.00607		0.0010	0.00025	0.00018
106-93-4	1,2-Dibromoethane	0.00484		0.0010	0.00025	0.00024
75-34-3	1,1-Dichloroethane	0.00507		0.0010	0.00025	0.00015
107-06-2	1,2-Dichloroethane	0.00521		0.0010	0.00025	0.00022
75-35-4	1,1-Dichloroethene	0.00477		0.0010	0.00025	0.00019
540-59-0	1,2-Dichloroethene, Total	0.0102		0.0020	0.00050	0.00034
78-87-5	1,2-Dichloropropane	0.00523		0.0010	0.00025	0.00018
100-41-4	Ethylbenzene	0.00525		0.0010	0.00025	0.00017
591-78-6	2-Hexanone	0.0104		0.010	0.00050	0.00041
75-09-2	Methylene Chloride	0.00907	^	0.0010	0.00050	0.00033
108-10-1	4-Methyl-2-pentanone (MIBK)	0.00982	J	0.010	0.00050	0.00032
100-42-5	Styrene	0.00467		0.0010	0.00025	0.00011
79-34-5	1,1,2,2-Tetrachloroethane	0.00537		0.0010	0.00025	0.00018
127-18-4	Tetrachloroethene	0.00536		0.0010	0.00050	0.00029
108-88-3	Toluene	0.00523		0.0010	0.00025	0.00013
10061-02-6	trans-1,3-Dichloropropene	0.00423		0.0010	0.00025	0.00019
71-55-6	1,1,1-Trichloroethane	0.00448		0.0010	0.00025	0.00022
79-00-5	1,1,2-Trichloroethane	0.00536		0.0010	0.00050	0.00027
79-01-6	Trichloroethene	0.00520		0.0010	0.00025	0.00017
75-01-4	Vinyl chloride	0.00558		0.0010	0.00025	0.00022
1330-20-7	Xylenes, Total	0.0102		0.0020	0.00075	0.00028

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-80741/5

Matrix: Solid Lab File ID: 141800.D

Analysis Method: 8260B/DoD Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/05/2013 11:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 80741 Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		50-150
1868-53-7	Dibromofluoromethane (Surr)	87		50-150
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		50-150
2037-26-5	Toluene-d8 (Surr)	94		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141800.D
Lims ID: QCMRL Client ID:
Inject. Date: 05-Apr-2013 11:42:30 Dil. Factor: 1.0000
Sample Type: MRL
Sample ID: qcmrl
Misc. Info.: 240-0018585-005 =240-0018585-005
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 4
Lims Batch ID: 80741 Lims Sample ID: 5
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130405-18585.b\8260_14.m
Last Update: 08-Apr-2013 09:54:39 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK033

First Level Reviewer: macenczaks Date: 05-Apr-2013 12:09:56

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	100	1144306	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	95	767559	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	366063	50.0	
$ 4 BFB	95	4.388	4.502	-0.114	0	1429	0	
$ 5 Dibromofluoromethane (Surr)	113	6.258	6.258	0.0	69	264405	43.3	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	96	323009	48.5	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	1100867	47.0	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.624	0.0	93	364584	45.4	
135 1,4-Dichlorobutane	1		0.000					
136 Hexachloroethane TIC	1		0.000					
133 Benzyl chloride	126		0.000					
138 Butyl Methacrylate TIC	1		0.000					
143 1,3-Butadiene TIC	1		0.000					
141 Isobutylene TIC	1		0.000					
142 1,3-Diethylbenzene TIC	1		0.000					
134 Chlorodifluoromethane TIC	1		0.000					
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	96	36743	5.63	
13 Chloromethane	50	1.643	1.643	0.0	100	46078	5.46	
14 Vinyl chloride	62	1.761	1.761	0.0	82	37953	5.58	
15 Bromomethane	94	2.104	2.104	0.0	91	13894	6.23	
16 Chloroethane	64	2.211	2.211	0.0	91	14891	4.71	
17 Dichlorofluoromethane	67	2.483	2.483	0.0	78	60272	6.54	
18 Trichlorofluoromethane	101	2.530	2.530	0.0	95	51739	5.96	
25 Methylal	45		2.932					
19 Ethyl ether	59	2.921	2.932	-0.011	96	30676	5.95	
20 Acrolein	56	3.086	3.086	0.0	96	29777	40.9	
21 1,1-Dichloroethene	96	3.205	3.205	0.0	89	25059	4.77	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.228	3.228	0.0	85	22788	4.94	
22 Acetone	43	3.311	3.311	0.0	94	36536	18.6	
24 Iodomethane	142	3.394	3.394	0.0	97	45457	5.31	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
26 Carbon disulfide	76	3.477	3.477	0.0	98	44795	5.79	
27 Acetonitrile	41	3.749	3.725	0.024	72	46648	76.1	
29 3-Chloro-1-propene	76	3.749	3.749	0.0	79	12070	3.90	
28 Methyl acetate	43	3.832	3.832	0.0	97	104171	26.6	
30 Methylene Chloride	84	3.950	3.950	0.0	98	55925	9.07	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	81	23071	59.2	
32 Acrylonitrile	53	4.364	4.364	0.0	97	94914	50.4	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	97	30414	5.03	
34 Methyl tert-butyl ether	73	4.412	4.412	0.0	90	68102	4.99	
35 Hexane	86	4.802	4.802	0.0	96	9001	5.45	
36 1,1-Dichloroethane	63	4.980	4.979	0.001	97	57305	5.07	
37 Vinyl acetate	86	5.098	5.098	0.0	97	3737	4.21	
39 2-Chloro-1,3-butadiene	53		5.098					9
38 Isopropyl ether	87		5.122					
40 Tert-butyl ethyl ether	59		5.571					9
61 Ethyl acrylate	55		5.605					
43 2,2-Dichloropropane	77	5.701	5.701	0.0	57	21988	4.14	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	84	33374	5.13	
41 2-Butanone (MEK)	43	5.749	5.749	0.0	92	23323	10.0	
44 Propionitrile	54		5.808					
45 Ethyl acetate	43		5.843					9
47 Chlorobromomethane	128	5.974	5.973	0.001	96	14089	4.83	
46 Methacrylonitrile	41		5.985					9
48 Tetrahydrofuran	42	6.033	6.033	0.0	86	14554	9.15	
49 Chloroform	83	6.092	6.092	0.0	95	51202	5.23	
50 1,1,1-Trichloroethane	97	6.258	6.257	0.001	36	34032	4.48	
51 Cyclohexane	56	6.305	6.317	-0.012	95	57554	5.04	
53 Carbon tetrachloride	117	6.435	6.435	0.0	85	30295	4.12	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	89	40002	5.11	
54 Isobutyl alcohol	41	6.636	6.636	0.0	81	21323	134.4	
55 Benzene	78	6.648	6.648	0.0	97	129251	5.33	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	90	40696	5.21	
57 Tert-amyl methyl ether	73		6.790					
58 n-Heptane	100	6.944	6.944	0.0	88	9706	5.04	
80 Tetrahydrothiophene	60		7.255					9
59 n-Butanol	56		7.263					
60 Trichloroethene	130	7.287	7.287	0.0	96	36867	5.20	
63 Methylcyclohexane	83	7.465	7.464	0.001	95	50438	4.88	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	87	31702	5.23	
65 Dibromomethane	93	7.607	7.606	0.001	91	14349	5.00	
64 Methyl methacrylate	41		7.618					9
66 1,4-Dioxane	88	7.630	7.630	0.0	71	4338	99.9	
67 Dichlorobromomethane	83	7.760	7.760	0.0	95	23590	4.29	
68 2-Nitropropane	41		7.961					
69 2-Chloroethyl vinyl ether	63	8.033	8.032	0.001	91	19431	8.43	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.0	83	28274	4.29	
71 4-Methyl-2-pentanone (MIBK)	43	8.305	8.293	0.012	98	45761	9.82	
72 Toluene	91	8.459	8.458	0.001	93	135294	5.23	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	96	21237	4.23	
74 Ethyl methacrylate	69	8.731	8.731	0.001	92	21798	4.24	
75 1,1,2-Trichloroethane	97	8.802	8.802	0.0	92	21281	5.36	
77 Tetrachloroethene	164	8.932	8.932	0.0	92	28551	5.36	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
76 1,3-Dichloropropane	76	8.944	8.944	0.0	95	38850	5.47	
78 2-Hexanone	43	9.015	9.015	0.001	97	32267	10.4	
132 n-Butyl acetate	43		9.121					
79 Chlorodibromomethane	129	9.145	9.145	0.0	86	13068	6.07	
123 Ethylene Dibromide	107	9.240	9.239	0.001	97	18543	4.84	
81 1-Chlorohexane	91		9.594					
82 Chlorobenzene	112	9.665	9.665	0.0	93	84653	5.29	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	84	21531	4.19	
84 Ethylbenzene	106	9.748	9.748	0.0	99	45454	5.25	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	99	55212	5.17	
85 o-Xylene	106	10.186	10.186	0.0	95	51238	5.07	
86 Styrene	104	10.198	10.198	0.0	89	72551	4.67	
87 Bromoform	173	10.364	10.363	0.001	85	6591	5.86	
88 Isopropylbenzene	105	10.494	10.494	0.0	97	134828	5.05	
89 Cyclohexanone	55		10.577					
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	96	22988	5.37	
91 Bromobenzene	156	10.766	10.766	0.0	90	32676	5.03	
93 trans-1,4-Dichloro-2-butene	53	10.790	10.789	0.001	68	6974	5.03	
92 1,2,3-Trichloropropane	110	10.790	10.789	0.001	77	8154	5.61	
94 N-Propylbenzene	120	10.849	10.849	0.0	97	41553	5.38	
95 2-Chlorotoluene	126	10.920	10.920	0.0	96	34123	5.15	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	96	110468	5.00	
104 4-Chlorotoluene	126	11.014	11.014	0.0	97	36083	5.35	
97 tert-Butylbenzene	119	11.263	11.263	0.0	91	104015	5.00	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	73	115310	5.14	
99 sec-Butylbenzene	105	11.452	11.452	0.0	94	146270	5.10	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	81	66636	5.19	
101 4-Isopropyltoluene	119	11.571	11.570	0.001	77	122607	4.98	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	91	67438	5.22	
103 1,2,3-Trimethylbenzene	105		11.665					
105 n-Butylbenzene	91	11.914	11.914	0.0	97	108791	5.12	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	98	61368	5.22	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	52	2951	5.63	
108 1,3,5-Trichlorobenzene	180		12.777					9
109 1,2,4-Trichlorobenzene	180	13.275	13.274	0.001	94	42503	5.74	
110 Hexachlorobutadiene	225	13.405	13.405	0.001	96	23155	6.18	
111 Naphthalene	128	13.476	13.476	0.0	97	81892	5.67	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	96	40227	6.48	
113 2-Methylnaphthalene	142	14.339	14.339	0.0	76	12992	1.47	
A 140 C6-C10	1	7.589	3.915 - 11.263		0	9516850	0	
A 139 C6-C12	1	8.388	3.915 - 12.860		0	11727452	0	
S 137 Trihalomethanes, Total	1				0		21.4	
S 11 1,2-Dichloroethene, Total	96				0		10.2	
S 9 1,3-Dichloropropene, Total	75				0		8.52	
S 114 Xylenes, Total	106				0		10.2	

QC Flag Legend

Processing Flags
9 - Failed A Reference Spectral Test

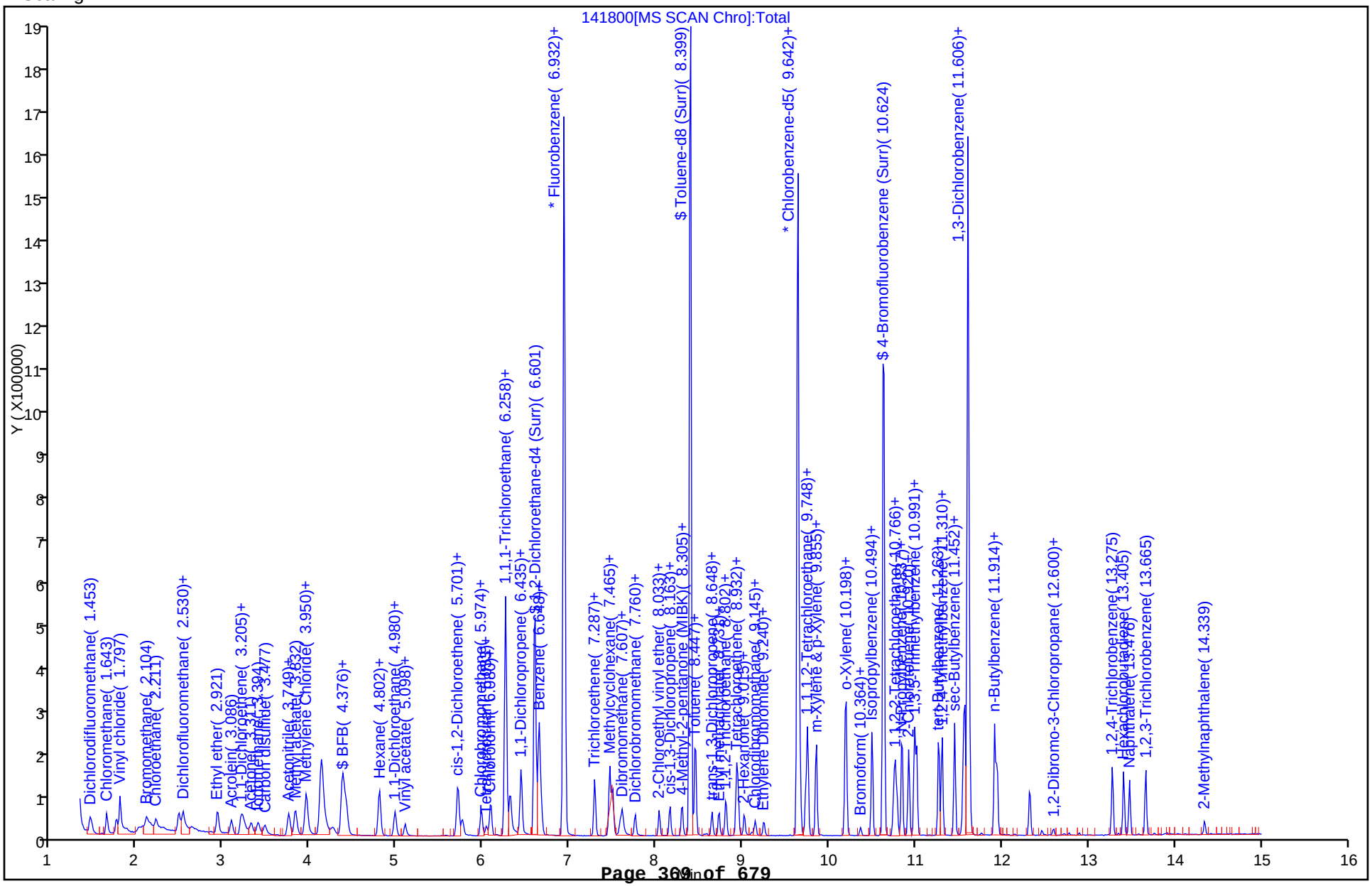
Report Date: 08-Apr-2013 09:54:40 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141800.D

Injection Date:	05-Apr-2013 11:42:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	5
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-22660-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-80741/28

Matrix: Solid | Lab File ID: 141824.D

Analysis Method: 8260B/DoD | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/05/2013 20:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 80741 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-64-1	Acetone	0.0207	^	0.010	0.0010	0.0011
71-43-2	Benzene	0.00526		0.0010	0.00025	0.00013
74-97-5	Bromochloromethane	0.00520		0.0010	0.00050	0.00029
75-27-4	Bromodichloromethane	0.00432		0.0010	0.00025	0.00015
75-25-2	Bromoform	0.00637		0.0010	0.00050	0.00064
74-83-9	Bromomethane	0.00702	^	0.0010	0.00050	0.00041
78-93-3	2-Butanone (MEK)	0.0120		0.010	0.00050	0.00057
75-15-0	Carbon disulfide	0.00556		0.0010	0.00025	0.00013
56-23-5	Carbon tetrachloride	0.00385		0.0010	0.00025	0.00013
108-90-7	Chlorobenzene	0.00532		0.0010	0.00025	0.00015
75-00-3	Chloroethane	0.00580		0.0010	0.0050	0.00029
67-66-3	Chloroform	0.00494		0.0010	0.00025	0.00016
74-87-3	Chloromethane	0.00569		0.0010	0.00050	0.00030
10061-01-5	cis-1,3-Dichloropropene	0.00403		0.0010	0.00025	0.00014
124-48-1	Dibromochloromethane	0.00643		0.0010	0.00025	0.00018
106-93-4	1,2-Dibromoethane	0.00515		0.0010	0.00025	0.00024
75-34-3	1,1-Dichloroethane	0.00483		0.0010	0.00025	0.00015
107-06-2	1,2-Dichloroethane	0.00536		0.0010	0.00025	0.00022
75-35-4	1,1-Dichloroethene	0.00455		0.0010	0.00025	0.00019
540-59-0	1,2-Dichloroethene, Total	0.00980		0.0020	0.00050	0.00034
78-87-5	1,2-Dichloropropane	0.00523		0.0010	0.00025	0.00018
100-41-4	Ethylbenzene	0.00527		0.0010	0.00025	0.00017
591-78-6	2-Hexanone	0.0128		0.010	0.00050	0.00041
75-09-2	Methylene Chloride	0.00785	^	0.0010	0.00050	0.00033
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0118		0.010	0.00050	0.00032
100-42-5	Styrene	0.00517		0.0010	0.00025	0.00011
79-34-5	1,1,2,2-Tetrachloroethane	0.00666	^	0.0010	0.00025	0.00018
127-18-4	Tetrachloroethene	0.00509		0.0010	0.00050	0.00029
108-88-3	Toluene	0.00519		0.0010	0.00025	0.00013
10061-02-6	trans-1,3-Dichloropropene	0.00387		0.0010	0.00025	0.00019
71-55-6	1,1,1-Trichloroethane	0.00427		0.0010	0.00025	0.00022
79-00-5	1,1,2-Trichloroethane	0.00586		0.0010	0.00050	0.00027
79-01-6	Trichloroethene	0.00517		0.0010	0.00025	0.00017
75-01-4	Vinyl chloride	0.00605		0.0010	0.00025	0.00022
1330-20-7	Xylenes, Total	0.0102		0.0020	0.00075	0.00028

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-80741/28

Matrix: Solid Lab File ID: 141824.D

Analysis Method: 8260B/DoD Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/05/2013 20:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 80741 Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		50-150
1868-53-7	Dibromofluoromethane (Surr)	86		50-150
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		50-150
2037-26-5	Toluene-d8 (Surr)	90		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141824.D
Lims ID: qcmrl Client ID:
Inject. Date: 05-Apr-2013 20:51:30 Dil. Factor: 1.0000
Sample Type: MRL
Sample ID: qcmrl
Misc. Info.: 240-0018585-028 =240-0018585-028
Operator: 002808 Instrument ID: A3UX14
Purge Vol: 5.000 mL ALS Bottle#: 27
Lims Batch ID: 80741 Lims Sample ID: 28
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX14\20130405-18585.b\8260_14.m
Last Update: 08-Apr-2013 09:54:39 Calib Date: 01-Apr-2013 20:09:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20130401-18434.b\141682.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK033

First Level Reviewer: macenczaks Date: 08-Apr-2013 09:25:50

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.932	6.932	0.0	99	1121209	50.0	
* 2 Chlorobenzene-d5	117	9.642	9.642	0.0	95	766174	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.606	11.606	0.0	99	352083	50.0	
$ 4 BFB	95	4.388	4.502	-0.114	0	1431	0	
$ 5 Dibromofluoromethane (Surr)	113	6.258	6.258	0.0	69	256889	42.9	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.601	6.601	0.0	96	323117	49.6	
$ 7 Toluene-d8 (Surr)	98	8.399	8.399	0.0	93	1053681	44.8	
$ 131 4-Bromofluorobenzene (Surr)	95	10.624	10.624	0.0	89	336615	43.3	
135 1,4-Dichlorobutane	1		0.000					
136 Hexachloroethane TIC	1		0.000					
133 Benzyl chloride	126		0.000					
138 Butyl Methacrylate TIC	1		0.000					
143 1,3-Butadiene TIC	1		0.000					
141 Isobutylene TIC	1		0.000					
142 1,3-Diethylbenzene TIC	1		0.000					
134 Chlorodifluoromethane TIC	1		0.000					
12 Dichlorodifluoromethane	85	1.453	1.453	0.0	96	35877	5.61	
13 Chloromethane	50	1.643	1.643	0.0	99	47089	5.69	
14 Vinyl chloride	62	1.761	1.761	0.0	98	40299	6.05	
15 Bromomethane	94	2.104	2.104	0.0	90	15343	7.02	
16 Chloroethane	64	2.211	2.211	0.0	95	17973	5.80	
17 Dichlorofluoromethane	67	2.483	2.483	0.0	94	59786	6.62	
18 Trichlorofluoromethane	101	2.530	2.530	0.0	94	44383	5.22	
25 Methylal	45		2.932					
19 Ethyl ether	59	2.921	2.932	-0.011	97	30985	6.13	
20 Acrolein	56	3.086	3.086	0.0	95	27410	38.4	
21 1,1-Dichloroethene	96	3.205	3.205	0.0	93	23401	4.55	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.228	3.228	0.0	81	22077	4.88	
22 Acetone	43	3.311	3.311	0.0	96	38760	20.7	
24 Iodomethane	142	3.394	3.394	0.0	99	42136	5.03	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
26 Carbon disulfide	76	3.477	3.477	0.0	97	40250	5.56	
27 Acetonitrile	41	3.749	3.725	0.024	66	39469	65.7	
29 3-Chloro-1-propene	76	3.749	3.749	0.0	78	10973	3.62	
28 Methyl acetate	43	3.832	3.832	0.0	97	112099	29.2	
30 Methylene Chloride	84	3.950	3.950	0.0	97	47434	7.85	
31 2-Methyl-2-propanol	59	4.258	4.258	0.0	83	27117	71.0	
32 Acrylonitrile	53	4.364	4.364	0.0	99	102356	55.4	
33 trans-1,2-Dichloroethene	96	4.388	4.388	0.0	96	28237	4.77	
34 Methyl tert-butyl ether	73	4.412	4.412	0.0	90	65985	4.94	
35 Hexane	86	4.802	4.802	0.0	96	7963	4.92	
36 1,1-Dichloroethane	63	4.980	4.979	0.001	97	53419	4.83	
37 Vinyl acetate	86	5.098	5.098	0.0	96	2686	3.09	
39 2-Chloro-1,3-butadiene	53		5.098					
38 Isopropyl ether	87		5.122					
40 Tert-butyl ethyl ether	59		5.571					
61 Ethyl acrylate	55		5.605					9
43 2,2-Dichloropropane	77	5.701	5.701	0.0	67	19139	3.67	
42 cis-1,2-Dichloroethene	96	5.713	5.713	0.0	85	32103	5.03	
41 2-Butanone (MEK)	43	5.749	5.749	0.0	92	27292	12.0	
44 Propionitrile	54		5.808					
45 Ethyl acetate	43		5.843					
47 Chlorobromomethane	128	5.974	5.973	0.001	95	14861	5.20	
46 Methacrylonitrile	41		5.985					9
48 Tetrahydrofuran	42	6.033	6.033	0.0	86	17445	11.2	
49 Chloroform	83	6.080	6.092	-0.012	96	47374	4.94	
50 1,1,1-Trichloroethane	97	6.258	6.257	0.001	37	31798	4.27	
51 Cyclohexane	56	6.305	6.317	-0.012	94	51516	4.61	
53 Carbon tetrachloride	117	6.435	6.435	0.0	80	27728	3.85	
52 1,1-Dichloropropene	75	6.435	6.435	0.0	87	37400	4.88	
54 Isobutyl alcohol	41	6.636	6.636	0.0	85	29130	187.4	
55 Benzene	78	6.648	6.648	0.0	97	124926	5.26	
56 1,2-Dichloroethane	62	6.672	6.672	0.0	91	41047	5.36	
57 Tert-amyl methyl ether	73		6.790					
58 n-Heptane	100	6.944	6.944	0.0	87	8829	4.68	
80 Tetrahydrothiophene	60		7.255					9
59 n-Butanol	56		7.263					
60 Trichloroethene	130	7.287	7.287	0.0	95	35960	5.17	
63 Methylcyclohexane	83	7.464	7.464	0.0	95	43719	4.32	
62 1,2-Dichloropropane	63	7.500	7.500	0.0	90	31079	5.23	
65 Dibromomethane	93	7.606	7.606	0.0	92	14417	5.12	
64 Methyl methacrylate	41		7.618					9
66 1,4-Dioxane	88	7.630	7.630	0.0	74	5270	123.8	
67 Dichlorobromomethane	83	7.760	7.760	0.0	95	23320	4.32	
68 2-Nitropropane	41		7.961					
69 2-Chloroethyl vinyl ether	63	8.032	8.032	0.0	89	14706	6.51	
70 cis-1,3-Dichloropropene	75	8.163	8.163	0.0	83	25571	4.03	
71 4-Methyl-2-pentanone (MIBK)	43	8.293	8.293	0.0	97	54995	11.8	
72 Toluene	91	8.458	8.458	0.0	93	134128	5.19	
73 trans-1,3-Dichloropropene	75	8.648	8.648	0.0	94	18811	3.87	
74 Ethyl methacrylate	69	8.731	8.731	0.001	90	26818	5.22	
75 1,1,2-Trichloroethane	97	8.802	8.802	0.0	90	23218	5.86	
77 Tetrachloroethene	164	8.932	8.932	0.0	97	27059	5.09	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
76 1,3-Dichloropropane	76	8.944	8.944	0.0	96	40022	5.64	
78 2-Hexanone	43	9.015	9.015	0.001	98	39464	12.8	
132 n-Butyl acetate	43		9.121					1
79 Chlorodibromomethane	129	9.145	9.145	0.0	85	14826	6.43	
123 Ethylene Dibromide	107	9.239	9.239	0.0	98	19675	5.15	
81 1-Chlorohexane	91		9.594					
82 Chlorobenzene	112	9.665	9.665	0.0	94	85101	5.32	
83 1,1,1,2-Tetrachloroethane	131	9.736	9.736	0.0	78	22439	4.37	
84 Ethylbenzene	106	9.748	9.748	0.0	99	45524	5.27	
10 m-Xylene & p-Xylene	106	9.855	9.855	0.0	98	54529	5.11	
85 o-Xylene	106	10.186	10.186	0.0	93	51444	5.10	
86 Styrene	104	10.198	10.198	0.0	93	80265	5.17	
87 Bromoform	173	10.364	10.363	0.001	94	7706	6.37	
88 Isopropylbenzene	105	10.494	10.494	0.0	96	136580	5.13	
89 Cyclohexanone	55		10.577					
90 1,1,2,2-Tetrachloroethane	83	10.742	10.742	0.0	86	27412	6.66	
91 Bromobenzene	156	10.766	10.766	0.0	91	34148	5.47	
93 trans-1,4-Dichloro-2-butene	53	10.790	10.789	0.001	59	8196	6.15	
92 1,2,3-Trichloropropane	110	10.790	10.789	0.001	75	10234	7.32	
94 N-Propylbenzene	120	10.849	10.849	0.0	97	39751	5.35	
95 2-Chlorotoluene	126	10.920	10.920	0.0	96	34983	5.49	
96 1,3,5-Trimethylbenzene	105	10.991	10.991	0.0	95	112146	5.27	
104 4-Chlorotoluene	126	11.014	11.014	0.0	97	36143	5.57	
97 tert-Butylbenzene	119	11.263	11.263	0.0	90	107265	5.36	
98 1,2,4-Trimethylbenzene	105	11.310	11.310	0.0	77	117549	5.44	
99 sec-Butylbenzene	105	11.452	11.452	0.0	94	148377	5.38	
100 1,3-Dichlorobenzene	146	11.559	11.559	0.0	83	68514	5.55	
101 4-Isopropyltoluene	119	11.570	11.570	0.0	83	125277	5.29	
102 1,4-Dichlorobenzene	146	11.630	11.630	0.0	91	67363	5.42	
103 1,2,3-Trimethylbenzene	105		11.665					
105 n-Butylbenzene	91	11.914	11.914	0.0	97	106735	5.22	
106 1,2-Dichlorobenzene	146	11.949	11.949	0.0	97	67155	5.93	
107 1,2-Dibromo-3-Chloropropane	157	12.600	12.600	0.0	51	3843	7.68	
108 1,3,5-Trichlorobenzene	180		12.777					9
109 1,2,4-Trichlorobenzene	180	13.274	13.274	0.0	93	43523	6.11	
110 Hexachlorobutadiene	225	13.405	13.405	0.001	93	22188	6.16	
111 Naphthalene	128	13.476	13.476	0.0	97	99290	7.15	
112 1,2,3-Trichlorobenzene	180	13.665	13.665	0.0	96	40010	6.76	
113 2-Methylnaphthalene	142	14.339	14.339	0.0	22	1460	0.1721	
A 140 C6-C10	1	7.589	3.915 - 11.263		0	9660240	0	
A 139 C6-C12	1	8.388	3.915 - 12.860		0	11991461	0	
S 137 Trihalomethanes, Total	1				0		22.1	
S 11 1,2-Dichloroethene, Total	96				0		9.80	
S 9 1,3-Dichloropropene, Total	75				0		7.90	
S 114 Xylenes, Total	106				0		10.2	

QC Flag Legend

Processing Flags
1 - Missing Peaks
9 - Failed A Reference Spectral Test

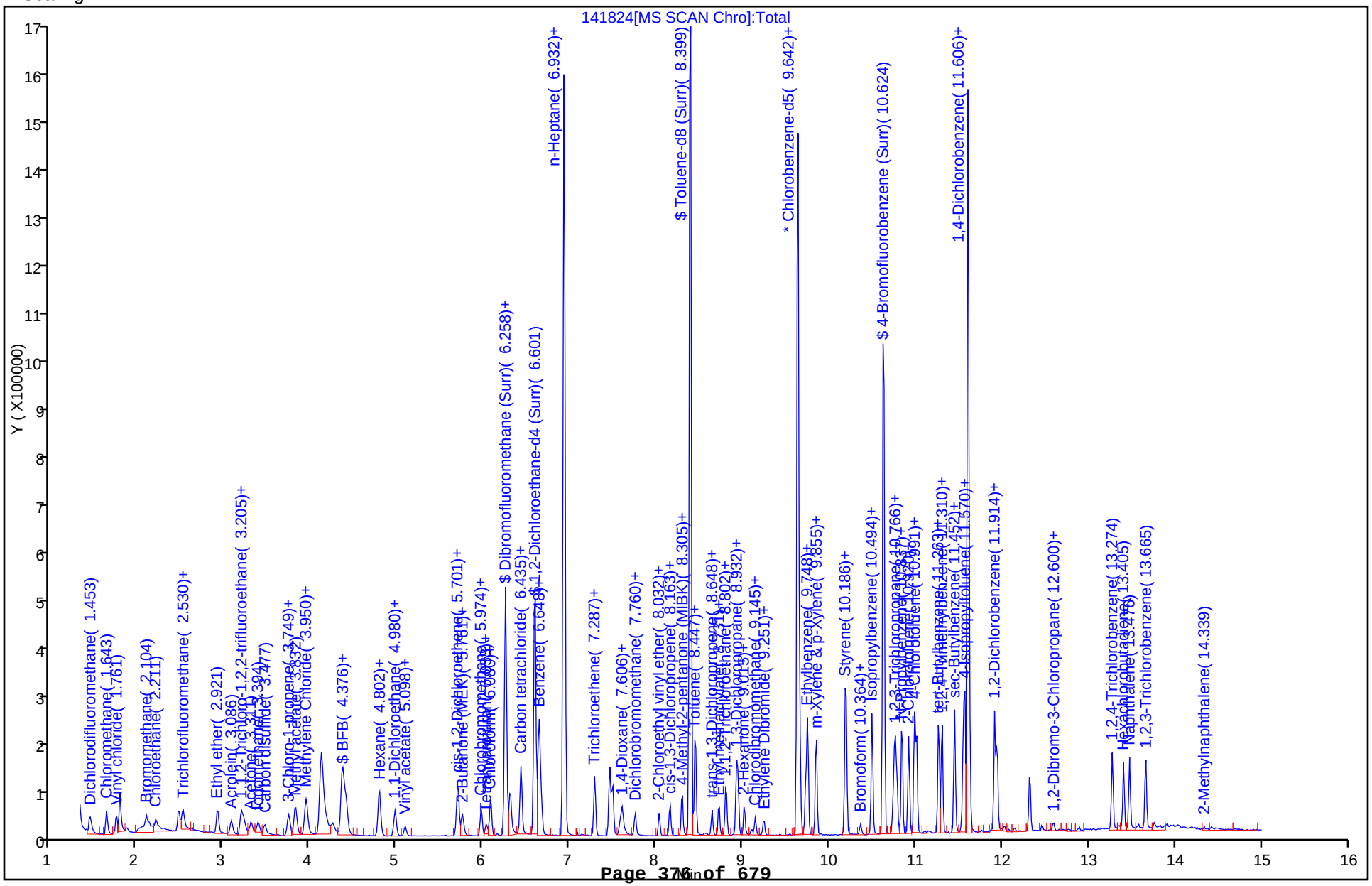
Report Date: 08-Apr-2013 09:54:46 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20130405-18585.b\141824.D

Injection Date:	05-Apr-2013 20:51:30	Limit Group:	MSV 8260DOD ICAL
Client ID:		Instrument ID:	A3UX14
Lims Batch ID:	80741	Lims Sample ID:	28
Operator ID:	002808	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Y Scaling:



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: A3UX14 Start Date: 04/01/2013 13:20

Analysis Batch Number: 80127 End Date: 04/01/2013 21:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-80127/1		04/01/2013 13:20	1	BFB14383.D	DB-624 0.18(mm)
IC 240-80127/3		04/01/2013 14:03	1	141665.D	DB-624 0.18(mm)
IC 240-80127/4		04/01/2013 14:25	1	141666.D	DB-624 0.18(mm)
IC 240-80127/5		04/01/2013 14:46	1	141667.D	DB-624 0.18(mm)
ICIS 240-80127/6		04/01/2013 15:08	1	141668.D	DB-624 0.18(mm)
IC 240-80127/7		04/01/2013 15:29	1	141669.D	DB-624 0.18(mm)
IC 240-80127/8		04/01/2013 15:51	1	141670.D	DB-624 0.18(mm)
IC 240-80127/9		04/01/2013 16:12	1	141671.D	DB-624 0.18(mm)
IC 240-80127/10		04/01/2013 16:34	1	141672.D	DB-624 0.18(mm)
IC 240-80127/11		04/01/2013 16:55	1	141673.D	DB-624 0.18(mm)
IC 240-80127/12		04/01/2013 17:17	1		DB-624 0.18(mm)
IC 240-80127/13		04/01/2013 17:38	1		DB-624 0.18(mm)
IC 240-80127/14		04/01/2013 18:00	1		DB-624 0.18(mm)
IC 240-80127/15		04/01/2013 18:21	1		DB-624 0.18(mm)
IC 240-80127/16		04/01/2013 18:43	1		DB-624 0.18(mm)
IC 240-80127/17		04/01/2013 19:04	1		DB-624 0.18(mm)
IC 240-80127/18		04/01/2013 19:26	1		DB-624 0.18(mm)
IC 240-80127/19		04/01/2013 19:48	1		DB-624 0.18(mm)
IC 240-80127/20		04/01/2013 20:09	1		DB-624 0.18(mm)
ICV 240-80127/21		04/01/2013 20:31	1	141683.D	DB-624 0.18(mm)
ZZZZZ		04/01/2013 21:14	1		DB-624 0.18(mm)
ZZZZZ		04/01/2013 21:35	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: A3UX14 Start Date: 04/05/2013 10:16

Analysis Batch Number: 80741 End Date: 04/05/2013 21:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-80741/1		04/05/2013 10:16	1	BFB14388.D	DB-624 0.18(mm)
CCV 240-80741/3		04/05/2013 10:59	1	141798.D	DB-624 0.18(mm)
CCV 240-80741/4		04/05/2013 11:21	1	141799.D	DB-624 0.18(mm)
MRL 240-80741/5		04/05/2013 11:42	1	141800.D	DB-624 0.18(mm)
LCS 240-80741/6		04/05/2013 12:04	1	141801.D	DB-624 0.18(mm)
MB 240-80741/30		04/05/2013 13:05	1	141803.D	DB-624 0.18(mm)
ZZZZZ		04/05/2013 13:41	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 14:03	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 14:24	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 14:46	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 15:29	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 16:33	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 16:55	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 17:16	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 17:38	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 17:59	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 18:21	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 19:25	1		DB-624 0.18(mm)
ZZZZZ		04/05/2013 20:08	1		DB-624 0.18(mm)
240-22660-30	068SB-0057M-0001-SO	04/05/2013 20:29	1	141823.D	DB-624 0.18(mm)
MRL 240-80741/28		04/05/2013 20:51	1	141824.D	DB-624 0.18(mm)
MDLV 240-80741/29		04/05/2013 21:12	1		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Batch Number: 80275 Batch Start Date: 04/02/13 12:14 Batch Analyst: Mancine, Louis

Batch Method: 5035 Batch End Date: 04/02/13 16:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
240-22660-B-30	068SB-0057M-0001 -SO	5035, 8260B/DoD	T	+030.630 g	36.87 g	6.24 g	5 mL		

Batch Notes	

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

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METALS

Lab Name: TestAmerica Canton Job Number: 240-22660-1

SDG No.:

Project: RVAAP - ECC

Client Sample ID	Lab Sample ID
079SB-0076M-0001-SO	240-22660-1
079SB-0077M-0001-SO	240-22660-2
079SB-0079M-0001-SO	240-22660-3
079SB-0080M-0001-SO	240-22660-4
079SB-0081M-0001-SO	240-22660-5
079SB-0082M-0001,0002-SO	240-22660-6
079SB-0083M-0001-SO	240-22660-7
079SB-0084M-0001-SO	240-22660-8
079SB-0085M-0001-SO	240-22660-9
079SB-0086M-0001-SO	240-22660-10
079SB-0087M-0001-SO	240-22660-11
079SB-0088M-0001-SO	240-22660-12
079SB-0089M-0001-SO	240-22660-13
079SB-0090M-0001-SO	240-22660-14
079SB-0091M-0001,0002-SO	240-22660-15
079SB-0092M-0001-SO	240-22660-16
079SB-0093M-0001-SO	240-22660-17
079SB-0095M-0001-SO	240-22660-18
079SB-0096-0001-SO	240-22660-19
079SB-0107M-0001-SO	240-22660-20
079SB-0108M-0001-SO	240-22660-21
079SB-0110M-0001-SO	240-22660-22
079SB-0111M-0001-SO	240-22660-23
079SB-0112M-0001-SO	240-22660-24
079SB-0113M-0001-SO	240-22660-25
079SB-0114M-0001-SO	240-22660-26
079SB-0116M-0001-SO	240-22660-27
079SB-0117M-0001-SO	240-22660-28

Comments:

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METALS

Lab Name: TestAmerica Pittsburgh Job Number: 240-22660-1

SDG No.:

Project: RVAAP - ECC

Client Sample ID	Lab Sample ID
079SB-0076M-0001-SO	240-22660-1
079SB-0077M-0001-SO	240-22660-2
079SB-0079M-0001-SO	240-22660-3
079SB-0080M-0001-SO	240-22660-4
079SB-0081M-0001-SO	240-22660-5
079SB-0082M-0001,0002-SO	240-22660-6
079SB-0083M-0001-SO	240-22660-7
079SB-0084M-0001-SO	240-22660-8
079SB-0085M-0001-SO	240-22660-9
079SB-0086M-0001-SO	240-22660-10
079SB-0087M-0001-SO	240-22660-11
079SB-0088M-0001-SO	240-22660-12
079SB-0089M-0001-SO	240-22660-13
079SB-0090M-0001-SO	240-22660-14
079SB-0091M-0001,0002-SO	240-22660-15
079SB-0092M-0001-SO	240-22660-16
079SB-0093M-0001-SO	240-22660-17
079SB-0095M-0001-SO	240-22660-18
079SB-0096-0001-SO	240-22660-19
079SB-0107M-0001-SO	240-22660-20
079SB-0108M-0001-SO	240-22660-21
079SB-0110M-0001-SO	240-22660-22
079SB-0111M-0001-SO	240-22660-23
079SB-0112M-0001-SO	240-22660-24
079SB-0113M-0001-SO	240-22660-25
079SB-0114M-0001-SO	240-22660-26
079SB-0116M-0001-SO	240-22660-27
079SB-0117M-0001-SO	240-22660-28

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0076M-0001-SO
Lab Sample ID: 240-22660-1
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:37
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.017	0.10	0.033	0.014	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0077M-0001-SO
Lab Sample ID: 240-22660-2
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:37
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.018	0.094	0.031	0.013	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0079M-0001-SO
Lab Sample ID: 240-22660-3
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:42
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.034	0.10	0.034	0.014	mg/Kg	U		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0080M-0001-SO
Lab Sample ID: 240-22660-4
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:42
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.031	0.094	0.031	0.013	mg/Kg	U		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0081M-0001-SO
Lab Sample ID: 240-22660-5
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 15:50
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.031	0.094	0.031	0.013	mg/Kg	U		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0082M-0001,0002-SO
Lab Sample ID: 240-22660-6
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 15:59
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.016	0.11	0.037	0.016	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0083M-0001-SO
Lab Sample ID: 240-22660-7
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:33
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.019	0.097	0.032	0.014	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0084M-0001-SO
Lab Sample ID: 240-22660-8
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:45
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.014	0.10	0.034	0.014	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0085M-0001-SO
Lab Sample ID: 240-22660-9
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:22
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.028	0.10	0.033	0.014	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0086M-0001-SO
Lab Sample ID: 240-22660-10
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 14:00
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.037	0.11	0.037	0.016	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0087M-0001-SO
Lab Sample ID: 240-22660-11
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 14:00
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.031	0.091	0.030	0.013	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0088M-0001-SO
Lab Sample ID: 240-22660-12
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 14:09
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.030	0.098	0.032	0.014	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0089M-0001-SO
Lab Sample ID: 240-22660-13
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 14:09
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.031	0.11	0.035	0.015	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0090M-0001-SO
Lab Sample ID: 240-22660-14
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 13:34
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.030	0.10	0.034	0.014	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0091M-0001,0002-SO
Lab Sample ID: 240-22660-15
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 13:19
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.036	0.11	0.035	0.015	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0092M-0001-SO
Lab Sample ID: 240-22660-16
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 13:56
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.032	0.11	0.035	0.015	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0093M-0001-SO
Lab Sample ID: 240-22660-17
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 14:06
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.027	0.10	0.033	0.014	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0095M-0001-SO
Lab Sample ID: 240-22660-18
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 12:56
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.034	0.11	0.035	0.015	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0096-0001-SO
Lab Sample ID: 240-22660-19
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 13:35
Reporting Basis: DRY
Date Received: 04/02/2013 08:54
% Solids: 86.5

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.033	0.099	0.033	0.014	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0107M-0001-SO
Lab Sample ID: 240-22660-20
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 11:20
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.032	0.090	0.030	0.013	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0108M-0001-SO
Lab Sample ID: 240-22660-21
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 11:20
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.036	0.090	0.030	0.013	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0110M-0001-SO
Lab Sample ID: 240-22660-22
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 11:37
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.038	0.11	0.035	0.015	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0111M-0001-SO
Lab Sample ID: 240-22660-23
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 11:37
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.029	0.11	0.035	0.015	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0112M-0001-SO
Lab Sample ID: 240-22660-24
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 08:56
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.023	0.11	0.037	0.016	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0113M-0001-SO
Lab Sample ID: 240-22660-25
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 09:25
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.029	0.11	0.036	0.015	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0114M-0001-SO
Lab Sample ID: 240-22660-26
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 10:31
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.044	0.091	0.030	0.013	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0116M-0001-SO
Lab Sample ID: 240-22660-27
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 10:55
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.036	0.095	0.031	0.013	mg/Kg	J		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0117M-0001-SO
Lab Sample ID: 240-22660-28
Lab Name: TestAmerica Canton
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 11:16
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.035	0.11	0.035	0.015	mg/Kg	U		1	7471/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0076M-0001-SO
Lab Sample ID: 240-22660-1
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:37
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.026	0.098	0.029	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	8400	2.9	0.59	0.28	mg/Kg			1	6020/DOD
Arsenic	8.8	0.098	0.049	0.018	mg/Kg			1	6020/DOD
Barium	50	0.98	0.020	0.010	mg/Kg		Q	1	6020/DOD
Beryllium	0.41	0.098	0.0098	0.0074	mg/Kg		Q	1	6020/DOD
Calcium	730	9.8	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.11	0.098	0.029	0.013	mg/Kg		Q	1	6020/DOD
Chromium	12	0.20	0.039	0.022	mg/Kg			1	6020/DOD
Cobalt	7.3	0.049	0.0098	0.0024	mg/Kg		Q	1	6020/DOD
Copper	15	0.20	0.059	0.032	mg/Kg		Q	1	6020/DOD
Iron	20000	4.9	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	2000	9.8	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	240	0.49	0.029	0.016	mg/Kg		Q	1	6020/DOD
Sodium	35	9.8	4.9	2.6	mg/Kg			1	6020/DOD
Nickel	15	0.098	0.029	0.011	mg/Kg			1	6020/DOD
Lead	12	0.098	0.029	0.015	mg/Kg		Q	1	6020/DOD
Antimony	1.6	0.20	0.098	0.045	mg/Kg			1	6020/DOD
Thallium	0.13	0.098	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	15	0.098	0.059	0.029	mg/Kg			1	6020/DOD
Zinc	39	0.49	0.20	0.064	mg/Kg		Q	1	6020/DOD
Potassium	700	9.8	5.9	3.1	mg/Kg			1	6020/DOD
Selenium	0.31	0.49	0.098	0.050	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0077M-0001-SO
Lab Sample ID: 240-22660-2
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:37
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.027	0.10	0.030	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	8400	3.0	0.60	0.28	mg/Kg			1	6020/DOD
Arsenic	9.1	0.10	0.050	0.018	mg/Kg			1	6020/DOD
Barium	50	1.0	0.020	0.011	mg/Kg		Q	1	6020/DOD
Beryllium	0.42	0.10	0.010	0.0075	mg/Kg		Q	1	6020/DOD
Calcium	730	10	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.11	0.10	0.030	0.013	mg/Kg		Q	1	6020/DOD
Chromium	11	0.20	0.040	0.022	mg/Kg			1	6020/DOD
Cobalt	7.9	0.050	0.010	0.0024	mg/Kg		Q	1	6020/DOD
Copper	14	0.20	0.060	0.033	mg/Kg		Q	1	6020/DOD
Iron	20000	5.0	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	2000	10	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	250	0.50	0.030	0.016	mg/Kg		Q	1	6020/DOD
Sodium	37	10	5.0	2.7	mg/Kg			1	6020/DOD
Nickel	16	0.10	0.030	0.011	mg/Kg			1	6020/DOD
Lead	12	0.10	0.030	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.49	0.20	0.10	0.046	mg/Kg			1	6020/DOD
Thallium	0.13	0.10	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	15	0.10	0.060	0.030	mg/Kg			1	6020/DOD
Zinc	39	0.50	0.20	0.065	mg/Kg		Q	1	6020/DOD
Potassium	720	10	6.0	3.2	mg/Kg			1	6020/DOD
Selenium	0.25	0.50	0.10	0.051	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0079M-0001-SO
Lab Sample ID: 240-22660-3
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:42
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.025	0.10	0.030	0.012	mg/Kg	J	Q	1	6020/DOD
Aluminum	7900	3.0	0.61	0.29	mg/Kg			1	6020/DOD
Arsenic	9.1	0.10	0.051	0.018	mg/Kg			1	6020/DOD
Barium	56	1.0	0.020	0.011	mg/Kg		Q	1	6020/DOD
Beryllium	0.51	0.10	0.010	0.0076	mg/Kg		Q	1	6020/DOD
Calcium	910	10	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.15	0.10	0.030	0.013	mg/Kg		Q	1	6020/DOD
Chromium	14	0.20	0.040	0.023	mg/Kg			1	6020/DOD
Cobalt	12	0.051	0.010	0.0024	mg/Kg		Q	1	6020/DOD
Copper	19	0.20	0.061	0.033	mg/Kg		Q	1	6020/DOD
Iron	23000	5.1	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	2800	10	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	470	0.51	0.030	0.016	mg/Kg		Q	1	6020/DOD
Sodium	44	10	5.1	2.7	mg/Kg			1	6020/DOD
Nickel	27	0.10	0.030	0.011	mg/Kg			1	6020/DOD
Lead	13	0.10	0.030	0.016	mg/Kg		Q	1	6020/DOD
Antimony	0.56	0.20	0.10	0.046	mg/Kg			1	6020/DOD
Thallium	0.12	0.10	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	13	0.10	0.061	0.030	mg/Kg			1	6020/DOD
Zinc	52	0.51	0.20	0.065	mg/Kg		Q	1	6020/DOD
Potassium	880	10	6.1	3.2	mg/Kg			1	6020/DOD
Selenium	0.29	0.51	0.10	0.051	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0080M-0001-SO
Lab Sample ID: 240-22660-4
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:42
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.020	0.10	0.030	0.012	mg/Kg	J	Q	1	6020/DOD
Aluminum	7400	3.0	0.61	0.29	mg/Kg			1	6020/DOD
Arsenic	10	0.10	0.051	0.018	mg/Kg			1	6020/DOD
Barium	42	1.0	0.020	0.011	mg/Kg		Q	1	6020/DOD
Beryllium	0.47	0.10	0.010	0.0076	mg/Kg		Q	1	6020/DOD
Calcium	890	10	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.15	0.10	0.030	0.013	mg/Kg		Q	1	6020/DOD
Chromium	12	0.20	0.040	0.023	mg/Kg			1	6020/DOD
Cobalt	11	0.051	0.010	0.0024	mg/Kg		Q	1	6020/DOD
Copper	19	0.20	0.061	0.033	mg/Kg		Q	1	6020/DOD
Iron	21000	5.1	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	2600	10	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	400	0.51	0.030	0.016	mg/Kg		Q	1	6020/DOD
Sodium	42	10	5.1	2.7	mg/Kg			1	6020/DOD
Nickel	23	0.10	0.030	0.011	mg/Kg			1	6020/DOD
Lead	12	0.10	0.030	0.016	mg/Kg		Q	1	6020/DOD
Antimony	0.23	0.20	0.10	0.046	mg/Kg			1	6020/DOD
Thallium	0.11	0.10	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	12	0.10	0.061	0.030	mg/Kg			1	6020/DOD
Zinc	53	0.51	0.20	0.065	mg/Kg		Q	1	6020/DOD
Potassium	820	10	6.1	3.2	mg/Kg			1	6020/DOD
Selenium	0.27	0.51	0.10	0.051	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0081M-0001-SO
Lab Sample ID: 240-22660-5
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 15:50
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.023	0.10	0.030	0.012	mg/Kg	J	Q	1	6020/DOD
Aluminum	9100	3.0	0.61	0.29	mg/Kg			1	6020/DOD
Arsenic	11	0.10	0.051	0.018	mg/Kg			1	6020/DOD
Barium	50	1.0	0.020	0.011	mg/Kg		Q	1	6020/DOD
Beryllium	0.50	0.10	0.010	0.0076	mg/Kg		Q	1	6020/DOD
Calcium	1200	10	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.15	0.10	0.030	0.013	mg/Kg		Q	1	6020/DOD
Chromium	14	0.20	0.040	0.023	mg/Kg			1	6020/DOD
Cobalt	9.9	0.051	0.010	0.0024	mg/Kg		Q	1	6020/DOD
Copper	18	0.20	0.061	0.033	mg/Kg		Q	1	6020/DOD
Iron	24000	5.1	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	3000	10	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	290	0.51	0.030	0.016	mg/Kg		Q	1	6020/DOD
Sodium	43	10	5.1	2.7	mg/Kg			1	6020/DOD
Nickel	25	0.10	0.030	0.011	mg/Kg			1	6020/DOD
Lead	12	0.10	0.030	0.016	mg/Kg		Q	1	6020/DOD
Antimony	0.060	0.20	0.10	0.046	mg/Kg	J		1	6020/DOD
Thallium	0.13	0.10	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	14	0.10	0.061	0.030	mg/Kg			1	6020/DOD
Zinc	57	0.51	0.20	0.065	mg/Kg		Q	1	6020/DOD
Potassium	960	10	6.1	3.2	mg/Kg			1	6020/DOD
Selenium	0.26	0.51	0.10	0.051	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0082M-0001,0002-SO
Lab Sample ID: 240-22660-6
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 15:59
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.014	0.097	0.029	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	7100	2.9	0.58	0.28	mg/Kg		J	1	6020/DOD
Arsenic	9.0	0.097	0.049	0.018	mg/Kg			1	6020/DOD
Barium	24	0.97	0.019	0.010	mg/Kg		Q	1	6020/DOD
Beryllium	0.31	0.097	0.0097	0.0073	mg/Kg		Q	1	6020/DOD
Calcium	250	9.7	2.4	1.3	mg/Kg			1	6020/DOD
Cadmium	0.12	0.097	0.029	0.013	mg/Kg		Q	1	6020/DOD
Chromium	9.2	0.19	0.039	0.022	mg/Kg			1	6020/DOD
Cobalt	6.1	0.049	0.0097	0.0023	mg/Kg		Q	1	6020/DOD
Copper	17	0.19	0.058	0.032	mg/Kg		Q	1	6020/DOD
Iron	17000	4.9	1.9	1.0	mg/Kg		J	1	6020/DOD
Magnesium	1600	9.7	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	220	0.49	0.029	0.015	mg/Kg		Q	1	6020/DOD
Sodium	26	9.7	4.9	2.6	mg/Kg			1	6020/DOD
Nickel	13	0.097	0.029	0.011	mg/Kg			1	6020/DOD
Lead	12	0.097	0.029	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.24	0.19	0.097	0.045	mg/Kg		J	1	6020/DOD
Thallium	0.10	0.097	0.019	0.0099	mg/Kg		Q	1	6020/DOD
Vanadium	11	0.097	0.058	0.029	mg/Kg			1	6020/DOD
Zinc	45	0.49	0.19	0.063	mg/Kg		Q	1	6020/DOD
Potassium	610	9.7	5.8	3.1	mg/Kg			1	6020/DOD
Selenium	0.26	0.49	0.097	0.049	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0083M-0001-SO
Lab Sample ID: 240-22660-7
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:33
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.026	0.099	0.030	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	9200	3.0	0.59	0.28	mg/Kg			1	6020/DOD
Arsenic	7.5	0.099	0.050	0.018	mg/Kg			1	6020/DOD
Barium	66	0.99	0.020	0.011	mg/Kg		Q	1	6020/DOD
Beryllium	0.52	0.099	0.0099	0.0074	mg/Kg		Q	1	6020/DOD
Calcium	630	9.9	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.11	0.099	0.030	0.013	mg/Kg		Q	1	6020/DOD
Chromium	14	0.20	0.040	0.022	mg/Kg			1	6020/DOD
Cobalt	9.2	0.050	0.0099	0.0024	mg/Kg		Q	1	6020/DOD
Copper	14	0.20	0.059	0.033	mg/Kg		Q	1	6020/DOD
Iron	22000	5.0	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	2400	9.9	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	340	0.50	0.030	0.016	mg/Kg		Q	1	6020/DOD
Sodium	49	9.9	5.0	2.6	mg/Kg			1	6020/DOD
Nickel	21	0.099	0.030	0.011	mg/Kg			1	6020/DOD
Lead	11	0.099	0.030	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.17	0.20	0.099	0.045	mg/Kg	J		1	6020/DOD
Thallium	0.13	0.099	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	16	0.099	0.059	0.030	mg/Kg			1	6020/DOD
Zinc	42	0.50	0.20	0.064	mg/Kg		Q	1	6020/DOD
Potassium	730	9.9	5.9	3.1	mg/Kg			1	6020/DOD
Selenium	0.25	0.50	0.099	0.050	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0084M-0001-SO
Lab Sample ID: 240-22660-8
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:45
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.040	0.10	0.030	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	10000	3.0	0.60	0.28	mg/Kg			1	6020/DOD
Arsenic	8.4	0.10	0.050	0.018	mg/Kg			1	6020/DOD
Barium	75	1.0	0.020	0.011	mg/Kg		Q	1	6020/DOD
Beryllium	0.57	0.10	0.010	0.0075	mg/Kg		Q	1	6020/DOD
Calcium	1300	10	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.16	0.10	0.030	0.013	mg/Kg		Q	1	6020/DOD
Chromium	16	0.20	0.040	0.022	mg/Kg			1	6020/DOD
Cobalt	11	0.050	0.010	0.0024	mg/Kg		Q	1	6020/DOD
Copper	17	0.20	0.060	0.033	mg/Kg		Q	1	6020/DOD
Iron	24000	5.0	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	3100	10	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	370	0.50	0.030	0.016	mg/Kg		Q	1	6020/DOD
Sodium	48	10	5.0	2.7	mg/Kg			1	6020/DOD
Nickel	26	0.10	0.030	0.011	mg/Kg			1	6020/DOD
Lead	13	0.10	0.030	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.15	0.20	0.10	0.046	mg/Kg	J		1	6020/DOD
Thallium	0.15	0.10	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	17	0.10	0.060	0.030	mg/Kg			1	6020/DOD
Zinc	45	0.50	0.20	0.065	mg/Kg		Q	1	6020/DOD
Potassium	990	10	6.0	3.2	mg/Kg			1	6020/DOD
Selenium	0.33	0.50	0.10	0.051	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0085M-0001-SO
Lab Sample ID: 240-22660-9
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/22/2013 16:22
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.023	0.097	0.029	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	8500	2.9	0.58	0.28	mg/Kg			1	6020/DOD
Arsenic	10	0.097	0.049	0.018	mg/Kg			1	6020/DOD
Barium	58	0.97	0.019	0.010	mg/Kg		Q	1	6020/DOD
Beryllium	0.47	0.097	0.0097	0.0073	mg/Kg		Q	1	6020/DOD
Calcium	820	9.7	2.4	1.3	mg/Kg			1	6020/DOD
Cadmium	0.12	0.097	0.029	0.013	mg/Kg		Q	1	6020/DOD
Chromium	12	0.19	0.039	0.022	mg/Kg			1	6020/DOD
Cobalt	9.6	0.049	0.0097	0.0023	mg/Kg		Q	1	6020/DOD
Copper	18	0.19	0.058	0.032	mg/Kg		Q	1	6020/DOD
Iron	22000	4.9	1.9	1.0	mg/Kg			1	6020/DOD
Magnesium	2600	9.7	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	310	0.49	0.029	0.015	mg/Kg		Q	1	6020/DOD
Sodium	42	9.7	4.9	2.6	mg/Kg			1	6020/DOD
Nickel	21	0.097	0.029	0.011	mg/Kg			1	6020/DOD
Lead	14	0.097	0.029	0.015	mg/Kg		Q	1	6020/DOD
Antimony	1.7	0.19	0.097	0.045	mg/Kg			1	6020/DOD
Thallium	0.12	0.097	0.019	0.0099	mg/Kg		Q	1	6020/DOD
Vanadium	15	0.097	0.058	0.029	mg/Kg			1	6020/DOD
Zinc	44	0.49	0.19	0.063	mg/Kg		Q	1	6020/DOD
Potassium	780	9.7	5.8	3.1	mg/Kg			1	6020/DOD
Selenium	0.29	0.49	0.097	0.049	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0086M-0001-SO
Lab Sample ID: 240-22660-10
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 14:00
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.021	0.10	0.030	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	8400	3.0	0.60	0.28	mg/Kg			1	6020/DOD
Arsenic	4.6	0.10	0.050	0.018	mg/Kg			1	6020/DOD
Barium	51	1.0	0.020	0.011	mg/Kg		Q	1	6020/DOD
Beryllium	0.47	0.10	0.010	0.0075	mg/Kg		Q	1	6020/DOD
Calcium	1200	10	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.13	0.10	0.030	0.013	mg/Kg		Q	1	6020/DOD
Chromium	14	0.20	0.040	0.022	mg/Kg			1	6020/DOD
Cobalt	9.1	0.050	0.010	0.0024	mg/Kg		Q	1	6020/DOD
Copper	12	0.20	0.060	0.033	mg/Kg		Q	1	6020/DOD
Iron	17000	5.0	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	2000	10	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	310	0.50	0.030	0.016	mg/Kg		Q	1	6020/DOD
Sodium	39	10	5.0	2.7	mg/Kg			1	6020/DOD
Nickel	18	0.10	0.030	0.011	mg/Kg			1	6020/DOD
Lead	12	0.10	0.030	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.10	0.20	0.10	0.046	mg/Kg	U		1	6020/DOD
Thallium	0.12	0.10	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	15	0.10	0.060	0.030	mg/Kg			1	6020/DOD
Zinc	35	0.50	0.20	0.065	mg/Kg		Q	1	6020/DOD
Potassium	700	10	6.0	3.2	mg/Kg			1	6020/DOD
Selenium	0.33	0.50	0.10	0.051	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0087M-0001-SO
Lab Sample ID: 240-22660-11
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 14:00
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.023	0.098	0.029	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	8200	2.9	0.59	0.28	mg/Kg			1	6020/DOD
Arsenic	5.2	0.098	0.049	0.018	mg/Kg			1	6020/DOD
Barium	51	0.98	0.020	0.010	mg/Kg		Q	1	6020/DOD
Beryllium	0.48	0.098	0.0098	0.0074	mg/Kg		Q	1	6020/DOD
Calcium	700	9.8	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.12	0.098	0.029	0.013	mg/Kg		Q	1	6020/DOD
Chromium	15	0.20	0.039	0.022	mg/Kg			1	6020/DOD
Cobalt	8.9	0.049	0.0098	0.0024	mg/Kg		Q	1	6020/DOD
Copper	13	0.20	0.059	0.032	mg/Kg		Q	1	6020/DOD
Iron	19000	4.9	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	2000	9.8	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	230	0.49	0.029	0.016	mg/Kg		Q	1	6020/DOD
Sodium	32	9.8	4.9	2.6	mg/Kg			1	6020/DOD
Nickel	19	0.098	0.029	0.011	mg/Kg			1	6020/DOD
Lead	13	0.098	0.029	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.098	0.20	0.098	0.045	mg/Kg	U		1	6020/DOD
Thallium	0.12	0.098	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	14	0.098	0.059	0.029	mg/Kg			1	6020/DOD
Zinc	36	0.49	0.20	0.064	mg/Kg		Q	1	6020/DOD
Potassium	740	9.8	5.9	3.1	mg/Kg			1	6020/DOD
Selenium	0.32	0.49	0.098	0.050	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0088M-0001-SO
Lab Sample ID: 240-22660-12
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 14:09
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.024	0.099	0.030	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	8700	3.0	0.59	0.28	mg/Kg			1	6020/DOD
Arsenic	7.4	0.099	0.050	0.018	mg/Kg			1	6020/DOD
Barium	63	0.99	0.020	0.011	mg/Kg		Q	1	6020/DOD
Beryllium	0.53	0.099	0.0099	0.0074	mg/Kg		Q	1	6020/DOD
Calcium	1600	9.9	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.15	0.099	0.030	0.013	mg/Kg		Q	1	6020/DOD
Chromium	15	0.20	0.040	0.022	mg/Kg			1	6020/DOD
Cobalt	10	0.050	0.0099	0.0024	mg/Kg		Q	1	6020/DOD
Copper	15	0.20	0.059	0.033	mg/Kg		Q	1	6020/DOD
Iron	23000	5.0	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	2500	9.9	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	370	0.50	0.030	0.016	mg/Kg		Q	1	6020/DOD
Sodium	51	9.9	5.0	2.6	mg/Kg			1	6020/DOD
Nickel	22	0.099	0.030	0.011	mg/Kg			1	6020/DOD
Lead	12	0.099	0.030	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.099	0.20	0.099	0.045	mg/Kg	U		1	6020/DOD
Thallium	0.12	0.099	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	15	0.099	0.059	0.030	mg/Kg			1	6020/DOD
Zinc	44	0.50	0.20	0.064	mg/Kg		Q	1	6020/DOD
Potassium	740	9.9	5.9	3.1	mg/Kg			1	6020/DOD
Selenium	0.29	0.50	0.099	0.050	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0089M-0001-SO
Lab Sample ID: 240-22660-13
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 14:09
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.023	0.099	0.030	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	8500	3.0	0.59	0.28	mg/Kg			1	6020/DOD
Arsenic	7.5	0.099	0.050	0.018	mg/Kg			1	6020/DOD
Barium	78	0.99	0.020	0.011	mg/Kg		Q	1	6020/DOD
Beryllium	0.56	0.099	0.0099	0.0074	mg/Kg		Q	1	6020/DOD
Calcium	1700	9.9	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.17	0.099	0.030	0.013	mg/Kg		Q	1	6020/DOD
Chromium	15	0.20	0.040	0.022	mg/Kg			1	6020/DOD
Cobalt	13	0.050	0.0099	0.0024	mg/Kg		Q	1	6020/DOD
Copper	15	0.20	0.059	0.033	mg/Kg		Q	1	6020/DOD
Iron	23000	5.0	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	2500	9.9	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	450	0.50	0.030	0.016	mg/Kg		Q	1	6020/DOD
Sodium	46	9.9	5.0	2.6	mg/Kg			1	6020/DOD
Nickel	23	0.099	0.030	0.011	mg/Kg			1	6020/DOD
Lead	12	0.099	0.030	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.099	0.20	0.099	0.045	mg/Kg	U		1	6020/DOD
Thallium	0.12	0.099	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	16	0.099	0.059	0.030	mg/Kg			1	6020/DOD
Zinc	45	0.50	0.20	0.064	mg/Kg		Q	1	6020/DOD
Potassium	740	9.9	5.9	3.1	mg/Kg			1	6020/DOD
Selenium	0.29	0.50	0.099	0.050	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0090M-0001-SO
Lab Sample ID: 240-22660-14
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 13:34
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.026	0.10	0.030	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	9300	3.0	0.60	0.28	mg/Kg			1	6020/DOD
Arsenic	6.9	0.10	0.050	0.018	mg/Kg			1	6020/DOD
Barium	63	1.0	0.020	0.011	mg/Kg		Q	1	6020/DOD
Beryllium	0.58	0.10	0.010	0.0075	mg/Kg		Q	1	6020/DOD
Calcium	750	10	2.5	1.3	mg/Kg			1	6020/DOD
Cadmium	0.14	0.10	0.030	0.013	mg/Kg		Q	1	6020/DOD
Chromium	16	0.20	0.040	0.022	mg/Kg			1	6020/DOD
Cobalt	15	0.050	0.010	0.0024	mg/Kg		Q	1	6020/DOD
Copper	16	0.20	0.060	0.033	mg/Kg		Q	1	6020/DOD
Iron	20000	5.0	2.0	1.1	mg/Kg			1	6020/DOD
Magnesium	2600	10	2.0	1.1	mg/Kg			1	6020/DOD
Manganese	300	0.50	0.030	0.016	mg/Kg		Q	1	6020/DOD
Sodium	62	10	5.0	2.7	mg/Kg			1	6020/DOD
Nickel	23	0.10	0.030	0.011	mg/Kg			1	6020/DOD
Lead	13	0.10	0.030	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.10	0.20	0.10	0.046	mg/Kg	U		1	6020/DOD
Thallium	0.13	0.10	0.020	0.010	mg/Kg		Q	1	6020/DOD
Vanadium	16	0.10	0.060	0.030	mg/Kg			1	6020/DOD
Zinc	44	0.50	0.20	0.065	mg/Kg		Q	1	6020/DOD
Potassium	790	10	6.0	3.2	mg/Kg			1	6020/DOD
Selenium	0.30	0.50	0.10	0.051	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0091M-0001,0002-SO
Lab Sample ID: 240-22660-15
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 13:19
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.032	0.088	0.026	0.010	mg/Kg	J	Q	1	6020/DOD
Aluminum	9100	2.6	0.53	0.25	mg/Kg		J	1	6020/DOD
Arsenic	6.1	0.088	0.044	0.016	mg/Kg			1	6020/DOD
Barium	60	0.88	0.018	0.0094	mg/Kg		Q	1	6020/DOD
Beryllium	0.52	0.088	0.0088	0.0066	mg/Kg		Q	1	6020/DOD
Calcium	2400	8.8	2.2	1.2	mg/Kg			1	6020/DOD
Cadmium	0.11	0.088	0.026	0.012	mg/Kg		Q	1	6020/DOD
Chromium	16	0.18	0.035	0.020	mg/Kg			1	6020/DOD
Cobalt	13	0.044	0.0088	0.0021	mg/Kg		Q	1	6020/DOD
Copper	12	0.18	0.053	0.029	mg/Kg		Q	1	6020/DOD
Iron	21000	4.4	1.8	0.94	mg/Kg		J	1	6020/DOD
Magnesium	2100	8.8	1.8	0.95	mg/Kg			1	6020/DOD
Manganese	540	0.44	0.026	0.014	mg/Kg		Q	1	6020/DOD
Sodium	49	8.8	4.4	2.3	mg/Kg			1	6020/DOD
Nickel	18	0.088	0.026	0.0099	mg/Kg			1	6020/DOD
Lead	15	0.088	0.026	0.014	mg/Kg		Q	1	6020/DOD
Antimony	0.088	0.18	0.088	0.040	mg/Kg	U	J	1	6020/DOD
Thallium	0.13	0.088	0.018	0.0089	mg/Kg		Q	1	6020/DOD
Vanadium	18	0.088	0.053	0.026	mg/Kg			1	6020/DOD
Zinc	38	0.44	0.18	0.057	mg/Kg		Q	1	6020/DOD
Potassium	750	8.8	5.3	2.8	mg/Kg			1	6020/DOD
Selenium	0.37	0.44	0.088	0.045	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0092M-0001-SO
Lab Sample ID: 240-22660-16
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 13:56
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.020	0.093	0.028	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	10000	2.8	0.56	0.26	mg/Kg			1	6020/DOD
Arsenic	7.7	0.093	0.046	0.017	mg/Kg			1	6020/DOD
Barium	79	0.93	0.019	0.0099	mg/Kg		Q	1	6020/DOD
Beryllium	0.60	0.093	0.0093	0.0069	mg/Kg		Q	1	6020/DOD
Calcium	1400	9.3	2.3	1.2	mg/Kg			1	6020/DOD
Cadmium	0.13	0.093	0.028	0.012	mg/Kg		Q	1	6020/DOD
Chromium	17	0.19	0.037	0.021	mg/Kg			1	6020/DOD
Cobalt	12	0.046	0.0093	0.0022	mg/Kg		Q	1	6020/DOD
Copper	17	0.19	0.056	0.031	mg/Kg		Q	1	6020/DOD
Iron	23000	4.6	1.9	1.0	mg/Kg			1	6020/DOD
Magnesium	2900	9.3	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	300	0.46	0.028	0.015	mg/Kg		Q	1	6020/DOD
Sodium	41	9.3	4.6	2.5	mg/Kg			1	6020/DOD
Nickel	25	0.093	0.028	0.010	mg/Kg			1	6020/DOD
Lead	13	0.093	0.028	0.014	mg/Kg		Q	1	6020/DOD
Antimony	0.093	0.19	0.093	0.043	mg/Kg	U		1	6020/DOD
Thallium	0.14	0.093	0.019	0.0094	mg/Kg		Q	1	6020/DOD
Vanadium	17	0.093	0.056	0.028	mg/Kg			1	6020/DOD
Zinc	45	0.46	0.19	0.060	mg/Kg		Q	1	6020/DOD
Potassium	900	9.3	5.6	2.9	mg/Kg			1	6020/DOD
Selenium	0.41	0.46	0.093	0.047	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0093M-0001-SO
Lab Sample ID: 240-22660-17
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 14:06
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.018	0.093	0.028	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	9500	2.8	0.56	0.26	mg/Kg			1	6020/DOD
Arsenic	7.8	0.093	0.046	0.017	mg/Kg			1	6020/DOD
Barium	62	0.93	0.019	0.0099	mg/Kg		Q	1	6020/DOD
Beryllium	0.56	0.093	0.0093	0.0069	mg/Kg		Q	1	6020/DOD
Calcium	540	9.3	2.3	1.2	mg/Kg			1	6020/DOD
Cadmium	0.12	0.093	0.028	0.012	mg/Kg		Q	1	6020/DOD
Chromium	15	0.19	0.037	0.021	mg/Kg			1	6020/DOD
Cobalt	11	0.046	0.0093	0.0022	mg/Kg		Q	1	6020/DOD
Copper	17	0.19	0.056	0.031	mg/Kg		Q	1	6020/DOD
Iron	21000	4.6	1.9	1.0	mg/Kg			1	6020/DOD
Magnesium	2600	9.3	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	260	0.46	0.028	0.015	mg/Kg		Q	1	6020/DOD
Sodium	42	9.3	4.6	2.5	mg/Kg			1	6020/DOD
Nickel	23	0.093	0.028	0.010	mg/Kg			1	6020/DOD
Lead	13	0.093	0.028	0.014	mg/Kg		Q	1	6020/DOD
Antimony	0.17	0.19	0.093	0.043	mg/Kg	J		1	6020/DOD
Thallium	0.14	0.093	0.019	0.0094	mg/Kg		Q	1	6020/DOD
Vanadium	16	0.093	0.056	0.028	mg/Kg			1	6020/DOD
Zinc	40	0.46	0.19	0.060	mg/Kg		Q	1	6020/DOD
Potassium	880	9.3	5.6	2.9	mg/Kg			1	6020/DOD
Selenium	0.41	0.46	0.093	0.047	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0095M-0001-SO
Lab Sample ID: 240-22660-18
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 12:56
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.025	0.093	0.028	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	9200	2.8	0.56	0.26	mg/Kg			1	6020/DOD
Arsenic	6.5	0.093	0.046	0.017	mg/Kg			1	6020/DOD
Barium	69	0.93	0.019	0.0099	mg/Kg		Q	1	6020/DOD
Beryllium	0.54	0.093	0.0093	0.0069	mg/Kg		Q	1	6020/DOD
Calcium	1300	9.3	2.3	1.2	mg/Kg			1	6020/DOD
Cadmium	0.19	0.093	0.028	0.012	mg/Kg		Q	1	6020/DOD
Chromium	15	0.19	0.037	0.021	mg/Kg			1	6020/DOD
Cobalt	9.5	0.046	0.0093	0.0022	mg/Kg		Q	1	6020/DOD
Copper	14	0.19	0.056	0.031	mg/Kg		Q	1	6020/DOD
Iron	20000	4.6	1.9	1.0	mg/Kg			1	6020/DOD
Magnesium	2200	9.3	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	250	0.46	0.028	0.015	mg/Kg		Q	1	6020/DOD
Sodium	38	9.3	4.6	2.5	mg/Kg			1	6020/DOD
Nickel	21	0.093	0.028	0.010	mg/Kg			1	6020/DOD
Lead	13	0.093	0.028	0.014	mg/Kg		Q	1	6020/DOD
Antimony	0.068	0.19	0.093	0.043	mg/Kg	J		1	6020/DOD
Thallium	0.13	0.093	0.019	0.0094	mg/Kg		Q	1	6020/DOD
Vanadium	16	0.093	0.056	0.028	mg/Kg			1	6020/DOD
Zinc	42	0.46	0.19	0.060	mg/Kg		Q	1	6020/DOD
Potassium	790	9.3	5.6	2.9	mg/Kg			1	6020/DOD
Selenium	0.39	0.46	0.093	0.047	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0096-0001-SO
Lab Sample ID: 240-22660-19
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 13:35
Reporting Basis: DRY
Date Received: 04/02/2013 08:54
% Solids: 86.5

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.020	0.093	0.028	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	8400	2.8	0.56	0.27	mg/Kg			1	6020/DOD
Arsenic	5.0	0.093	0.047	0.017	mg/Kg			1	6020/DOD
Barium	44	0.93	0.019	0.010	mg/Kg		Q	1	6020/DOD
Beryllium	0.39	0.093	0.0093	0.0070	mg/Kg		Q	1	6020/DOD
Calcium	1200	9.3	2.3	1.2	mg/Kg			1	6020/DOD
Cadmium	0.11	0.093	0.028	0.012	mg/Kg		Q	1	6020/DOD
Chromium	17	0.19	0.037	0.021	mg/Kg			1	6020/DOD
Cobalt	6.0	0.047	0.0093	0.0022	mg/Kg		Q	1	6020/DOD
Copper	12	0.19	0.056	0.031	mg/Kg		Q	1	6020/DOD
Iron	16000	4.7	1.9	1.0	mg/Kg			1	6020/DOD
Magnesium	1800	9.3	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	170	0.47	0.028	0.015	mg/Kg		Q	1	6020/DOD
Sodium	54	9.3	4.7	2.5	mg/Kg			1	6020/DOD
Nickel	16	0.093	0.028	0.011	mg/Kg			1	6020/DOD
Lead	12	0.093	0.028	0.014	mg/Kg		Q	1	6020/DOD
Antimony	0.044	0.19	0.093	0.043	mg/Kg	J		1	6020/DOD
Thallium	0.12	0.093	0.019	0.0095	mg/Kg		Q	1	6020/DOD
Vanadium	16	0.093	0.056	0.028	mg/Kg			1	6020/DOD
Zinc	31	0.47	0.19	0.060	mg/Kg		Q	1	6020/DOD
Potassium	760	9.3	5.6	2.9	mg/Kg			1	6020/DOD
Selenium	0.31	0.47	0.093	0.047	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0107M-0001-SO
Lab Sample ID: 240-22660-20
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 11:20
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.025	0.093	0.028	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	10000	2.8	0.56	0.27	mg/Kg			1	6020/DOD
Arsenic	8.4	0.093	0.047	0.017	mg/Kg			1	6020/DOD
Barium	62	0.93	0.019	0.010	mg/Kg		Q	1	6020/DOD
Beryllium	0.53	0.093	0.0093	0.0070	mg/Kg		Q	1	6020/DOD
Calcium	630	9.3	2.3	1.2	mg/Kg			1	6020/DOD
Cadmium	0.13	0.093	0.028	0.012	mg/Kg		Q	1	6020/DOD
Chromium	15	0.19	0.037	0.021	mg/Kg			1	6020/DOD
Cobalt	11	0.047	0.0093	0.0022	mg/Kg		Q	1	6020/DOD
Copper	17	0.19	0.056	0.031	mg/Kg		Q	1	6020/DOD
Iron	25000	4.7	1.9	1.0	mg/Kg			1	6020/DOD
Magnesium	2500	9.3	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	380	0.47	0.028	0.015	mg/Kg		Q	1	6020/DOD
Sodium	52	9.3	4.7	2.5	mg/Kg			1	6020/DOD
Nickel	22	0.093	0.028	0.011	mg/Kg			1	6020/DOD
Lead	13	0.093	0.028	0.014	mg/Kg		Q	1	6020/DOD
Antimony	0.051	0.19	0.093	0.043	mg/Kg	J		1	6020/DOD
Thallium	0.15	0.093	0.019	0.0095	mg/Kg		Q	1	6020/DOD
Vanadium	17	0.093	0.056	0.028	mg/Kg			1	6020/DOD
Zinc	48	0.47	0.19	0.061	mg/Kg		Q	1	6020/DOD
Potassium	860	9.3	5.6	2.9	mg/Kg			1	6020/DOD
Selenium	0.35	0.47	0.093	0.048	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0108M-0001-SO
Lab Sample ID: 240-22660-21
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 11:20
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.028	0.095	0.029	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	11000	2.9	0.57	0.27	mg/Kg			1	6020/DOD
Arsenic	8.6	0.095	0.048	0.017	mg/Kg			1	6020/DOD
Barium	67	0.95	0.019	0.010	mg/Kg		Q	1	6020/DOD
Beryllium	0.57	0.095	0.0095	0.0071	mg/Kg		Q	1	6020/DOD
Calcium	660	9.5	2.4	1.3	mg/Kg			1	6020/DOD
Cadmium	0.14	0.095	0.029	0.013	mg/Kg		Q	1	6020/DOD
Chromium	16	0.19	0.038	0.021	mg/Kg			1	6020/DOD
Cobalt	12	0.048	0.0095	0.0023	mg/Kg		Q	1	6020/DOD
Copper	17	0.19	0.057	0.031	mg/Kg		Q	1	6020/DOD
Iron	25000	4.8	1.9	1.0	mg/Kg			1	6020/DOD
Magnesium	2600	9.5	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	350	0.48	0.029	0.015	mg/Kg		Q	1	6020/DOD
Sodium	51	9.5	4.8	2.5	mg/Kg			1	6020/DOD
Nickel	22	0.095	0.029	0.011	mg/Kg			1	6020/DOD
Lead	13	0.095	0.029	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.046	0.19	0.095	0.044	mg/Kg	J		1	6020/DOD
Thallium	0.16	0.095	0.019	0.0097	mg/Kg		Q	1	6020/DOD
Vanadium	19	0.095	0.057	0.028	mg/Kg			1	6020/DOD
Zinc	51	0.48	0.19	0.062	mg/Kg		Q	1	6020/DOD
Potassium	910	9.5	5.7	3.0	mg/Kg			1	6020/DOD
Selenium	0.35	0.48	0.095	0.048	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0110M-0001-SO
Lab Sample ID: 240-22660-22
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 11:37
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.034	0.083	0.025	0.0095	mg/Kg	J	Q	1	6020/DOD
Aluminum	9100	2.5	0.50	0.24	mg/Kg			1	6020/DOD
Arsenic	7.9	0.083	0.042	0.015	mg/Kg			1	6020/DOD
Barium	60	0.83	0.017	0.0089	mg/Kg		Q	1	6020/DOD
Beryllium	0.63	0.083	0.0083	0.0063	mg/Kg		Q	1	6020/DOD
Calcium	980	8.3	2.1	1.1	mg/Kg			1	6020/DOD
Cadmium	0.20	0.083	0.025	0.011	mg/Kg		Q	1	6020/DOD
Chromium	20	0.17	0.033	0.019	mg/Kg			1	6020/DOD
Cobalt	12	0.042	0.0083	0.0020	mg/Kg		Q	1	6020/DOD
Copper	17	0.17	0.050	0.028	mg/Kg		Q	1	6020/DOD
Iron	25000	4.2	1.7	0.90	mg/Kg			1	6020/DOD
Magnesium	3000	8.3	1.7	0.90	mg/Kg			1	6020/DOD
Manganese	450	0.42	0.025	0.013	mg/Kg		Q	1	6020/DOD
Sodium	63	8.3	4.2	2.2	mg/Kg			1	6020/DOD
Nickel	31	0.083	0.025	0.0094	mg/Kg			1	6020/DOD
Lead	14	0.083	0.025	0.013	mg/Kg		Q	1	6020/DOD
Antimony	0.051	0.17	0.083	0.038	mg/Kg	J		1	6020/DOD
Thallium	0.14	0.083	0.017	0.0085	mg/Kg		Q	1	6020/DOD
Vanadium	15	0.083	0.050	0.025	mg/Kg			1	6020/DOD
Zinc	71	0.42	0.17	0.054	mg/Kg		Q	1	6020/DOD
Potassium	950	8.3	5.0	2.6	mg/Kg			1	6020/DOD
Selenium	0.36	0.42	0.083	0.042	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0111M-0001-SO
Lab Sample ID: 240-22660-23
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 11:37
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.026	0.093	0.028	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	7300	2.8	0.56	0.27	mg/Kg			1	6020/DOD
Arsenic	5.7	0.093	0.047	0.017	mg/Kg			1	6020/DOD
Barium	47	0.93	0.019	0.010	mg/Kg		Q	1	6020/DOD
Beryllium	0.50	0.093	0.0093	0.0070	mg/Kg		Q	1	6020/DOD
Calcium	450	9.3	2.3	1.2	mg/Kg			1	6020/DOD
Cadmium	0.14	0.093	0.028	0.012	mg/Kg		Q	1	6020/DOD
Chromium	17	0.19	0.037	0.021	mg/Kg			1	6020/DOD
Cobalt	15	0.047	0.0093	0.0022	mg/Kg		Q	1	6020/DOD
Copper	14	0.19	0.056	0.031	mg/Kg		Q	1	6020/DOD
Iron	22000	4.7	1.9	1.0	mg/Kg			1	6020/DOD
Magnesium	2100	9.3	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	500	0.47	0.028	0.015	mg/Kg		Q	1	6020/DOD
Sodium	38	9.3	4.7	2.5	mg/Kg			1	6020/DOD
Nickel	31	0.093	0.028	0.011	mg/Kg			1	6020/DOD
Lead	11	0.093	0.028	0.014	mg/Kg		Q	1	6020/DOD
Antimony	0.045	0.19	0.093	0.043	mg/Kg	J		1	6020/DOD
Thallium	0.12	0.093	0.019	0.0095	mg/Kg		Q	1	6020/DOD
Vanadium	13	0.093	0.056	0.028	mg/Kg			1	6020/DOD
Zinc	33	0.47	0.19	0.061	mg/Kg		Q	1	6020/DOD
Potassium	840	9.3	5.6	2.9	mg/Kg			1	6020/DOD
Selenium	0.30	0.47	0.093	0.048	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0112M-0001-SO
Lab Sample ID: 240-22660-24
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 08:56
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.032	0.086	0.026	0.0098	mg/Kg	J	Q	1	6020/DOD
Aluminum	12000	2.6	0.52	0.25	mg/Kg			1	6020/DOD
Arsenic	12	0.086	0.043	0.016	mg/Kg			1	6020/DOD
Barium	73	0.86	0.017	0.0092	mg/Kg		Q	1	6020/DOD
Beryllium	0.60	0.086	0.0086	0.0065	mg/Kg		Q	1	6020/DOD
Calcium	1600	8.6	2.2	1.1	mg/Kg			1	6020/DOD
Cadmium	0.16	0.086	0.026	0.011	mg/Kg		Q	1	6020/DOD
Chromium	16	0.17	0.034	0.019	mg/Kg			1	6020/DOD
Cobalt	12	0.043	0.0086	0.0021	mg/Kg		Q	1	6020/DOD
Copper	20	0.17	0.052	0.028	mg/Kg		Q	1	6020/DOD
Iron	27000	4.3	1.7	0.93	mg/Kg			1	6020/DOD
Magnesium	3600	8.6	1.7	0.93	mg/Kg			1	6020/DOD
Manganese	330	0.43	0.026	0.014	mg/Kg		Q	1	6020/DOD
Sodium	73	8.6	4.3	2.3	mg/Kg			1	6020/DOD
Nickel	27	0.086	0.026	0.0097	mg/Kg			1	6020/DOD
Lead	14	0.086	0.026	0.013	mg/Kg		Q	1	6020/DOD
Antimony	0.086	0.17	0.086	0.040	mg/Kg	U		1	6020/DOD
Thallium	0.16	0.086	0.017	0.0088	mg/Kg		Q	1	6020/DOD
Vanadium	18	0.086	0.052	0.026	mg/Kg			1	6020/DOD
Zinc	57	0.43	0.17	0.056	mg/Kg		Q	1	6020/DOD
Potassium	1100	8.6	5.2	2.7	mg/Kg			1	6020/DOD
Selenium	0.37	0.43	0.086	0.044	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0113M-0001-SO
Lab Sample ID: 240-22660-25
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 09:25
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.018	0.093	0.028	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	10000	2.8	0.56	0.26	mg/Kg			1	6020/DOD
Arsenic	12	0.093	0.046	0.017	mg/Kg			1	6020/DOD
Barium	71	0.93	0.019	0.0099	mg/Kg		Q	1	6020/DOD
Beryllium	0.54	0.093	0.0093	0.0069	mg/Kg		Q	1	6020/DOD
Calcium	510	9.3	2.3	1.2	mg/Kg			1	6020/DOD
Cadmium	0.10	0.093	0.028	0.012	mg/Kg		Q	1	6020/DOD
Chromium	15	0.19	0.037	0.021	mg/Kg			1	6020/DOD
Cobalt	19	0.046	0.0093	0.0022	mg/Kg		Q	1	6020/DOD
Copper	19	0.19	0.056	0.031	mg/Kg		Q	1	6020/DOD
Iron	29000	4.6	1.9	1.0	mg/Kg			1	6020/DOD
Magnesium	2600	9.3	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	870	0.46	0.028	0.015	mg/Kg		Q	1	6020/DOD
Sodium	47	9.3	4.6	2.5	mg/Kg			1	6020/DOD
Nickel	20	0.093	0.028	0.010	mg/Kg			1	6020/DOD
Lead	13	0.093	0.028	0.014	mg/Kg		Q	1	6020/DOD
Antimony	0.093	0.19	0.093	0.043	mg/Kg	U		1	6020/DOD
Thallium	0.16	0.093	0.019	0.0094	mg/Kg		Q	1	6020/DOD
Vanadium	17	0.093	0.056	0.028	mg/Kg			1	6020/DOD
Zinc	49	0.46	0.19	0.060	mg/Kg		Q	1	6020/DOD
Potassium	1000	9.3	5.6	2.9	mg/Kg			1	6020/DOD
Selenium	0.30	0.46	0.093	0.047	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0114M-0001-SO
Lab Sample ID: 240-22660-26
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 10:31
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.037	0.097	0.029	0.011	mg/Kg	J	Q	1	6020/DOD
Aluminum	9100	2.9	0.58	0.28	mg/Kg			1	6020/DOD
Arsenic	9.4	0.097	0.049	0.018	mg/Kg			1	6020/DOD
Barium	61	0.97	0.019	0.010	mg/Kg		Q	1	6020/DOD
Beryllium	0.66	0.097	0.0097	0.0073	mg/Kg		Q	1	6020/DOD
Calcium	740	9.7	2.4	1.3	mg/Kg			1	6020/DOD
Cadmium	0.16	0.097	0.029	0.013	mg/Kg		Q	1	6020/DOD
Chromium	19	0.19	0.039	0.022	mg/Kg			1	6020/DOD
Cobalt	15	0.049	0.0097	0.0023	mg/Kg		Q	1	6020/DOD
Copper	16	0.19	0.058	0.032	mg/Kg		Q	1	6020/DOD
Iron	25000	4.9	1.9	1.0	mg/Kg			1	6020/DOD
Magnesium	2600	9.7	1.9	1.0	mg/Kg			1	6020/DOD
Manganese	850	0.49	0.029	0.015	mg/Kg		Q	1	6020/DOD
Sodium	49	9.7	4.9	2.6	mg/Kg			1	6020/DOD
Nickel	32	0.097	0.029	0.011	mg/Kg			1	6020/DOD
Lead	16	0.097	0.029	0.015	mg/Kg		Q	1	6020/DOD
Antimony	0.097	0.19	0.097	0.045	mg/Kg	U		1	6020/DOD
Thallium	0.15	0.097	0.019	0.0099	mg/Kg		Q	1	6020/DOD
Vanadium	17	0.097	0.058	0.029	mg/Kg			1	6020/DOD
Zinc	41	0.49	0.19	0.063	mg/Kg		Q	1	6020/DOD
Potassium	1000	9.7	5.8	3.1	mg/Kg			1	6020/DOD
Selenium	0.35	0.49	0.097	0.049	mg/Kg	J		1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0116M-0001-SO
Lab Sample ID: 240-22660-27
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 10:55
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.027	0.081	0.024	0.0092	mg/Kg	J	Q	1	6020/DOD
Aluminum	13000	2.4	0.48	0.23	mg/Kg			1	6020/DOD
Arsenic	7.8	0.081	0.040	0.015	mg/Kg			1	6020/DOD
Barium	81	0.81	0.016	0.0086	mg/Kg		Q	1	6020/DOD
Beryllium	0.56	0.081	0.0081	0.0060	mg/Kg		Q	1	6020/DOD
Calcium	490	8.1	2.0	1.1	mg/Kg			1	6020/DOD
Cadmium	0.18	0.081	0.024	0.011	mg/Kg		Q	1	6020/DOD
Chromium	16	0.16	0.032	0.018	mg/Kg			1	6020/DOD
Cobalt	11	0.040	0.0081	0.0019	mg/Kg		Q	1	6020/DOD
Copper	17	0.16	0.048	0.027	mg/Kg		Q	1	6020/DOD
Iron	24000	4.0	1.6	0.87	mg/Kg			1	6020/DOD
Magnesium	2300	8.1	1.6	0.87	mg/Kg			1	6020/DOD
Manganese	210	0.40	0.024	0.013	mg/Kg		Q	1	6020/DOD
Sodium	37	8.1	4.0	2.1	mg/Kg			1	6020/DOD
Nickel	20	0.081	0.024	0.0091	mg/Kg			1	6020/DOD
Lead	13	0.081	0.024	0.012	mg/Kg		Q	1	6020/DOD
Antimony	0.081	0.16	0.081	0.037	mg/Kg	U		1	6020/DOD
Thallium	0.16	0.081	0.016	0.0082	mg/Kg		Q	1	6020/DOD
Vanadium	20	0.081	0.048	0.024	mg/Kg			1	6020/DOD
Zinc	72	0.40	0.16	0.052	mg/Kg		Q	1	6020/DOD
Potassium	840	8.1	4.8	2.5	mg/Kg			1	6020/DOD
Selenium	0.41	0.40	0.081	0.041	mg/Kg			1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0117M-0001-SO
Lab Sample ID: 240-22660-28
Lab Name: TestAmerica Pittsburgh
Job No.: 240-22660-1
SDG ID.:
Matrix: Solid
Date Sampled: 03/23/2013 11:16
Reporting Basis: WET
Date Received: 04/02/2013 08:54

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Silver	0.034	0.087	0.026	0.0099	mg/Kg	J	Q	1	6020/DOD
Aluminum	8600	2.6	0.52	0.25	mg/Kg			1	6020/DOD
Arsenic	9.9	0.087	0.043	0.016	mg/Kg			1	6020/DOD
Barium	72	0.87	0.017	0.0093	mg/Kg		Q	1	6020/DOD
Beryllium	0.63	0.087	0.0087	0.0065	mg/Kg		Q	1	6020/DOD
Calcium	930	8.7	2.2	1.2	mg/Kg			1	6020/DOD
Cadmium	0.19	0.087	0.026	0.011	mg/Kg		Q	1	6020/DOD
Chromium	19	0.17	0.035	0.019	mg/Kg			1	6020/DOD
Cobalt	13	0.043	0.0087	0.0021	mg/Kg		Q	1	6020/DOD
Copper	18	0.17	0.052	0.029	mg/Kg		Q	1	6020/DOD
Iron	27000	4.3	1.7	0.94	mg/Kg			1	6020/DOD
Magnesium	3100	8.7	1.7	0.94	mg/Kg			1	6020/DOD
Manganese	520	0.43	0.026	0.014	mg/Kg		Q	1	6020/DOD
Sodium	67	8.7	4.3	2.3	mg/Kg			1	6020/DOD
Nickel	35	0.087	0.026	0.0098	mg/Kg			1	6020/DOD
Lead	13	0.087	0.026	0.013	mg/Kg		Q	1	6020/DOD
Antimony	0.087	0.17	0.087	0.040	mg/Kg	U		1	6020/DOD
Thallium	0.14	0.087	0.017	0.0089	mg/Kg		Q	1	6020/DOD
Vanadium	15	0.087	0.052	0.026	mg/Kg			1	6020/DOD
Zinc	70	0.43	0.17	0.056	mg/Kg		Q	1	6020/DOD
Potassium	1000	8.7	5.2	2.7	mg/Kg			1	6020/DOD
Selenium	0.38	0.43	0.087	0.044	mg/Kg	J		1	6020/DOD

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00352

Analyte	ICV 240-81478/7-A 04/11/2013 10:30				CCV 240-81478/10-A 04/11/2013 10:51				CCV 240-81478/10-A 04/11/2013 11:06			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.55		2.50	102	5.09		5.00	102	5.10		5.00	102

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

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00352

Analyte	CCV 240-81478/10-A 04/11/2013 11:24				CCV 240-81478/10-A 04/11/2013 11:42							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.16		5.00	103	5.11		5.00	102				

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00355

Analyte	ICV 240-82099/7-A 04/16/2013 11:15				CCV 240-82099/10-A 04/16/2013 11:51				CCV 240-82099/10-A 04/16/2013 12:07			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.52		2.50	101	4.98		5.00	100	4.98		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.

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00355

Analyte	CCV 240-82099/10-A 04/16/2013 12:25											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.95		5.00	99								

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00352

Analyte	ICV 240-81478/7-A 04/12/2013 09:17				CCV 240-81478/10-A 04/12/2013 11:37				CCV 240-81478/10-A 04/12/2013 12:00			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.63		2.50	105	4.47		5.00	89	5.07		5.00	101

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00352

Analyte	CCV 240-81478/10-A 04/12/2013 12:25				CCV 240-81478/10-A 04/12/2013 12:50							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.17		5.00	103	5.29		5.00	106				

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.: 240-22660-1

SDG No.:

ICV Source: MICVX_00003 Concentration Units: ug/L

CCV Source: CCVHL1_00002

Analyte	ICV 180-70561/5 04/30/2013 20:08				CCV 180-70561/11 04/30/2013 20:58							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	400		400	100	475000		500000	95				
Barium	76.7		80.0	96	16100		15000	107				
Chromium	81.3		80.0	102	21400		20000	107				
Copper	83.3		80.0	104	20400		20000	102				
Iron	19700		20000	98	517000		500000	103				
Lead	77.6		80.0	97	21000		20000	105				
Manganese	381		400	95	20800		20000	104				
Nickel	82.5		80.0	103	10700		10000	107				
Zinc	82.6		80.0	103	20800		20000	104				

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

ICV Source: MICVX_00003 Concentration Units: ug/L

CCV Source: CCVHL2_00002

Analyte	ICV 180-70561/5 04/30/2013 20:08				CCV 180-70561/12 04/30/2013 21:06							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	37300		40000	93	975000		1000000	98				
Magnesium	39000		40000	97	928000		1000000	93				
Potassium	40000		40000	100	484000		500000	97				
Sodium	39300		40000	98	477000		500000	95				

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.: 240-22660-1

SDG No.:

ICV Source: MICVX_00003 Concentration Units: ug/L

CCV Source: MCCV1X_00041

Analyte	ICV 180-70561/5 04/30/2013 20:08				CCV 180-70561/13 04/30/2013 21:14				CCV 180-70561/25 04/30/2013 22:53			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	400		400	100	481		500	96	487		500	97
Antimony	77.4		80.0	97	95.4		100	95	95.2		100	95
Arsenic	81.3		80.0	102	101		100	101	101		100	101
Barium	76.7		80.0	96	95.6		100	96	95.8		100	96
Beryllium	79.3		80.0	99	100		100	100	101		100	101
Cadmium	77.0		80.0	96	97.9		100	98	99.0		100	99
Calcium	37300		40000	93	47000		50000	94	46000		50000	92
Chromium	81.3		80.0	102	98.2		100	98	99.2		100	99
Cobalt	81.6		80.0	102	98.9		100	99	101		100	101
Copper	83.3		80.0	104	103		100	103	103		100	103
Iron	19700		20000	98	24600		25000	99	24900		25000	100
Lead	77.6		80.0	97	95.8		100	96	96.9		100	97
Magnesium	39000		40000	97	49100		50000	98	49600		50000	99
Manganese	381		400	95	461		500	92	471		500	94
Nickel	82.5		80.0	103	101		100	101	103		100	103
Potassium	40000		40000	100	48700		50000	97	49500		50000	99
Selenium	81.1		80.0	101	99.1		100	99	100		100	100
Silver	76.6		80.0	96	98.6		100	99	99.3		100	99
Sodium	39300		40000	98	48800		50000	98	49300		50000	99
Thallium	79.9		80.0	100	95.7		100	96	97.0		100	97
Vanadium	81.9		80.0	102	97.6		100	98	98.4		100	98
Zinc	82.6		80.0	103	100		100	100	101		100	101

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

ICV Source: MICVX_00003 Concentration Units: ug/L

CCV Source: MCCV1X_00041

Analyte	CCV 180-70561/37 05/01/2013 00:31				CCV 180-70561/49 05/01/2013 02:09				CCV 180-70561/61 05/01/2013 03:48			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	488		500	98	492		500	98	494		500	99
Antimony	96.4		100	96	95.1		100	95	95.0		100	95
Arsenic	102		100	102	101		100	101	101		100	101
Barium	97.7		100	98	96.8		100	97	97.9		100	98
Beryllium	99.5		100	100	100		100	100	102		100	102
Cadmium	98.7		100	99	97.0		100	97	98.5		100	99
Calcium	45400		50000	91	45500		50000	91	45800		50000	92
Chromium	97.8		100	98	97.8		100	98	98.6		100	99
Cobalt	99.4		100	99	99.0		100	99	99.8		100	100
Copper	102		100	102	101		100	101	102		100	102
Iron	24700		25000	99	24500		25000	98	24700		25000	99
Lead	97.4		100	97	96.5		100	96	96.8		100	97
Magnesium	49400		50000	99	49100		50000	98	49200		50000	98
Manganese	465		500	93	463		500	93	467		500	93
Nickel	101		100	101	99.7		100	100	102		100	102
Potassium	48700		50000	97	48900		50000	98	49200		50000	98
Selenium	102		100	102	102		100	102	100		100	100
Silver	99.1		100	99	99.1		100	99	99.4		100	99
Sodium	49300		50000	99	49100		50000	98	49300		50000	99
Thallium	97.5		100	97	96.5		100	97	97.1		100	97
Vanadium	96.8		100	97	97.1		100	97	97.7		100	98
Zinc	99.3		100	99	98.9		100	99	99.4		100	99

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.: 240-22660-1

SDG No.:

ICV Source: MICVX_00003 Concentration Units: ug/L

CCV Source: MCCV1X_00041

Analyte	CCV 180-70561/65 05/01/2013 04:21				CCV 180-70561/77 05/01/2013 06:00							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	504		500	101	510		500	102				
Antimony	95.6		100	96	96.6		100	97				
Arsenic	102		100	102	97.3		100	97				
Barium	98.3		100	98	99.9		100	100				
Beryllium	101		100	101	98.6		100	99				
Cadmium	98.2		100	98	97.0		100	97				
Calcium	46000		50000	92	46100		50000	92				
Chromium	98.8		100	99	99.1		100	99				
Cobalt	101		100	101	100		100	100				
Copper	103		100	103	100		100	100				
Iron	24700		25000	99	24800		25000	99				
Lead	95.0		100	95	99.0		100	99				
Magnesium	49700		50000	99	49600		50000	99				
Manganese	468		500	94	473		500	95				
Nickel	103		100	103	100		100	100				
Potassium	49800		50000	100	50000		50000	100				
Selenium	102		100	102	92.9		100	93				
Silver	99.8		100	100	102		100	102				
Sodium	49700		50000	99	49400		50000	99				
Thallium	95.6		100	96	99.1		100	99				
Vanadium	97.7		100	98	99.8		100	100				
Zinc	100		100	100	94.3		100	94				

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 Canton Job No.: 240-22660-1

SDG No.:

Method: 7471/DOD Instrument ID: H1

Lab Sample ID: CRA 240-81478/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00352

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.189	J	94	

Lab Sample ID: CRA 240-81478/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00352

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.177	J	89	

Lab Sample ID: CRA 240-82099/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00355

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.189	J	95	

Lab Sample ID: CRA 240-82099/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00355

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.164	J	82	

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 Canton Job No.: 240-22660-1

SDG No.:

Method: 7471/DOD Instrument ID: H4

Lab Sample ID: CRA 240-81478/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00352

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.228		114	

Lab Sample ID: CRA 240-81478/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00352

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.234		117	

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.: 240-22660-1

SDG No.:

Method: 6020/DOD Instrument ID: M

Lab Sample ID: CRI 180-70561/7 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00032

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	1.00	0.963	J	96	80-120
Aluminum	30.0	32.9		110	80-120
Arsenic	1.00	1.10		110	80-120
Barium	10.0	9.43	J	94	80-120
Beryllium	1.00	1.01		101	80-120
Calcium	100	94.6	J	95	80-120
Cadmium	1.00	1.06		106	80-120
Chromium	2.00	1.91	J	96	80-120
Cobalt	0.500	0.508		102	80-120
Copper	2.00	2.13		106	80-120
Iron	50.0	52.8		106	80-120
Magnesium	100	99.3	J	99	80-120
Manganese	5.00	5.39		108	80-120
Sodium	100	92.0	J	92	80-120
Nickel	1.00	1.06		106	80-120
Lead	1.00	0.916	J	92	80-120
Antimony	2.00	1.91	J	96	80-120
Thallium	1.00	0.892	J	89	80-120
Vanadium	1.00	0.925	J	93	80-120
Zinc	5.00	5.31		106	80-120
Potassium	100	96.3	J	96	80-120
Selenium	5.00	5.31		106	80-120

Lab Sample ID: CRI 180-70561/104 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00032

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	1.00	0.957	J	96	80-120
Aluminum	30.0	35.8		119	80-120
Arsenic	1.00	1.19		119	80-120
Barium	10.0	9.02	J	90	80-120
Beryllium	1.00	0.811	J	81	80-120
Calcium	100	92.8	J	93	80-120
Cadmium	1.00	0.820	J	82	80-120
Chromium	2.00	1.68	J	84	80-120

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.: 240-22660-1

SDG No.:

Method: 6020/DOD Instrument ID: M

Lab Sample ID: CRI 180-70561/104 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00032

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	0.500	0.464	J	93	80-120
Copper	2.00	1.85	J	93	80-120
Iron	50.0	52.4		105	80-120
Magnesium	100	96.9	J	97	80-120
Manganese	5.00	5.14		103	80-120
Sodium	100	92.1	J	92	80-120
Nickel	1.00	0.925	J	92	80-120
Lead	1.00	0.887	J	89	80-120
Antimony	2.00	1.93	J	96	80-120
Thallium	1.00	0.838	J	84	80-120
Vanadium	1.00	0.810	J	81	80-120
Zinc	5.00	3.68	J	74	80-120
Potassium	100	106		106	80-120
Selenium	5.00	4.27	J	85	80-120

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 Canton Job No.: 240-22660-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-81478/8-A 04/11/2013 10:32		CCB 240-81478/11-A 04/11/2013 10:53		CCB 240-81478/11-A 04/11/2013 11:08		CCB 240-81478/11-A 04/11/2013 11:26	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-81478/11-A 04/11/2013 11:44							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-82099/8-A 04/16/2013 11:16		CCB 240-82099/11-A 04/16/2013 11:52		CCB 240-82099/11-A 04/16/2013 12:09		CCB 240-82099/11-A 04/16/2013 12:28	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-81478/8-A 04/12/2013 09:19		CCB 240-81478/11-A 04/12/2013 11:39		CCB 240-81478/11-A 04/12/2013 12:02		CCB 240-81478/11-A 04/12/2013 12:27	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-81478/11-A 04/12/2013 12:51							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-70561/6 04/30/2013 20:16		CCB1 180-70561/14 04/30/2013 21:23		CCB2 180-70561/26 04/30/2013 23:01		CCB3 180-70561/38 05/01/2013 00:39	
		Found	C	Found	C	Found	C	Found	C
Aluminum	30	2.96	J	4.00	J	3.98	J	4.83	J
Antimony	2.0	0.90	U	0.90	U	0.90	U	0.90	U
Arsenic	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Barium	10	0.15	U	0.0980	J	0.15	U	0.15	U
Beryllium	1.0	0.090	U	0.090	U	0.090	U	0.090	U
Cadmium	1.0	0.30	U	0.30	U	0.30	U	0.30	U
Calcium	100	20	U	10.8	J	20	U	10.4	J
Chromium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Cobalt	0.50	0.050	U	0.050	U	0.050	U	0.0340	J
Copper	2.0	0.50	U	0.50	U	0.50	U	0.50	U
Iron	50	20	U	20	U	20	U	11.9	J
Lead	1.0	0.30	U	0.30	U	0.30	U	0.30	U
Magnesium	100	22	U	22	U	22	U	12.5	J
Manganese	5.0	0.656	J	0.785	J	0.745	J	0.766	J
Nickel	1.0	0.35	U	0.35	U	0.35	U	0.35	U
Potassium	100	60	U	60	U	60	U	60	U
Selenium	5.0	0.705	J	1.0	U	1.0	U	1.0	U
Silver	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Sodium	100	55	U	55	U	55	U	55	U
Thallium	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Vanadium	1.0	0.60	U	0.60	U	0.60	U	0.60	U
Zinc	5.0	2.0	U	2.0	U	2.0	U	2.0	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB4 180-70561/50 05/01/2013 02:18		CCB5 180-70561/62 05/01/2013 03:56		CCB6 180-70561/66 05/01/2013 04:29		CCB7 180-70561/78 05/01/2013 06:08	
		Found	C	Found	C	Found	C	Found	C
Aluminum	30	4.90	J	4.90	J	3.57	J	6.17	J
Antimony	2.0	0.90	U	0.90	U	0.90	U	0.90	U
Arsenic	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Barium	10	0.104	J	0.104	J	0.15	U	0.154	J
Beryllium	1.0	0.090	U	0.090	U	0.090	U	0.090	U
Cadmium	1.0	0.30	U	0.30	U	0.30	U	0.30	U
Calcium	100	12.0	J	10.4	J	11.1	J	19.5	J
Chromium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Cobalt	0.50	0.0360	J	0.0360	J	0.0330	J	0.0570	J
Copper	2.0	0.50	U	0.50	U	0.50	U	0.50	U
Iron	50	12.0	J	20	U	20	U	11.4	J
Lead	1.0	0.30	U	0.30	U	0.30	U	0.30	U
Magnesium	100	13.0	J	12.7	J	12.7	J	16.7	J
Manganese	5.0	0.803	J	0.677	J	0.653	J	0.949	J
Nickel	1.0	0.35	U	0.35	U	0.35	U	0.35	U
Potassium	100	60	U	60	U	60	U	60	U
Selenium	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Silver	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Sodium	100	55	U	55	U	55	U	55	U
Thallium	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Vanadium	1.0	0.60	U	0.60	U	0.60	U	0.60	U
Zinc	5.0	2.0	U	2.0	U	2.0	U	2.0	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-81357/1-A

Instrument Code: H1 Batch No.: 81523

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471_DOD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-81545/1-A

Instrument Code: H4 Batch No.: 81798

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471_DOD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-81976/1-A

Instrument Code: H1 Batch No.: 82289

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471_DOD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 180-68898/1-A

Instrument Code: M Batch No.: 70561

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	0.020	U	Q	6020_DoD
7429-90-5	Aluminum	0.40	U		6020_DoD
7440-38-2	Arsenic	0.033	U		6020_DoD
7440-39-3	Barium	0.00807	J	Q	6020_DoD
7440-41-7	Beryllium	0.0067	U	Q	6020_DoD
7440-70-2	Calcium	1.44	J		6020_DoD
7440-43-9	Cadmium	0.020	U	Q	6020_DoD
7440-47-3	Chromium	0.027	U		6020_DoD
7440-48-4	Cobalt	0.0067	U	Q	6020_DoD
7440-50-8	Copper	0.040	U	Q	6020_DoD
7439-89-6	Iron	1.3	U		6020_DoD
7439-95-4	Magnesium	1.3	U		6020_DoD
7439-96-5	Manganese	0.0112	J	Q	6020_DoD
7440-23-5	Sodium	3.3	U		6020_DoD
7440-02-0	Nickel	0.020	U		6020_DoD
7439-92-1	Lead	0.020	U	Q	6020_DoD
7440-36-0	Antimony	0.067	U		6020_DoD
7440-28-0	Thallium	0.013	U	Q	6020_DoD
7440-62-2	Vanadium	0.040	U		6020_DoD
7440-66-6	Zinc	0.0461	J	Q	6020_DoD
7440-09-7	Potassium	4.0	U		6020_DoD
7782-49-2	Selenium	0.067	U		6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 180-68991/1-A

Instrument Code: M Batch No.: 70561

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	0.028	U	Q	6020_DoD
7429-90-5	Aluminum	0.56	U		6020_DoD
7440-38-2	Arsenic	0.046	U		6020_DoD
7440-39-3	Barium	0.019	U	Q	6020_DoD
7440-41-7	Beryllium	0.0093	U	Q	6020_DoD
7440-70-2	Calcium	1.67	J		6020_DoD
7440-43-9	Cadmium	0.028	U	Q	6020_DoD
7440-47-3	Chromium	0.037	U		6020_DoD
7440-48-4	Cobalt	0.0093	U	Q	6020_DoD
7440-50-8	Copper	0.056	U	Q	6020_DoD
7439-89-6	Iron	1.9	U		6020_DoD
7439-95-4	Magnesium	1.9	U		6020_DoD
7439-96-5	Manganese	0.028	U	Q	6020_DoD
7440-23-5	Sodium	4.6	U		6020_DoD
7440-02-0	Nickel	0.028	U		6020_DoD
7439-92-1	Lead	0.028	U	Q	6020_DoD
7440-36-0	Antimony	0.093	U		6020_DoD
7440-28-0	Thallium	0.019	U	Q	6020_DoD
7440-62-2	Vanadium	0.056	U		6020_DoD
7440-66-6	Zinc	0.19	U	Q	6020_DoD
7440-09-7	Potassium	5.6	U		6020_DoD
7782-49-2	Selenium	0.093	U		6020_DoD

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Lab Sample ID: ICSA 180-70561/9 Instrument ID: M

Lab File ID: M30430A.xml ICS Source: MICSAX_00029

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**100000**	**102100**	**102**
Antimony		**0.490**	
Arsenic		**0.366**	
Barium		**0.793**	
Beryllium		**0.260**	
Cadmium		**0.545**	
Calcium	**100000**	**108500**	**109**
Chromium		**0.0180**	
Cobalt		**0.350**	
Copper		**1.63**	
Iron	**100000**	**106700**	**107**
Lead		**0.494**	
Magnesium	**100000**	**103000**	**103**
Manganese		**0.799**	
Nickel		**0.211**	
Potassium	**100000**	**106100**	**106**
Selenium		**0.864**	
Silver		**0.281**	
Sodium	**100000**	**103500**	**104**
Thallium		**0.237**	
Vanadium		**-0.446**	
Zinc		**4.09**	
Boron		*0.890*	
Molybdenum	*2000*	*2127*	*106*
Silicon		*31.9*	
Strontium		*5.05*	
Tin		*1.62*	
Titanium	*2000*	*2389*	*119*

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.: 240-22660-1

SDG No.:

Lab Sample ID: ICSAB 180-70561/10 Instrument ID: M

Lab File ID: M30430A.xml ICS Source: MICSABX_00033

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**100000**	**93513**	**94**
Antimony	**20.0**	**19.7**	**99**
Arsenic	**20.0**	**20.9**	**105**
Barium	**20.0**	**20.4**	**102**
Beryllium	**20.0**	**19.2**	**96**
Cadmium	**20.0**	**19.8**	**99**
Calcium	**100000**	**100533**	**101**
Chromium	**20.0**	**19.8**	**99**
Cobalt	**20.0**	**19.6**	**98**
Copper	**20.0**	**20.3**	**102**
Iron	**100000**	**100550**	**101**
Lead	**20.0**	**20.5**	**102**
Magnesium	**100000**	**95217**	**95**
Manganese	**22.5**	**19.9**	**89**
Nickel	**20.0**	**19.2**	**96**
Potassium	**100000**	**97597**	**98**
Selenium	**50.0**	**49.4**	**99**
Silver	**20.0**	**19.2**	**96**
Sodium	**100000**	**96103**	**96**
Thallium	**20.0**	**20.0**	**100**
Vanadium	**20.0**	**19.7**	**98**
Zinc	**25.0**	**23.4**	**94**
Boron	*50.0*	*45.1*	*90*
Molybdenum	*2000*	*2155*	*108*
Silicon	*500*	*493*	*99*
Strontium	*25.0*	*25.3*	*101*
Tin	*100*	*99.5*	*100*
Titanium	*2000*	*2203*	*110*

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SB-0082M-0001,0002-SO MS Lab ID: 240-22660-6 MS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.207		0.016	J	0.185	112	80-120		7471/DOD

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SB-0091M-0001,0002-SO MS Lab ID: 240-22660-15 MS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.213		0.036	J	0.179	99	80-120		7471/DOD

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SB-0082M-0001,0002-SO MS Lab ID: 240-22660-6 MS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	4.41		0.014	J	4.95	89	75-125	Q	6020/DOD
Aluminum	9980		7100		198	1465	70-130	4	6020/DOD
Arsenic	12.8		9.0		3.96	96	23-131		6020/DOD
Barium	202		24		198	90	10-199	Q	6020/DOD
Beryllium	4.42		0.31		4.95	83	58-112	Q	6020/DOD
Calcium	4330		250		4950	82	70-130		6020/DOD
Cadmium	4.33		0.12		4.95	85	58-110	Q	6020/DOD
Chromium	28.9		9.2		19.8	99	10-199		6020/DOD
Cobalt	50.5		6.1		49.5	90	55-110	Q	6020/DOD
Copper	39.5		17		24.8	90	10-199	Q	6020/DOD
Iron	17900		17000		99.0	528	70-130	4	6020/DOD
Magnesium	6200		1600		4950	93	70-130		6020/DOD
Manganese	257		220		49.5	74	10-199	Q 4	6020/DOD
Sodium	4540		26		4950	91	70-130		6020/DOD
Nickel	57.6		13		49.5	90	10-176		6020/DOD
Lead	14.1		12		1.98	98	10-199	Q 4	6020/DOD
Antimony	22.8		0.24		49.5	46	75-125	J	6020/DOD
Thallium	4.74		0.10		4.95	94	82-110	Q	6020/DOD
Vanadium	60.2		11		49.5	99	39-129		6020/DOD
Zinc	86.4		45		49.5	84	10-199	Q	6020/DOD
Potassium	5060		610		4950	90	70-130		6020/DOD
Selenium	0.916		0.26	J	0.990	66	39-116		6020/DOD

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SB-0091M-0001,0002-SO MS Lab ID: 240-22660-15 MS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	3.71		0.032	J	4.31	85	75-125	Q	6020/DOD
Aluminum	13700		9100		172	2669	70-130	4	6020/DOD
Arsenic	8.72		6.1		3.45	76	23-131		6020/DOD
Barium	226		60		172	97	10-199	Q	6020/DOD
Beryllium	4.18		0.52		4.31	85	58-112	Q	6020/DOD
Calcium	5740		2400		4310	77	70-130		6020/DOD
Cadmium	3.73		0.11		4.31	84	58-110	Q	6020/DOD
Chromium	35.7		16		17.2	115	10-199		6020/DOD
Cobalt	53.2		13		43.1	92	55-110	Q	6020/DOD
Copper	32.0		12		21.6	91	10-199	Q	6020/DOD
Iron	22400		21000		86.2	1345	70-130	4	6020/DOD
Magnesium	6330		2100		4310	99	70-130		6020/DOD
Manganese	601		540		43.1	147	10-199	Q 4	6020/DOD
Sodium	4080		49		4310	94	70-130		6020/DOD
Nickel	58.3		18		43.1	93	10-176		6020/DOD
Lead	17.5		15		1.72	159	10-199	Q 4	6020/DOD
Antimony	13.6		0.088	U	43.1	31	75-125	J	6020/DOD
Thallium	4.28		0.13		4.31	96	82-110	Q	6020/DOD
Vanadium	62.5		18		43.1	102	39-129		6020/DOD
Zinc	76.9		38		43.1	90	10-199	Q	6020/DOD
Potassium	4750		750		4310	93	70-130		6020/DOD
Selenium	0.853		0.37	J	0.862	56	39-116		6020/DOD

SSR = Spiked Sample Result

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

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SB-0082M-0001,0002-SO PDS Lab ID: 240-22660-6 PDS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	5.11		0.014	J	4.85	105	80-120	Q	6020/DOD
Aluminum	6850		7100		194	-117	80-120		6020/DOD
Arsenic	12.3		9.0		3.88	85	80-120		6020/DOD
Barium	216		24		194	99	80-120	Q	6020/DOD
Beryllium	4.69		0.31		4.85	90	80-120	Q	6020/DOD
Calcium	4530		250		4850	88	80-120		6020/DOD
Cadmium	4.72		0.12		4.85	95	80-120	Q	6020/DOD
Chromium	28.2		9.2		19.4	98	80-120		6020/DOD
Cobalt	55.4		6.1		48.5	102	80-120	Q	6020/DOD
Copper	40.9		17		24.3	97	80-120	Q	6020/DOD
Iron	16800		17000		97.1	-580	80-120		6020/DOD
Magnesium	6120		1600		4850	93	80-120		6020/DOD
Manganese	261		220		48.5	84	80-120	Q	6020/DOD
Sodium	4750		26		4850	97	80-120		6020/DOD
Nickel	61.0		13		48.5	99	80-120		6020/DOD
Lead	14.0		12		1.94	97	80-120	Q	6020/DOD
Antimony	44.8		0.24		48.5	92	80-120		6020/DOD
Thallium	5.22		0.10		4.85	105	80-120	Q	6020/DOD
Vanadium	59.6		11		48.5	99	80-120		6020/DOD
Zinc	86.6		45		48.5	87	80-120	Q	6020/DOD
Potassium	5140		610		4850	93	80-120		6020/DOD
Selenium	1.14		0.26	J	0.971	90	80-120		6020/DOD

SSR = Spiked Sample Result

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

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SB-0091M-0001,0002-SO PDS Lab ID: 240-22660-15 PDS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	4.64		0.032	J	4.39	105	80-120	Q	6020/DOD
Aluminum	8940		9100		175	-70	80-120		6020/DOD
Arsenic	9.32		6.1		3.51	92	80-120		6020/DOD
Barium	234		60		175	100	80-120	Q	6020/DOD
Beryllium	4.54		0.52		4.39	92	80-120	Q	6020/DOD
Calcium	6990		2400		4390	104	80-120		6020/DOD
Cadmium	4.19		0.11		4.39	93	80-120	Q	6020/DOD
Chromium	33.9		16		17.5	103	80-120		6020/DOD
Cobalt	59.2		13		43.9	104	80-120	Q	6020/DOD
Copper	34.5		12		21.9	101	80-120	Q	6020/DOD
Iron	21100		21000		87.7	-220	80-120		6020/DOD
Magnesium	6340		2100		4390	97	80-120		6020/DOD
Manganese	577		540		43.9	89	80-120	Q	6020/DOD
Sodium	4540		49		4390	102	80-120		6020/DOD
Nickel	63.4		18		43.9	103	80-120		6020/DOD
Lead	16.4		15		1.75	95	80-120	Q	6020/DOD
Antimony	39.3		0.088	U	43.9	90	80-120		6020/DOD
Thallium	4.85		0.13		4.39	107	80-120	Q	6020/DOD
Vanadium	64.7		18		43.9	106	80-120		6020/DOD
Zinc	76.1		38		43.9	87	80-120	Q	6020/DOD
Potassium	5120		750		4390	100	80-120		6020/DOD
Selenium	1.11		0.37	J	0.877	84	80-120		6020/DOD

SSR = Spiked Sample Result

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

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: 079SB-0082M-0001,0002-SO DU Lab ID: 240-22660-6 DU

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

% Solids for Sample: % Solids for Duplicate:

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.11	0.016	J	0.037	U	NC		7471/DOD

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

FORM VI-IN

6-IN
DUPLICATES
METALS

Client ID: 079SB-0091M-0001,0002-SO DU Lab ID: 240-22660-15 DU

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

% Solids for Sample: % Solids for Duplicate:

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.11	0.036	J	0.0339	J	6		7471/DOD

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

FORM VI-IN

6-IN
DUPLICATES
METALS

Client ID: 079SB-0082M-0001,0002-SO DU Lab ID: 240-22660-6 DU

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

% Solids for Sample: % Solids for Duplicate:

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Silver	0.10	0.014	J	0.0154	J	6	Q	6020/DOD
Aluminum	3.0	7100		7150		1		6020/DOD
Arsenic	0.10	9.0		8.70		3		6020/DOD
Barium	1.0	24		23.5		0.1	Q	6020/DOD
Beryllium	0.10	0.31		0.337		7	Q	6020/DOD
Calcium	10	250		245		2		6020/DOD
Cadmium	0.10	0.12		0.113		7	Q	6020/DOD
Chromium	0.20	9.2		9.19		0.3		6020/DOD
Cobalt	0.050	6.1		5.98		2	Q	6020/DOD
Copper	0.20	17		17.1		1	Q	6020/DOD
Iron	5.0	17000		17600		1		6020/DOD
Magnesium	10	1600		1620		2		6020/DOD
Manganese	0.50	220		211		4	Q	6020/DOD
Sodium	10	26		24.4		5		6020/DOD
Nickel	0.10	13		13.0		0.8		6020/DOD
Lead	0.10	12		11.7		4	Q	6020/DOD
Antimony	0.20	0.24		0.226		5		6020/DOD
Thallium	0.10	0.10		0.0954	J	6	Q	6020/DOD
Vanadium	0.10	11		11.5		0.5		6020/DOD
Zinc	0.50	45		44.2		0.8	Q	6020/DOD
Potassium	10	610		606		0.7		6020/DOD
Selenium	0.50	0.26	J	0.288	J	8		6020/DOD

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

FORM VI-IN

6-IN
DUPLICATES
METALS

Client ID: 079SB-0091M-0001,0002-SO DU Lab ID: 240-22660-15 DU

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

% Solids for Sample: % Solids for Duplicate:

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Silver	0.089	0.032	J	0.0304	J	6	Q	6020/DOD
Aluminum	2.7	9100		9460		4		6020/DOD
Arsenic	0.089	6.1		6.28		3		6020/DOD
Barium	0.89	60		67.9		13	Q	6020/DOD
Beryllium	0.089	0.52		0.547		4	Q	6020/DOD
Calcium	8.9	2400		1460		50	J	6020/DOD
Cadmium	0.089	0.11		0.115		4	Q	6020/DOD
Chromium	0.18	16		16.4		3		6020/DOD
Cobalt	0.045	13		14.0		4	Q	6020/DOD
Copper	0.18	12		13.4		8	Q	6020/DOD
Iron	4.5	21000		21600		1		6020/DOD
Magnesium	8.9	2100		2140		3		6020/DOD
Manganese	0.45	540		550		2	Q	6020/DOD
Sodium	8.9	49		49.3		1		6020/DOD
Nickel	0.089	18		19.2		4		6020/DOD
Lead	0.089	15		14.9		0.9	Q	6020/DOD
Antimony	0.18	0.088	U	0.089	U	NC		6020/DOD
Thallium	0.089	0.13		0.141		6	Q	6020/DOD
Vanadium	0.089	18		18.4		0.1		6020/DOD
Zinc	0.45	38		39.7		4	Q	6020/DOD
Potassium	8.9	750		812		8		6020/DOD
Selenium	0.45	0.37	J	0.343	J	8		6020/DOD

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-81357/2-A

Lab Name: TestAmerica Canton Job No.: 240-22660-1

Sample Matrix: Solid LCS Source: MTHGCALW_00351

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.827		99	80	120		7471/DOD

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 240-81545/2-A

Lab Name: TestAmerica Canton Job No.: 240-22660-1

Sample Matrix: Solid LCS Source: MTHGCALW_00352

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.783		94	80	120		7471/DOD

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 240-81976/2-A

Lab Name: TestAmerica Canton Job No.: 240-22660-1

Sample Matrix: Solid LCS Source: MTHGCALW_00354

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.837		100	80	120		7471/DOD

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 180-68898/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

Sample Matrix: Solid LCS Source: MTAPITTICPMS_00014

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Silver	4.85	4.42		91	60	114	Q	6020/DOD
Aluminum	194	186		96	80	120		6020/DOD
Arsenic	3.88	3.25		84	73	110		6020/DOD
Barium	194	180		93	70	110	Q	6020/DOD
Beryllium	4.85	4.18		86	79	110	Q	6020/DOD
Calcium	4850	4310		89	80	120		6020/DOD
Cadmium	4.85	4.20		87	74	110	Q	6020/DOD
Chromium	19.4	18.6		96	70	110		6020/DOD
Cobalt	48.5	46.9		97	74	110	Q	6020/DOD
Copper	24.3	24.1		99	73	110	Q	6020/DOD
Iron	97.1	94.4		97	80	120		6020/DOD
Magnesium	4850	4630		95	80	120		6020/DOD
Manganese	48.5	44.2		91	80	120	Q	6020/DOD
Sodium	4850	4630		95	80	120		6020/DOD
Nickel	48.5	47.4		98	75	110		6020/DOD
Lead	1.94	1.84		95	75	110	Q	6020/DOD
Antimony	48.5	42.1		87	68	113		6020/DOD
Thallium	4.85	4.54		94	71	110	Q	6020/DOD
Vanadium	48.5	46.8		96	72	110		6020/DOD
Zinc	48.5	40.8		84	72	113	Q	6020/DOD
Potassium	4850	4590		95	80	120		6020/DOD
Selenium	0.971	0.858		88	65	110		6020/DOD

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 180-68991/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

Sample Matrix: Solid LCS Source: MTAPITTICPMS_00014

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Silver	4.13	4.00		97	60	114	Q	6020/DOD
Aluminum	165	168		102	80	120		6020/DOD
Arsenic	3.31	2.86		86	73	110		6020/DOD
Barium	165	159		96	70	110	Q	6020/DOD
Beryllium	4.13	3.69		89	79	110	Q	6020/DOD
Calcium	4130	3870		94	80	120		6020/DOD
Cadmium	4.13	3.69		89	74	110	Q	6020/DOD
Chromium	16.5	16.6		101	70	110		6020/DOD
Cobalt	41.3	42.1		102	74	110	Q	6020/DOD
Copper	20.7	21.4		104	73	110	Q	6020/DOD
Iron	82.6	83.3		101	80	120		6020/DOD
Magnesium	4130	4110		99	80	120		6020/DOD
Manganese	41.3	39.4		95	80	120	Q	6020/DOD
Sodium	4130	4170		101	80	120		6020/DOD
Nickel	41.3	42.3		102	75	110		6020/DOD
Lead	1.65	1.67		101	75	110	Q	6020/DOD
Antimony	41.3	36.2		88	68	113		6020/DOD
Thallium	4.13	4.13		100	71	110	Q	6020/DOD
Vanadium	41.3	42.1		102	72	110		6020/DOD
Zinc	41.3	35.5		86	72	113	Q	6020/DOD
Potassium	4130	4110		99	80	120		6020/DOD
Selenium	0.826	0.738		89	65	110		6020/DOD

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

FORM VIIA - IN

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

Lab ID: 240-22660-6

SDG No:

Lab Name: TestAmerica Pittsburgh Job No: 240-22660-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	0.014	J	0.15	U	NC	Q	6020/DOD
Aluminum	7100		6870		3.0	D	6020/DOD
Arsenic	9.0		9.02		0.75	D	6020/DOD
Barium	24		23.2		1.3	D Q	6020/DOD
Beryllium	0.31		0.337	J	NC	D Q	6020/DOD
Calcium	250		253		1.5	D	6020/DOD
Cadmium	0.12		0.123	J	NC	D Q	6020/DOD
Chromium	9.2		9.04		2.0	D	6020/DOD
Cobalt	6.1		5.79		4.9	D Q	6020/DOD
Copper	17		17.0		1.5	D Q	6020/DOD
Iron	17000		17000		2.5	D	6020/DOD
Magnesium	1600		1480		6.5	D	6020/DOD
Manganese	220		207		6.1	D Q	6020/DOD
Sodium	26		26.3	J	NC	D	6020/DOD
Nickel	13		12.6		2.4	D	6020/DOD
Lead	12		11.8		2.4	D Q	6020/DOD
Antimony	0.24		0.256	J	NC	D	6020/DOD
Thallium	0.10		0.0951	J	NC	D Q	6020/DOD
Vanadium	11		11.1		3.1	D	6020/DOD
Zinc	45		50.3		13	Q V D	6020/DOD
Potassium	610		587		3.7	D	6020/DOD
Selenium	0.26	J	0.49	U	NC		6020/DOD

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

FORM VIII-IN

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

Lab ID: 240-22660-15

SDG No:

Lab Name: TestAmerica Pittsburgh Job No: 240-22660-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	0.032	J	0.13	U	NC	Q	6020/DOD
Aluminum	9100		9350		3.2	D	6020/DOD
Arsenic	6.1		6.19		1.6	D	6020/DOD
Barium	60		60.8		1.7	D Q	6020/DOD
Beryllium	0.52		0.625		19	D Q V	6020/DOD
Calcium	2400		2510		3.6	D	6020/DOD
Cadmium	0.11		0.132	J	NC	D Q	6020/DOD
Chromium	16		15.9		0.28	D	6020/DOD
Cobalt	13		13.2		1.9	D Q	6020/DOD
Copper	12		12.7		2.6	D Q	6020/DOD
Iron	21000		21000		1.0	D	6020/DOD
Magnesium	2100		2080		0.36	D	6020/DOD
Manganese	540		530		1.4	D Q	6020/DOD
Sodium	49		51.9		NC	D	6020/DOD
Nickel	18		18.2		0.60	D	6020/DOD
Lead	15		14.7		0.12	D Q	6020/DOD
Antimony	0.088	U	0.44	U	NC		6020/DOD
Thallium	0.13		0.132	J	NC	D Q	6020/DOD
Vanadium	18		18.1		1.4	D	6020/DOD
Zinc	38		43.6		14	Q V D	6020/DOD
Potassium	750		733		2.4	D	6020/DOD
Selenium	0.37	J	0.44	U	NC		6020/DOD

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-22660-1

SDG Number:

Matrix: Solid Instrument ID: H1

Method: 7471/DOD DL Date: 02/16/2010 09:46

Prep Method: 7471A

Leach Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Mercury	253.7	0.1	0.014

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-22660-1

SDG Number:

Matrix: Solid Instrument ID: H1

Method: 7471/DOD XMDL Date: 02/16/2010 09:47

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-22660-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471/DOD DL Date: 02/16/2010 09:46

Prep Method: 7471A

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Mercury	253.7	0.1	0.014

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-22660-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471/DOD XMDL Date: 02/16/2010 09:47

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-22660-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471/DOD DL Date: 02/16/2010 09:46

Prep Method: 7471A

Leach Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Mercury	253.7	0.1	0.014

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-22660-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471/DOD XMDL Date: 02/16/2010 09:47

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 240-22660-1

SDG Number:

Matrix: Solid Instrument ID: M

Method: 6020/DOD DL Date: 01/26/2010 16:34

Prep Method: 3050B

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Aluminum	27	3	0.2849
Antimony	121	0.2	0.0459
Arsenic	75	0.1	0.0181
Barium	137	1	0.0107
Beryllium	9	0.1	0.0075
Cadmium	111	0.1	0.0132
Calcium	44	10	1.326
Chromium	52	0.2	0.0223
Cobalt	59	0.05	0.0024
Copper	65	0.2	0.033
Iron	56	5	1.077
Lead	208	0.1	0.0154
Magnesium	26	10	1.079
Manganese	55	0.5	0.0159
Nickel	60	0.1	0.0113
Potassium	39	10	3.155
Selenium	82	0.5	0.0509
Silver	107	0.1	0.0114
Sodium	23	10	2.658
Thallium	205	0.1	0.0102
Vanadium	51	0.1	0.0299
Zinc	66	0.5	0.0648

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 240-22660-1

SDG Number:

Matrix: Solid Instrument ID: M

Method: 6020/DOD XMDL Date: 01/26/2010 16:34

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum	27	30	2.5662
Antimony	121	2	0.459
Arsenic	75	1	0.2908
Barium	137	10	0.098
Beryllium	9	1	0.0451
Cadmium	111	1	0.132
Calcium	44	100	9.357
Chromium	52	2	0.5433
Cobalt	59	0.5	0.0263
Copper	65	2	0.2443
Iron	56	50	10.77
Lead	208	1	0.154
Magnesium	26	100	10.8
Manganese	55	5	0.159
Nickel	60	1	0.1749
Potassium	39	100	31.6
Selenium	82	5	0.509
Silver	107	1	0.114
Sodium	23	100	26.8
Thallium	205	1	0.102
Vanadium	51	1	0.299
Zinc	66	5	0.9609

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-22660-1

SDG No.:

Instrument ID: H4 Date: 04/01/2011 10:50

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7471/DOD

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Pittsburgh Job No: 240-22660-1

SDG No.:

Instrument ID: M Date: 03/14/2011 22:35

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Silver		2500	6020/DOD
Aluminum		450000	6020/DOD
Arsenic		4500	6020/DOD
Barium		13500	6020/DOD
Beryllium		9000	6020/DOD
Calcium		1500000	6020/DOD
Cadmium		13500	6020/DOD
Chromium		13500	6020/DOD
Cobalt		13500	6020/DOD
Copper		20000	6020/DOD
Iron		450000	6020/DOD
Magnesium		1500000	6020/DOD
Manganese		25000	6020/DOD
Sodium		450000	6020/DOD
Nickel		13500	6020/DOD
Lead		20000	6020/DOD
Antimony		13500	6020/DOD
Thallium		13500	6020/DOD
Vanadium		13500	6020/DOD
Zinc		25000	6020/DOD
Potassium		450000	6020/DOD
Selenium		4500	6020/DOD

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-81357/1-A	04/10/2013 14:15	81357	0.60		100
LCS 240-81357/2-A	04/10/2013 14:15	81357	0.60		100
240-22660-6	04/10/2013 14:15	81357	0.54		100
240-22660-6 DU	04/10/2013 14:15	81357	0.54		100
240-22660-6 MS	04/10/2013 14:15	81357	0.54		100
240-22660-1	04/10/2013 14:15	81357	0.60		100
240-22660-2	04/10/2013 14:15	81357	0.64		100
240-22660-3	04/10/2013 14:15	81357	0.59		100
240-22660-4	04/10/2013 14:15	81357	0.64		100
240-22660-5	04/10/2013 14:15	81357	0.64		100
240-22660-7	04/10/2013 14:15	81357	0.62		100
240-22660-8	04/10/2013 14:15	81357	0.58		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-81545/1-A	04/11/2013 15:00	81545	0.60		100
LCS 240-81545/2-A	04/11/2013 15:00	81545	0.60		100
240-22660-15	04/11/2013 15:00	81545	0.56		100
240-22660-15 DU	04/11/2013 15:00	81545	0.56		100
240-22660-15 MS	04/11/2013 15:00	81545	0.56		100
240-22660-9	04/11/2013 15:00	81545	0.60		100
240-22660-10	04/11/2013 15:00	81545	0.54		100
240-22660-11	04/11/2013 15:00	81545	0.66		100
240-22660-12	04/11/2013 15:00	81545	0.61		100
240-22660-13	04/11/2013 15:00	81545	0.57		100
240-22660-14	04/11/2013 15:00	81545	0.58		100
240-22660-16	04/11/2013 15:00	81545	0.56		100
240-22660-17	04/11/2013 15:00	81545	0.60		100
240-22660-18	04/11/2013 15:00	81545	0.57		100
240-22660-19	04/11/2013 15:00	81545	0.70		100
240-22660-20	04/11/2013 15:00	81545	0.67		100
240-22660-21	04/11/2013 15:00	81545	0.67		100
240-22660-22	04/11/2013 15:00	81545	0.57		100
240-22660-23	04/11/2013 15:00	81545	0.56		100
240-22660-24	04/11/2013 15:00	81545	0.53		100
240-22660-25	04/11/2013 15:00	81545	0.55		100
240-22660-26	04/11/2013 15:00	81545	0.66		100
240-22660-27	04/11/2013 15:00	81545	0.63		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-81976/1-A	04/15/2013 16:00	81976	0.60		100
LCS 240-81976/2-A	04/15/2013 16:00	81976	0.60		100
240-22660-28	04/15/2013 16:00	81976	0.57		100

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PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 180-68898/1-A	04/11/2013 11:49	68898	00001.50		100
LCS 180-68898/2-A	04/11/2013 11:49	68898	00001.03		100
240-22660-1	04/11/2013 11:49	68898	00001.02		100
240-22660-2	04/11/2013 11:49	68898	00001.00		100
240-22660-3	04/11/2013 11:49	68898	00000.99		100
240-22660-4	04/11/2013 11:49	68898	00000.99		100
240-22660-5	04/11/2013 11:49	68898	00000.99		100
240-22660-6	04/11/2013 11:49	68898	00001.03		100
240-22660-6 DU	04/11/2013 11:49	68898	00001.00		100
240-22660-6 MS	04/11/2013 11:49	68898	00001.01		100
240-22660-7	04/11/2013 11:49	68898	00001.01		100
240-22660-8	04/11/2013 11:49	68898	00001.00		100
240-22660-9	04/11/2013 11:49	68898	00001.03		100
240-22660-10	04/11/2013 11:49	68898	00001.00		100
240-22660-11	04/11/2013 11:49	68898	00001.02		100
240-22660-12	04/11/2013 11:49	68898	00001.01		100
240-22660-13	04/11/2013 11:49	68898	00001.01		100
240-22660-14	04/11/2013 11:49	68898	00001.00		100

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PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 180-68991/1-A	04/12/2013 09:08	68991	00001.08		100
LCS 180-68991/2-A	04/12/2013 09:08	68991	00001.21		100
240-22660-15	04/12/2013 09:08	68991	00001.14		100
240-22660-15 DU	04/12/2013 09:08	68991	00001.12		100
240-22660-15 MS	04/12/2013 09:08	68991	00001.16		100
240-22660-16	04/12/2013 09:08	68991	00001.08		100
240-22660-17	04/12/2013 09:08	68991	00001.08		100
240-22660-18	04/12/2013 09:08	68991	00001.08		100
240-22660-19	04/12/2013 09:08	68991	00001.24		100
240-22660-20	04/12/2013 09:08	68991	00001.07		100
240-22660-21	04/12/2013 09:08	68991	00001.05		100
240-22660-22	04/12/2013 09:08	68991	00001.20		100
240-22660-23	04/12/2013 09:08	68991	00001.07		100
240-22660-24	04/12/2013 09:08	68991	00001.16		100
240-22660-25	04/12/2013 09:08	68991	00001.08		100
240-22660-26	04/12/2013 09:08	68991	00001.03		100
240-22660-27	04/12/2013 09:08	68991	00001.24		100
240-22660-28	04/12/2013 09:08	68991	00001.15		100

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: H1 Method: 7471/DOD

Start Date: 04/11/2013 10:20 End Date: 04/11/2013 13:27

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
IC 240-81478/1-A			10:20	X																			
IC 240-81478/2-A			10:22	X																			
IC 240-81478/3-A			10:23	X																			
IC 240-81478/4-A			10:25	X																			
IC 240-81478/5-A			10:26	X																			
IC 240-81478/6-A			10:27	X																			
ICV 240-81478/7-A	1		10:30	X																			
ICB 240-81478/8-A	1		10:32	X																			
CRA 240-81478/9-A	1		10:33	X																			
CCV 240-81478/10-A			10:40																				
CCB 240-81478/11-A			10:41																				
ZZZZZZ			10:42																				
ZZZZZZ			10:44																				
ZZZZZZ			10:46																				
ZZZZZZ			10:48																				
ZZZZZZ			10:50																				
CCV 240-81478/10-A	1		10:51	X																			
CCB 240-81478/11-A	1		10:53	X																			
ZZZZZZ			10:55																				
ZZZZZZ			10:56																				
ZZZZZZ			10:57																				
ZZZZZZ			10:59																				
ZZZZZZ			11:00																				
ZZZZZZ			11:02																				
ZZZZZZ			11:03																				
MB 240-81357/1-A	1	T	11:05	X																			
CCV 240-81478/10-A	1		11:06	X																			
CCB 240-81478/11-A	1		11:08	X																			
LCS 240-81357/2-A	1	T	11:10	X																			
240-22660-6	1	T	11:11	X																			
240-22660-6 DU	1	T	11:13	X																			
240-22660-6 MS	1	T	11:14	X																			
240-22660-1	1	T	11:15	X																			
240-22660-2	1	T	11:17	X																			
240-22660-3	1	T	11:18	X																			
240-22660-4	1	T	11:20	X																			
240-22660-5	1	T	11:21	X																			
240-22660-7	1	T	11:22	X																			
CCV 240-81478/10-A	1		11:24	X																			
CCB 240-81478/11-A	1		11:26	X																			
240-22660-8	1	T	11:27	X																			
ZZZZZZ			11:28																				

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: H1 Method: 7471/DOD

Start Date: 04/11/2013 10:20 End Date: 04/11/2013 13:27

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			11:30																				
ZZZZZZ			11:32																				
ZZZZZZ			11:33																				
ZZZZZZ			11:36																				
ZZZZZZ			11:37																				
ZZZZZZ			11:38																				
ZZZZZZ			11:40																				
ZZZZZZ			11:41																				
CCV 240-81478/10-A	1		11:42	X																			
CCB 240-81478/11-A	1		11:44	X																			
ZZZZZZ			11:45																				
ZZZZZZ			11:47																				
ZZZZZZ			11:49																				
ZZZZZZ			11:50																				
ZZZZZZ			11:51																				
ZZZZZZ			11:53																				
ZZZZZZ			11:54																				
ZZZZZZ			11:56																				
ZZZZZZ			11:57																				
ZZZZZZ			11:58																				
CCV 240-81478/10-A			12:00																				
CCB 240-81478/11-A			12:01																				
ZZZZZZ			12:03																				
ZZZZZZ			12:05																				
ZZZZZZ			12:06																				
ZZZZZZ			12:07																				
ZZZZZZ			12:08																				
ZZZZZZ			12:10																				
ZZZZZZ			12:12																				
ZZZZZZ			12:13																				
ZZZZZZ			12:14																				
ZZZZZZ			12:16																				
CCV 240-81478/10-A			12:17																				
CCB 240-81478/11-A			12:19																				
ZZZZZZ			12:20																				
ZZZZZZ			12:22																				
ZZZZZZ			12:23																				
ZZZZZZ			12:24																				
ZZZZZZ			12:26																				
ZZZZZZ			12:28																				
ZZZZZZ			12:29																				
ZZZZZZ			12:31																				

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: H1 Method: 7471/DOD

Start Date: 04/11/2013 10:20 End Date: 04/11/2013 13:27

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			12:32																				
ZZZZZZ			12:35																				
CCV 240-81478/10-A			12:36																				
CCB 240-81478/11-A			12:38																				
ZZZZZZ			12:40																				
ZZZZZZ			12:41																				
ZZZZZZ			12:42																				
ZZZZZZ			12:44																				
ZZZZZZ			12:45																				
ZZZZZZ			12:46																				
ZZZZZZ			12:48																				
ZZZZZZ			12:49																				
ZZZZZZ			12:52																				
ZZZZZZ			12:54																				
CCV 240-81478/10-A			12:56																				
CCB 240-81478/11-A			12:57																				
ZZZZZZ			12:59																				
ZZZZZZ			13:00																				
ZZZZZZ			13:01																				
ZZZZZZ			13:03																				
ZZZZZZ			13:05																				
ZZZZZZ			13:07																				
ZZZZZZ			13:08																				
ZZZZZZ			13:09																				
ZZZZZZ			13:11																				
ZZZZZZ			13:12																				
CCV 240-81478/10-A			13:13																				
CCB 240-81478/11-A			13:15																				
ZZZZZZ			13:17																				
ZZZZZZ			13:18																				
ZZZZZZ			13:20																				
ZZZZZZ			13:21																				
ZZZZZZ			13:22																				
CCV 240-81478/10-A			13:24																				
CCB 240-81478/11-A			13:26																				
CRA 240-81478/9-A	1		13:27	X																			

Prep Types

T = Total/NA

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: H1 Method: 7471/DOD

Start Date: 04/16/2013 11:06 End Date: 04/16/2013 14:33

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
IC 240-82099/1-A			11:06	X																			
IC 240-82099/2-A			11:08	X																			
IC 240-82099/3-A			11:09	X																			
IC 240-82099/4-A			11:10	X																			
IC 240-82099/5-A			11:12	X																			
IC 240-82099/6-A			11:13	X																			
ICV 240-82099/7-A	1		11:15	X																			
ICB 240-82099/8-A	1		11:16	X																			
CRA 240-82099/9-A	1		11:18	X																			
CCV 240-82099/10-A			11:19																				
CCB 240-82099/11-A			11:20																				
ZZZZZZ			11:22																				
ZZZZZZ			11:23																				
ZZZZZZ			11:25																				
ZZZZZZ			11:26																				
ZZZZZZ			11:27																				
ZZZZZZ			11:29																				
ZZZZZZ			11:30																				
ZZZZZZ			11:32																				
ZZZZZZ			11:33																				
ZZZZZZ			11:35																				
CCV 240-82099/10-A			11:36																				
CCB 240-82099/11-A			11:38																				
ZZZZZZ			11:39																				
ZZZZZZ			11:41																				
ZZZZZZ			11:44																				
ZZZZZZ			11:46																				
ZZZZZZ			11:47																				
ZZZZZZ			11:49																				
CCV 240-82099/10-A	1		11:51	X																			
CCB 240-82099/11-A	1		11:52	X																			
ZZZZZZ			11:53																				
ZZZZZZ			11:55																				
ZZZZZZ			11:56																				
ZZZZZZ			11:57																				
ZZZZZZ			11:59																				
ZZZZZZ			12:00																				
ZZZZZZ			12:02																				
ZZZZZZ			12:03																				
MB 240-81976/1-A	1	T	12:04	X																			
LCS 240-81976/2-A	1	T	12:06	X																			
CCV 240-82099/10-A	1		12:07	X																			

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: H1 Method: 7471/DOD

Start Date: 04/16/2013 11:06 End Date: 04/16/2013 14:33

Lab Sample ID	D/F	Type	Time	Analytes																				
				Hg																				
CCB 240-82099/11-A	1		12:09	X																				
ZZZZZZ			12:10																					
ZZZZZZ			12:11																					
ZZZZZZ			12:14																					
ZZZZZZ			12:15																					
ZZZZZZ			12:17																					
ZZZZZZ			12:18																					
240-22660-28	1	T	12:19	X																				
ZZZZZZ			12:21																					
ZZZZZZ			12:22																					
ZZZZZZ			12:24																					
CCV 240-82099/10-A	1		12:25	X																				
CCB 240-82099/11-A	1		12:28	X																				
ZZZZZZ			12:29																					
ZZZZZZ			12:31																					
ZZZZZZ			12:32																					
ZZZZZZ			12:33																					
ZZZZZZ			12:36																					
ZZZZZZ			12:37																					
ZZZZZZ			12:40																					
ZZZZZZ			12:41																					
ZZZZZZ			12:42																					
ZZZZZZ			12:43																					
CCV 240-82099/10-A			12:45																					
CCB 240-82099/11-A			12:46																					
ZZZZZZ			12:48																					
ZZZZZZ			12:49																					
ZZZZZZ			12:51																					
ZZZZZZ			12:53																					
ZZZZZZ			12:55																					
ZZZZZZ			12:57																					
ZZZZZZ			12:58																					
ZZZZZZ			13:00																					
ZZZZZZ			13:01																					
ZZZZZZ			13:04																					
CCV 240-82099/10-A			13:05																					
CCB 240-82099/11-A			13:07																					
ZZZZZZ			13:09																					
ZZZZZZ			13:10																					
ZZZZZZ			13:11																					
ZZZZZZ			13:14																					
ZZZZZZ			13:15																					

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: H1 Method: 7471/DOD

Start Date: 04/16/2013 11:06 End Date: 04/16/2013 14:33

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			13:16																				
ZZZZZZ			13:18																				
ZZZZZZ			13:19																				
ZZZZZZ			13:21																				
ZZZZZZ			13:23																				
CCV 240-82099/10-A			13:24																				
CCB 240-82099/11-A			13:25																				
ZZZZZZ			13:28																				
ZZZZZZ			13:30																				
ZZZZZZ			13:31																				
ZZZZZZ			13:32																				
ZZZZZZ			13:34																				
ZZZZZZ			13:35																				
ZZZZZZ			13:36																				
ZZZZZZ			13:38																				
ZZZZZZ			13:39																				
ZZZZZZ			13:41																				
CCV 240-82099/10-A			13:43																				
CCB 240-82099/11-A			13:44																				
ZZZZZZ			13:45																				
ZZZZZZ			13:47																				
ZZZZZZ			13:48																				
ZZZZZZ			13:50																				
ZZZZZZ			13:52																				
ZZZZZZ			13:53																				
ZZZZZZ			13:54																				
ZZZZZZ			13:56																				
ZZZZZZ			13:57																				
ZZZZZZ			13:58																				
CCV 240-82099/10-A			14:00																				
CCB 240-82099/11-A			14:01																				
ZZZZZZ			14:02																				
ZZZZZZ			14:04																				
ZZZZZZ			14:05																				
ZZZZZZ			14:07																				
ZZZZZZ			14:08																				
ZZZZZZ			14:09																				
CCV 240-82099/10-A			14:11																				
CCB 240-82099/11-A			14:12																				
CRA 240-82099/9-A	1		14:33	X																			

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: H1 Method: 7471/DOD

Start Date: 04/16/2013 11:06 End Date: 04/16/2013 14:33

Prep Types
T = Total/NA

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: H4 Method: 7471/DOD

Start Date: 04/12/2013 09:01 End Date: 04/12/2013 13:56

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
IC 240-81478/1-A			09:01	X																			
IC 240-81478/2-A			09:03	X																			
IC 240-81478/3-A			09:06	X																			
IC 240-81478/4-A			09:07	X																			
IC 240-81478/5-A			09:09	X																			
IC 240-81478/6-A			09:11	X																			
ICV 240-81478/7-A	1		09:17	X																			
ICB 240-81478/8-A	1		09:19	X																			
CRA 240-81478/9-A	1		09:22	X																			
CCV 240-81478/10-A	1		11:37	X																			
CCB 240-81478/11-A	1		11:39	X																			
ZZZZZZ			11:41																				
ZZZZZZ			11:43																				
ZZZZZZ			11:45																				
ZZZZZZ			11:47																				
ZZZZZZ			11:50																				
ZZZZZZ			11:52																				
MB 240-81545/1-A	1	T	11:53	X																			
LCS 240-81545/2-A	1	T	11:55	X																			
240-22660-15	1	T	11:57	X																			
240-22660-15 DU	1	T	11:58	X																			
CCV 240-81478/10-A	1		12:00	X																			
CCB 240-81478/11-A	1		12:02	X																			
240-22660-15 MS	1	T	12:05	X																			
240-22660-20	1	T	12:07	X																			
240-22660-26	1	T	12:09	X																			
240-22660-21	1	T	12:11	X																			
240-22660-17	1	T	12:12	X																			
240-22660-10	1	T	12:15	X																			
240-22660-12	1	T	12:16	X																			
240-22660-18	1	T	12:18	X																			
240-22660-27	1	T	12:21	X																			
240-22660-22	1	T	12:23	X																			
CCV 240-81478/10-A	1		12:25	X																			
CCB 240-81478/11-A	1		12:27	X																			
240-22660-25	1	T	12:28	X																			
240-22660-9	1	T	12:30	X																			
240-22660-14	1	T	12:32	X																			
240-22660-16	1	T	12:35	X																			
240-22660-11	1	T	12:38	X																			
240-22660-24	1	T	12:40	X																			
ZZZZZZ			12:42																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: H4 Method: 7471/DOD

Start Date: 04/12/2013 09:01 End Date: 04/12/2013 13:56

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
240-22660-23	1	T	12:44	X																			
240-22660-19	1	T	12:46	X																			
240-22660-13	1	T	12:48	X																			
CCV 240-81478/10-A	1		12:50	X																			
CCB 240-81478/11-A	1		12:51	X																			
CCV 240-81478/10-A			13:48																				
CCB 240-81478/11-A			13:49																				
CRA 240-81478/9-A	1		13:51	X																			
CCV 240-81478/10-A			13:54																				
CCB 240-81478/11-A			13:56																				

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 04/30/2013 19:08 End Date: 05/01/2013 10:08

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ITUNE 180-70561/1			19:08																				
STD1 180-70561/2 IC	1		19:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD2 180-70561/3 IC	1		19:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD3 180-70561/4 IC	1		20:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 180-70561/5	1		20:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB 180-70561/6	1		20:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 180-70561/7	1		20:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 180-70561/8			20:33																				
ICSA 180-70561/9	1		20:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 180-70561/10	1		20:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 180-70561/11	1		20:58		X		X					X	X	X			X		X	X			
CCV 180-70561/12	1		21:06						X						X	X		X					
CCV 180-70561/13	1		21:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB1 180-70561/14	1		21:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 180-68898/1-A	1	T	21:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 180-68898/2-A	1	T	21:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			21:47																				
ZZZZZZ			21:55																				
ZZZZZZ			22:04																				
ZZZZZZ			22:12																				
ZZZZZZ			22:20																				
ZZZZZZ			22:28																				
ZZZZZZ			22:36																				
240-22660-1	1	T	22:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 180-70561/25	1		22:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB2 180-70561/26	1		23:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-2	1	T	23:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-3	1	T	23:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-4	1	T	23:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-5	1	T	23:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-6	1	T	23:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-6 SD	5	T	23:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-6 DU	1	T	23:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-6 MS	1	T	00:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-6 PDS	1	T	00:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-7	1	T	00:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 180-70561/37	1		00:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB3 180-70561/38	1		00:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-8	1	T	00:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-9	1	T	00:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-10	1	T	01:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-11	1	T	01:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 04/30/2013 19:08 End Date: 05/01/2013 10:08

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
240-22660-12	1	T	01:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-13	1	T	01:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-14	1	T	01:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 180-68991/1-A	1	T	01:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 180-68991/2-A	1	T	01:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-16	1	T	02:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 180-70561/49	1		02:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB4 180-70561/50	1		02:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-15	1	T	02:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-15 SD	5	T	02:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-15 DU	1	T	02:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-15 MS	1	T	02:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-15 PDS	1	T	02:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-17	1	T	03:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-18	1	T	03:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-19	1	T	03:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-20	1	T	03:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-21	1	T	03:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 180-70561/61	1		03:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB5 180-70561/62	1		03:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 180-70561/63			04:05																				
CRI 180-70561/64			04:13																				
CCV 180-70561/65	1		04:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB6 180-70561/66	1		04:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-22	1	T	04:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-23	1	T	04:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-24	1	T	04:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-25	1	T	05:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-26	1	T	05:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-27	1	T	05:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-22660-28	1	T	05:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			05:35																				
ZZZZZZ			05:43																				
ZZZZZZ			05:52																				
CCV 180-70561/77	1		06:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB7 180-70561/78	1		06:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			06:16																				
ZZZZZZ			06:25																				
ZZZZZZ			06:33																				
ZZZZZZ			06:41																				
ZZZZZZ			06:49																				
ZZZZZZ			06:58																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 04/30/2013 19:08 End Date: 05/01/2013 10:08

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			07:06																				
ZZZZZZ			07:14																				
ZZZZZZ			07:22																				
ZZZZZZ			07:31																				
CCV 180-70561/89			07:39																				
CCB8 180-70561/90			07:47																				
ZZZZZZ			07:55																				
ZZZZZZ			08:04																				
ZZZZZZ			08:12																				
ZZZZZZ			08:20																				
ZZZZZZ			08:28																				
ZZZZZZ			08:37																				
ZZZZZZ			08:45																				
ZZZZZZ			08:53																				
ZZZZZZ			09:02																				
ZZZZZZ			09:10																				
ZZZZZZ			09:18																				
CCV 180-70561/102			09:26																				
CCB9 180-70561/103			09:35																				
CRI 180-70561/104	1		09:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 180-70561/105			09:51																				
CCV 180-70561/106			10:00																				
CCB10 180-70561/107			10:08																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 04/30/2013 19:08 End Date: 05/01/2013 10:08

Lab Sample ID	D / F	Type	Time	Analytes																				
				V	Zn																			
ITUNE 180-70561/1			19:08																					
STD1 180-70561/2 IC	1		19:53	X	X																			
STD2 180-70561/3 IC	1		19:59	X	X																			
STD3 180-70561/4 IC	1		20:03	X	X																			
ICV 180-70561/5	1		20:08	X	X																			
ICB 180-70561/6	1		20:16	X	X																			
CRI 180-70561/7	1		20:25	X	X																			
CRI 180-70561/8			20:33																					
ICSA 180-70561/9	1		20:41	X	X																			
ICSAB 180-70561/10	1		20:50	X	X																			
CCV 180-70561/11	1		20:58		X																			
CCV 180-70561/12	1		21:06																					
CCV 180-70561/13	1		21:14	X	X																			
CCB1 180-70561/14	1		21:23	X	X																			
MB 180-68898/1-A	1	T	21:31	X	X																			
LCS 180-68898/2-A	1	T	21:39	X	X																			
ZZZZZZ			21:47																					
ZZZZZZ			21:55																					
ZZZZZZ			22:04																					
ZZZZZZ			22:12																					
ZZZZZZ			22:20																					
ZZZZZZ			22:28																					
ZZZZZZ			22:36																					
240-22660-1	1	T	22:44	X	X																			
CCV 180-70561/25	1		22:53	X	X																			
CCB2 180-70561/26	1		23:01	X	X																			
240-22660-2	1	T	23:09	X	X																			
240-22660-3	1	T	23:17	X	X																			
240-22660-4	1	T	23:25	X	X																			
240-22660-5	1	T	23:34	X	X																			
240-22660-6	1	T	23:42	X	X																			
240-22660-6 SD	5	T	23:50	X	X																			
240-22660-6 DU	1	T	23:58	X	X																			
240-22660-6 MS	1	T	00:06	X	X																			
240-22660-6 PDS	1	T	00:15	X	X																			
240-22660-7	1	T	00:23	X	X																			
CCV 180-70561/37	1		00:31	X	X																			
CCB3 180-70561/38	1		00:39	X	X																			
240-22660-8	1	T	00:47	X	X																			
240-22660-9	1	T	00:56	X	X																			
240-22660-10	1	T	01:04	X	X																			
240-22660-11	1	T	01:12	X	X																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 04/30/2013 19:08 End Date: 05/01/2013 10:08

Lab Sample ID	D / F	Type	Time	Analytes																			
				V	Zn																		
240-22660-12	1	T	01:20	X	X																		
240-22660-13	1	T	01:28	X	X																		
240-22660-14	1	T	01:37	X	X																		
MB 180-68991/1-A	1	T	01:45	X	X																		
LCS 180-68991/2-A	1	T	01:53	X	X																		
240-22660-16	1	T	02:01	X	X																		
CCV 180-70561/49	1		02:09	X	X																		
CCB4 180-70561/50	1		02:18	X	X																		
240-22660-15	1	T	02:26	X	X																		
240-22660-15 SD	5	T	02:34	X	X																		
240-22660-15 DU	1	T	02:42	X	X																		
240-22660-15 MS	1	T	02:51	X	X																		
240-22660-15 PDS	1	T	02:59	X	X																		
240-22660-17	1	T	03:07	X	X																		
240-22660-18	1	T	03:15	X	X																		
240-22660-19	1	T	03:23	X	X																		
240-22660-20	1	T	03:32	X	X																		
240-22660-21	1	T	03:40	X	X																		
CCV 180-70561/61	1		03:48	X	X																		
CCB5 180-70561/62	1		03:56	X	X																		
CRI 180-70561/63			04:05																				
CRI 180-70561/64			04:13																				
CCV 180-70561/65	1		04:21	X	X																		
CCB6 180-70561/66	1		04:29	X	X																		
240-22660-22	1	T	04:37	X	X																		
240-22660-23	1	T	04:46	X	X																		
240-22660-24	1	T	04:54	X	X																		
240-22660-25	1	T	05:02	X	X																		
240-22660-26	1	T	05:10	X	X																		
240-22660-27	1	T	05:19	X	X																		
240-22660-28	1	T	05:27	X	X																		
ZZZZZZ			05:35																				
ZZZZZZ			05:43																				
ZZZZZZ			05:52																				
CCV 180-70561/77	1		06:00	X	X																		
CCB7 180-70561/78	1		06:08	X	X																		
ZZZZZZ			06:16																				
ZZZZZZ			06:25																				
ZZZZZZ			06:33																				
ZZZZZZ			06:41																				
ZZZZZZ			06:49																				
ZZZZZZ			06:58																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 04/30/2013 19:08 End Date: 05/01/2013 10:08

Lab Sample ID	D / F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			07:06																				
ZZZZZZ			07:14																				
ZZZZZZ			07:22																				
ZZZZZZ			07:31																				
CCV 180-70561/89			07:39																				
CCB8 180-70561/90			07:47																				
ZZZZZZ			07:55																				
ZZZZZZ			08:04																				
ZZZZZZ			08:12																				
ZZZZZZ			08:20																				
ZZZZZZ			08:28																				
ZZZZZZ			08:37																				
ZZZZZZ			08:45																				
ZZZZZZ			08:53																				
ZZZZZZ			09:02																				
ZZZZZZ			09:10																				
ZZZZZZ			09:18																				
CCV 180-70561/102			09:26																				
CCB9 180-70561/103			09:35																				
CRI 180-70561/104	1		09:43	X	X																		
CRI 180-70561/105			09:51																				
CCV 180-70561/106			10:00																				
CCB10 180-70561/107			10:08																				

Prep Types

T = Total/NA

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

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

ICP-MS Instrument ID: M Start Date: 04/30/2013 End Date: 05/01/2013

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 180-70561/2 IC	19:53	100		100		100		100		100	
STD2 180-70561/3 IC	19:59	92		90		89		79		87	
STD3 180-70561/4 IC	20:03	92		90		90		86		90	
ICV 180-70561/5	20:08	94		91		94		90		93	
ICB 180-70561/6	20:16	108		110		114		110		108	
CRI 180-70561/7	20:25	108		111		110		111		109	
ICSA 180-70561/9	20:41	78		69		74		72		83	
ICSAB 180-70561/10	20:50	77		67		68		63		72	
CCV 180-70561/11	20:58	84		78		68		73		84	
CCV 180-70561/12	21:06	86		88		89		71		82	
CCV 180-70561/13	21:14	83		80		79		73		79	
CCB1 180-70561/14	21:23	105		107		99		97		93	
MB 180-68898/1-A	21:31	100		102		102		107		101	
LCS 180-68898/2-A	21:39	75		70		66		64		68	
240-22660-1	22:44	77		78		0		69		75	
CCV 180-70561/25	22:53	79		75		76		70		76	
CCB2 180-70561/26	23:01	92		93		90		88		87	
240-22660-2	23:09	76		78		0		69		75	
240-22660-3	23:17	74		77		0		68		74	
240-22660-4	23:25	76		79		0		70		76	
240-22660-5	23:34	75		78		0		69		75	
240-22660-6	23:42	77		78		0		70		76	
240-22660-6 SD	23:50	85		76		90		73		78	
240-22660-6 DU	23:58	78		78		0		71		77	
240-22660-6 MS	00:06	70		71		0		61		68	
240-22660-6 PDS	00:15	70		70		0		56		67	
240-22660-7	00:23	73		76		0		67		74	
CCV 180-70561/37	00:31	75		72		72		66		71	
CCB3 180-70561/38	00:39	93		93		93		94		86	
240-22660-8	00:47	72		75		0		64		71	
240-22660-9	00:56	73		74		0		66		72	
240-22660-10	01:04	76		77		0		69		75	
240-22660-11	01:12	74		74		0		65		70	
240-22660-12	01:20	74		76		0		67		74	
240-22660-13	01:28	73		75		0		66		72	
240-22660-14	01:37	73		75		0		65		71	
MB 180-68991/1-A	01:45	75		73		74		71		74	
LCS 180-68991/2-A	01:53	69		65		61		60		64	
240-22660-16	02:01	71		73		0		64		70	
CCV 180-70561/49	02:09	75		72		72		66		72	
CCB4 180-70561/50	02:18	103		103		90		93		87	
240-22660-15	02:26	69		71		0		62		69	

FORM XV - IN

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

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

ICP-MS Instrument ID: M Start Date: 04/30/2013 End Date: 05/01/2013

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
240-22660-15 SD	02:34	75		73		90		69		73	
240-22660-15 DU	02:42	73		75		0		65		71	
240-22660-15 MS	02:51	66		69		0		56		63	
240-22660-15 PDS	02:59	66		67		0		54		65	
240-22660-17	03:07	67		69		0		59		66	
240-22660-18	03:15	70		71		0		62		68	
240-22660-19	03:23	71		71		0		63		69	
240-22660-20	03:32	68		69		0		59		65	
240-22660-21	03:40	69		70		0		61		67	
CCV 180-70561/61	03:48	70		67		68		62		68	
CCB5 180-70561/62	03:56	102		103		83		87		88	
CCV 180-70561/65	04:21	73		72		71		66		70	
CCB6 180-70561/66	04:29	105		103		90		87		89	
240-22660-22	04:37	65		67		0		56		62	
240-22660-23	04:46	66		67		0		59		64	
240-22660-24	04:54	64		65		0		55		61	
240-22660-25	05:02	65		67		0		57		63	
240-22660-26	05:10	63		65		0		56		61	
240-22660-27	05:19	63		65		0		56		62	
240-22660-28	05:27	60		61		0		53		58	
CCV 180-70561/77	06:00	64		61		60		56		61	
CCB7 180-70561/78	06:08	96		99		89		86		89	
CRI 180-70561/104	09:43	66		67		71		61		64	

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

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

ICP-MS Instrument ID: M Start Date: 04/30/2013 End Date: 05/01/2013

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-70561/2 IC	19:53	100		100		100					
STD2 180-70561/3 IC	19:59	88		88		74					
STD3 180-70561/4 IC	20:03	91		91		89					
ICV 180-70561/5	20:08	95		95		86					
ICB 180-70561/6	20:16	103		103		93					
CRI 180-70561/7	20:25	107		106		104					
ICSA 180-70561/9	20:41	84		83		88					
ICSAB 180-70561/10	20:50	72		72		63					
CCV 180-70561/11	20:58	77		72		77					
CCV 180-70561/12	21:06	85		85		59					
CCV 180-70561/13	21:14	81		81		75					
CCB1 180-70561/14	21:23	91		90		85					
MB 180-68898/1-A	21:31	100		101		102					
LCS 180-68898/2-A	21:39	71		71		59					
240-22660-1	22:44	78		78		64					
CCV 180-70561/25	22:53	78		78		72					
CCB2 180-70561/26	23:01	86		86		84					
240-22660-2	23:09	81		80		71					
240-22660-3	23:17	80		78		64					
240-22660-4	23:25	82		81		70					
240-22660-5	23:34	80		79		67					
240-22660-6	23:42	82		81		72					
240-22660-6 SD	23:50	78		78		70					
240-22660-6 DU	23:58	81		80		70					
240-22660-6 MS	00:06	74		73		61					
240-22660-6 PDS	00:15	71		71		55					
240-22660-7	00:23	80		79		69					
CCV 180-70561/37	00:31	71		71		60					
CCB3 180-70561/38	00:39	85		85		86					
240-22660-8	00:47	78		77		60					
240-22660-9	00:56	77		76		63					
240-22660-10	01:04	79		77		68					
240-22660-11	01:12	74		72		59					
240-22660-12	01:20	80		79		69					
240-22660-13	01:28	78		76		63					
240-22660-14	01:37	77		75		62					
MB 180-68991/1-A	01:45	76		76		77					
LCS 180-68991/2-A	01:53	70		70		56					
240-22660-16	02:01	77		75		64					
CCV 180-70561/49	02:09	73		73		66					
CCB4 180-70561/50	02:18	88		89		93					
240-22660-15	02:26	74		72		62					

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

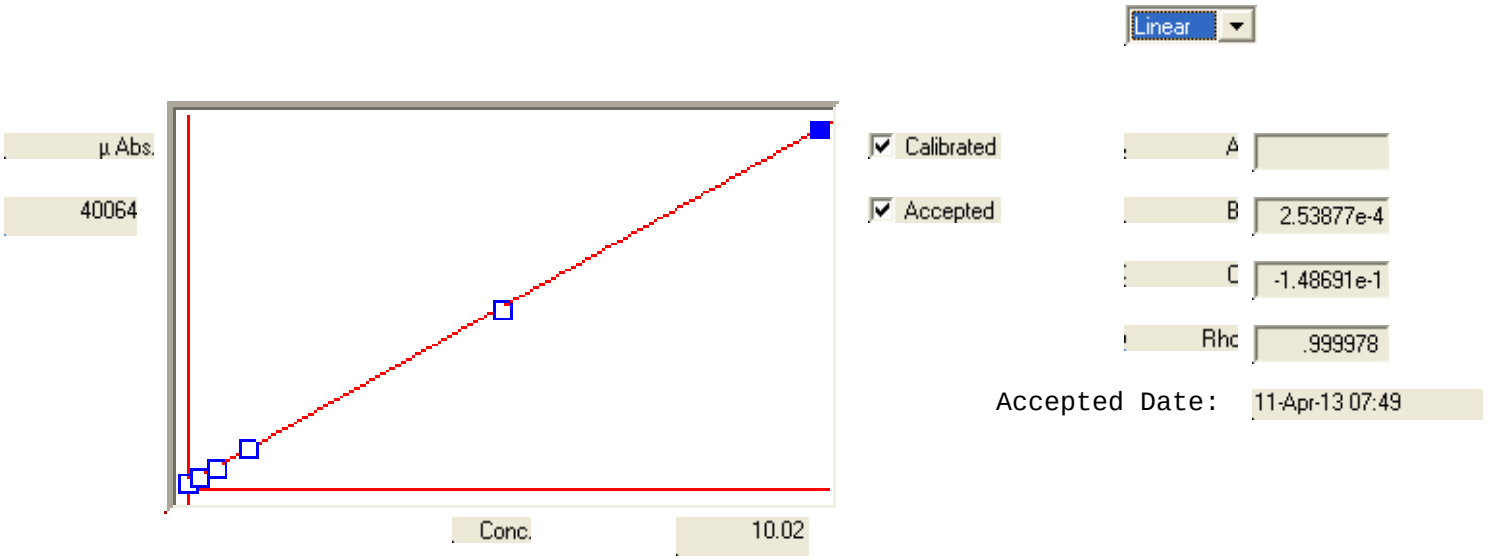
Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

ICP-MS Instrument ID: M Start Date: 04/30/2013 End Date: 05/01/2013

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
240-22660-15 SD	02:34	74		73		64					
240-22660-15 DU	02:42	75		73		64					
240-22660-15 MS	02:51	68		66		52					
240-22660-15 PDS	02:59	71		70		59					
240-22660-17	03:07	72		71		58					
240-22660-18	03:15	72		70		58					
240-22660-19	03:23	72		72		63					
240-22660-20	03:32	70		68		55					
240-22660-21	03:40	73		72		62					
CCV 180-70561/61	03:48	69		69		62					
CCB5 180-70561/62	03:56	84		84		82					
CCV 180-70561/65	04:21	71		71		64					
CCB6 180-70561/66	04:29	88		88		89					
240-22660-22	04:37	69		67		52					
240-22660-23	04:46	71		70		61					
240-22660-24	04:54	68		66		53					
240-22660-25	05:02	69		68		59					
240-22660-26	05:10	67		66		56					
240-22660-27	05:19	66		65		51					
240-22660-28	05:27	67		65		55					
CCV 180-70561/77	06:00	64		64		59					
CCB7 180-70561/78	06:08	87		87		89					
CRI 180-70561/104	09:43	65		65		65					

Protocol: 0411AHG4



S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0298	.0298	704	0	703				
02	.20000	.2065	.0065	1400	0%	1399				
03	.50000	.4906	-.0094	2519	0%	2518				
04	1.0000	.9948	-.0052	4505	0%	4504				
05	5.0000	4.956	-.0442	20106	0%	20106				
06	10.000	10.02	.0226	40065	0%	40064				
07										
08										
09										
10										

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 07:39:08 11 Apr 13 HG

Hg .0000 ppb 703

*** Standard: 2 Rep: 1 Seq: 2 07:41:10 11 Apr 13 HG

Hg .2000 ppb 1399

*** Standard: 3 Rep: 1 Seq: 3 07:42:52 11 Apr 13 HG

Hg .5000 ppb 2518

*** Standard: 4 Rep: 1 Seq: 4 07:44:49 11 Apr 13 HG

Hg 1.000 ppb 4504

*** Standard: 5 Rep: 1 Seq: 5 07:46:32 11 Apr 13 HG

Hg 5.000 ppb 20106

*** Standard: 6 Rep: 1 Seq: 6 07:48:28 11 Apr 13 HG

Hg 10.00 ppb 40064

*** Check Standard: 2 Ck2ICV Seq: 7 07:51:09 11 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.0	2.675	2.500	ppb	.0000

*** Check Standard: 3 Ck3ICB Seq: 8 07:53:55 11 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		^^^^^^	.0189	.0000	ppb	.0000

*** Check Standard: 4 Ck4CRA\MRL Seq: 9 07:55:58 11 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.6	.2072	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 10 08:19:25 11 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		94.78	4.739	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 11 08:21:08 11 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0124	.2000	ppb	.0000

*** Sample ID: Seq: 12 08:23:41 11 Apr 13 HG
LB 240-81224/1-D

Hg	-.1309	ppb	.0000	-.1309

*** Sample ID: Seq: 13 08:25:21 11 Apr 13 HG
MB 240-81353/2-A

Hg	-.1264	ppb	.0000	-.1264

*** Sample ID: Seq: 14 08:27:16 11 Apr 13 HG
LCS 240-81353/3-A

Hg	4.944	ppb	.0000	4.944

*** Sample ID: Seq: 15 08:28:58 11 Apr 13 HG
240-22862-A-1-E

Hg	-.1588	ppb	.0000	-.1588

*** Sample ID: Seq: 16 08:31:20 11 Apr 13 HG
240-22862-A-1-F MS

Hg	5.001	ppb	.0000	5.001

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 17	08:33:42 11 Apr 13	HG		
				240-22862-A-1-G MSD				
Hg	4.976	ppb	.0000	4.976				
*** Sample ID:				Seq: 18	08:35:35 11 Apr 13	HG		
				240-22753-D-1-K				
Hg	-.0964	ppb	.0000	-.0964				
*** Sample ID:				Seq: 19	08:37:29 11 Apr 13	HG		
				240-22829-A-5-F				
Hg	-.1177	ppb	.0000	-.1177				
*** Sample ID:				Seq: 20	08:39:14 11 Apr 13	HG		
				240-22829-A-7-I				
Hg	-.0560	ppb	.0000	-.0560				
*** Sample ID:				Seq: 21	08:41:07 11 Apr 13	HG		
				240-22829-A-12-C				
Hg	-.1043	ppb	.0000	-.1043				

*** Check Standard: 6 Ck6CCV Seq: 22 08:42:50 11 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		106.7	5.336	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 23 08:44:47 11 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.0382	.2000	ppb	.0000

*** Sample ID:				Seq: 24	08:46:30 11 Apr 13	HG		
				240-22829-A-13-C				
Hg	-.1172	ppb	.0000	-.1172				
*** Sample ID:				Seq: 25	08:48:11 11 Apr 13	HG		
				240-22927-B-1-D				
Hg	-.1304	ppb	.0000	-.1304				
*** Sample ID:				Seq: 26	08:49:55 11 Apr 13	HG		
				LB 240-81223/1-C				
Hg	-.1050	ppb	.0000	-.1050				
*** Sample ID:				Seq: 27	08:53:30 11 Apr 13	HG		
				MB 240-81319/2-A				
Hg	-.1114	ppb	.0000	-.1114				
*** Sample ID:				Seq: 28	08:55:15 11 Apr 13	HG		
				LCS 240-81319/3-A				
Hg	5.233	ppb	.0000	5.233				
*** Sample ID:				Seq: 29	08:57:00 11 Apr 13	HG		
				240-22829-A-10-E				
Hg	-.1444	ppb	.0000	-.1444				
*** Sample ID:				Seq: 30	08:58:44 11 Apr 13	HG		
				240-22829-A-10-F MS				
Hg	5.201	ppb	.0000	5.201				
*** Sample ID:				Seq: 31	09:00:41 11 Apr 13	HG		
				240-22829-A-10-G MSD				
Hg	5.155	ppb	.0000	5.155				
*** Sample ID:				Seq: 32	09:02:25 11 Apr 13	HG		
				MB 240-81277/1-A				
Hg	-.1799	ppb	.0000	-.1799				

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 33 09:04:08 11 Apr 13 HG
LCS 240-81277/2-A

Hg	4.646	ppb	.0000	4.646

*** Check Standard: 6 Ck6CCV Seq: 34 09:06:00 11 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.0	5.348	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 35 09:08:04 11 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.0397	.2000	ppb	.0000

*** Sample ID: Seq: 36 09:09:49 11 Apr 13 HG
240-22929-D-1-A

Hg	-.1197	ppb	.0000	-.1197

*** Sample ID: Seq: 37 09:11:37 11 Apr 13 HG
240-22929-D-1-B MS

Hg	.9427	ppb	.0000	.9427

*** Sample ID: Seq: 38 09:13:23 11 Apr 13 HG
240-22929-D-1-C MSD

Hg	.9653	ppb	.0000	.9653

*** Sample ID: Seq: 39 09:15:14 11 Apr 13 HG
240-22929-E-2-A

Hg	-.1286	ppb	.0000	-.1286

*** Sample ID: Seq: 40 09:16:55 11 Apr 13 HG
240-22929-D-3-A

Hg	-.1248	ppb	.0000	-.1248

*** Sample ID: Seq: 41 09:18:39 11 Apr 13 HG
240-22929-D-4-A

Hg	-.1261	ppb	.0000	-.1261

*** Sample ID: Seq: 42 09:22:12 11 Apr 13 HG
240-22929-D-5-A

Hg	-.1274	ppb	.0000	-.1274

*** Sample ID: Seq: 43 09:24:20 11 Apr 13 HG
240-22929-D-6-A

Hg	-.1238	ppb	.0000	-.1238

*** Sample ID: Seq: 44 09:26:35 11 Apr 13 HG
240-22929-D-7-A

Hg	-.1286	ppb	.0000	-.1286

*** Sample ID: Seq: 45 09:28:21 11 Apr 13 HG
240-22929-E-8-A

Hg	-.1314	ppb	.0000	-.1314

*** Check Standard: 6 Ck6CCV Seq: 46 09:30:14 11 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		108.4	5.422	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 47 09:31:57 11 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0106	.2000	ppb	.0000

*** Sample ID: Seq: 48 09:33:41 11 Apr 13 HG
240-22929-D-9-A

Hg	-.1223	ppb	.0000	-.1223

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:					Seq: 49		09:35:45 11 Apr 13		HG
				240-22929-E-10-A					
Hg	-.1355	ppb	.0000	-.1355					
*** Sample ID:					Seq: 50		09:38:50 11 Apr 13		HG
				240-22929-E-11-A					
Hg	-.1365	ppb	.0000	-.1365					
*** Sample ID:					Seq: 51		09:40:32 11 Apr 13		HG
				240-22929-D-12-A					
Hg	-.1304	ppb	.0000	-.1304					
*** Sample ID:					Seq: 52		09:43:18 11 Apr 13		HG
				240-22929-D-13-A					
Hg	-.1319	ppb	.0000	-.1319					
*** Sample ID:					Seq: 53		09:46:41 11 Apr 13		HG
				240-22959-N-1-A					
Hg	.0369	ppb	.0000	.0369					
*** Sample ID:					Seq: 54		09:48:24 11 Apr 13		HG
				240-22811-A-5-B					
Hg	-.1545	ppb	.0000	-.1545					
*** Sample ID:					Seq: 55		09:51:20 11 Apr 13		HG
				MB 240-81297/1-A					
Hg	-.1309	ppb	.0000	-.1309					
*** Sample ID:					Seq: 56		09:53:48 11 Apr 13		HG
				LCS 240-81297/2-A					
Hg	5.195	ppb	.0000	5.195					
*** Sample ID:					Seq: 57		09:55:41 11 Apr 13		HG
				240-22882-K-6-A					
Hg	-.1423	ppb	.0000	-.1423					
*** Check Standard: 6 Ck6CCV					Seq: 58		09:57:25 11 Apr 13		HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		107.7	5.384	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB					Seq: 59		09:59:09 11 Apr 13		HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		.0171	.2000	ppb	.0000				
*** Sample ID:					Seq: 60		10:01:02 11 Apr 13		HG
				240-22882-K-6-B MS					
Hg	.9780	ppb	.0000	.9780					
*** Sample ID:					Seq: 61		10:03:24 11 Apr 13		HG
				240-22882-K-6-C MSD					
Hg	.9577	ppb	.0000	.9577					
*** Sample ID:					Seq: 62		10:05:39 11 Apr 13		HG
				240-22803-C-1-A					
Hg	-.1274	ppb	.0000	-.1274					
*** Sample ID:					Seq: 63		10:08:44 11 Apr 13		HG
				240-22816-D-9-A					
Hg	-.1266	ppb	.0000	-.1266					
*** Sample ID:					Seq: 64		10:10:32 11 Apr 13		HG
				240-22816-E-10-A					
Hg	-.1411	ppb	.0000	-.1411					

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 65	10:12:38 11 Apr 13	HG		
				240-22816-D-11-A				
Hg	-.1139	ppb	.0000	-.1139				
*** Sample ID:				Seq: 66	10:14:20 11 Apr 13	HG		
				240-22816-D-12-A				
Hg	-.1304	ppb	.0000	-.1304				
*** Sample ID:				Seq: 67	10:16:43 11 Apr 13	HG		
				240-22878-D-1-A				
Hg	-.0969	ppb	.0000	-.0969				
*** Sample ID:				Seq: 68	10:18:26 11 Apr 13	HG		
				240-22882-D-1-A				
Hg	-.1276	ppb	.0000	-.1276				
*** Sample ID:				Seq: 69	10:20:20 11 Apr 13	HG		
				240-22882-D-2-A				
Hg	-.1317	ppb	.0000	-.1317				
*** Check Standard: 6 Ck6CCV				Seq: 70	10:22:17 11 Apr 13	HG		
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		107.4	5.371	5.000	ppb	.0000		
*** Check Standard: 1 Ck1CCB				Seq: 71	10:24:01 11 Apr 13	HG		
Line	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg		.0069	.2000	ppb	.0000			
*** Sample ID:				Seq: 72	10:25:46 11 Apr 13	HG		
				240-22882-D-3-A				
Hg	-.1330	ppb	.0000	-.1330				
*** Sample ID:				Seq: 73	10:27:40 11 Apr 13	HG		
				240-22882-D-4-A				
Hg	-.1276	ppb	.0000	-.1276				
*** Sample ID:				Seq: 74	10:29:42 11 Apr 13	HG		
				240-22882-D-5-A				
Hg	-.1258	ppb	.0000	-.1258				
*** Sample ID:				Seq: 75	10:31:41 11 Apr 13	HG		
				240-22882-D-7-A				
Hg	-.1264	ppb	.0000	-.1264				
*** Sample ID:				Seq: 76	10:33:28 11 Apr 13	HG		
				240-22882-D-8-A				
Hg	-.1187	ppb	.0000	-.1187				
*** Sample ID:				Seq: 77	10:35:14 11 Apr 13	HG		
				240-22882-D-9-A				
Hg	-.1215	ppb	.0000	-.1215				
*** Sample ID:				Seq: 78	10:37:27 11 Apr 13	HG		
				240-22882-D-10-A				
Hg	-.1088	ppb	.0000	-.1088				
*** Sample ID:				Seq: 79	10:39:13 11 Apr 13	HG		
				240-22882-D-11-A				
Hg	-.1185	ppb	.0000	-.1185				
*** Sample ID:				Seq: 80	10:41:00 11 Apr 13	HG		
				240-22882-D-12-A				
Hg	-.1312	ppb	.0000	-.1312				

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCV Seq: 81 10:46:21 11 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		109.6	5.480	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 82 10:48:12 11 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.0255	.2000	ppb	.0000

*** Sample ID: Seq: 83 10:50:03 11 Apr 13 HG
240-22883-C-1-A

Hg	-.0824	ppb	.0000	-.0824

*** Sample ID: Seq: 84 10:51:46 11 Apr 13 HG
240-22883-C-2-A

Hg	-.1182	ppb	.0000	-.1182

*** Check Standard: 6 Ck6CCV Seq: 85 10:53:28 11 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		106.9	5.344	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 86 10:55:09 11 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0162	.2000	ppb	.0000

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: 7470A / 245.1 : (7471:)

Run Date: 4/11/2013 Analyst: A. Sutherland Instrument: H1

Review Items A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRA run?	✓			✓
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?			✓	
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	
2. Current IDL/MDL data on file?	✓			✓
3. Calculations and Transcription checked for error?	✓			✓
4. All client/project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Level I

Analyst: [signature] Date/Time: 4/11/2013 Reviewed from 10:20 to 13:27

Analyst: _____ Date/Time: _____ Reviewed from _____ to _____

Comments: _____

Level II

Reviewer: [signature] Date/Time: 4-11-13 Reviewed from 10:20 to 15:27

Reviewer: _____ Date/Time: _____ Reviewed from _____ to _____

Comments _____

Curve Date 4/11/2013 Curve Time 9:05-9:35 DILUTION H20 80014

Revised 11/29/2012

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: 7470A / 245.1 : (7471:)

Run Date: 4/16/2013 Analyst: A. Sutherland Instrument: H1

Review Items				
A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRA run?	✓			✓
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current IDL/MDL data on file?	✓			✓
3. Calculations and Transcription checked for error?	✓			✓
4. All client/project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Level I

Analyst: [signature] Date/Time: 4/17/2013 Reviewed from 11:06 to 14:33

Analyst: _____ Date/Time: _____ Reviewed from _____ to _____

Comments: _____

Level II

Reviewer: [signature] Date/Time: 4/17/13 Reviewed from 11:06 to 14:33

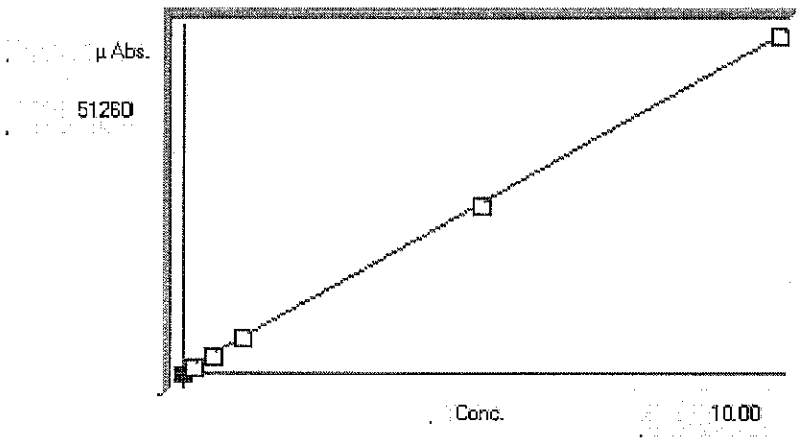
Reviewer: _____ Date/Time: _____ Reviewed from _____ to _____

Comments _____

Curve Date 4/16/2013 Curve Time 9:55 - 10:25 DILUTION H20 00014

Revised 11/29/2012

Protocol: 0416AHG1



Linear

Calibrated

Accepted

A

B 1.96148e-4

C -5.65353e-2

Rhc .999994

Accepted Date: 16-Apr-13 11:13

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0151	.0151	366	1	365				
02	.20000	.1798	-.0202	1206	0%	1205				
03	.50000	.4903	-.0097	2788	0%	2788				
04	1.0000	1.014	.0140	5459	0%	5458				
05	5.0000	5.003	.0027	25793	0%	25793				
06	10.000	9.998	-.0020	51261	0%	51260				
07										
08										
09										
10										

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 11:06:54 16 Apr 13 HG

Hg .0000 ppb 365

*** Standard: 2 Rep: 1 Seq: 2 11:08:12 16 Apr 13 HG

Hg .2000 ppb 1205

*** Standard: 3 Rep: 1 Seq: 3 11:09:32 16 Apr 13 HG

Hg .5000 ppb 2788

*** Standard: 4 Rep: 1 Seq: 4 11:10:52 16 Apr 13 HG

Hg 1.000 ppb 5458

*** Standard: 5 Rep: 1 Seq: 5 11:12:20 16 Apr 13 HG

Hg 5.000 ppb 25793

*** Standard: 6 Rep: 1 Seq: 6 11:13:40 16 Apr 13 HG

Hg 10.00 ppb 51260

*** Check Standard: 2 Ck2ICV Seq: 7 11:15:28 16 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.0	2.524	2.500	ppb	.0000

*** Check Standard: 3 Ck3ICB Seq: 8 11:16:45 16 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		^^^^^^	-.0079	.0000	ppb	.0000

*** Check Standard: 4 Ck4CRA\MRL Seq: 9 11:18:02 16 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		94.52	.1890	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 10 11:19:29 16 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.0	5.051	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 11 11:20:45 16 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0128	.2000	ppb	.0000

*** Sample ID: Seq: 12 11:22:20 16 Apr 13 HG
MB 240-81953/1-A
Hg -.0179 ppb .0000 -.0179

*** Sample ID: Seq: 13 11:23:36 16 Apr 13 HG
LCS 240-81953/2-A
Hg 5.033 ppb .0000 5.033

*** Sample ID: Seq: 14 11:25:26 16 Apr 13 HG
240-23183-B-16-D
Hg .0496 ppb .0000 .0496

*** Sample ID: Seq: 15 11:26:42 16 Apr 13 HG
240-23183-B-16-E MS
Hg 1.053 ppb .0000 1.053

*** Sample ID: Seq: 16 11:27:58 16 Apr 13 HG
240-23183-B-16-F MSD
Hg 1.024 ppb .0000 1.024

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 97	13:35:27 16 Apr 13	HG		
				240-23081-G-2-B				
Hg	1.396	ppb	.0000	1.396				
*** Sample ID:				Seq: 98	13:36:53 16 Apr 13	HG		
				240-23081-H-3-B				
Hg	.4266	ppb	.0000	.4266				
*** Sample ID:				Seq: 99	13:38:33 16 Apr 13	HG		
				240-23081-G-4-B				
Hg	1.542	ppb	.0000	1.542				
*** Sample ID:				Seq: 100	13:39:54 16 Apr 13	HG		
				MB 240-81982/1-A				
Hg	-.0093	ppb	.0000	-.0093				
*** Sample ID:				Seq: 101	13:41:11 16 Apr 13	HG		
				LCS 240-81982/2-A				
Hg	5.091	ppb	.0000	5.091				
*** Check Standard: 6 Ck6CCV				Seq: 102	13:43:03 16 Apr 13	HG		
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		99.41	4.970	5.000	ppb	.0000		
*** Check Standard: 1 Ck1CCB				Seq: 103	13:44:29 16 Apr 13	HG		
Line	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg		-.0089	.2000	ppb	.0000			
*** Sample ID:				Seq: 104	13:45:50 16 Apr 13	HG		
				240-23054-D-18-B				
Hg	.1741	ppb	.0000	.1741				
*** Sample ID:				Seq: 105	13:47:18 16 Apr 13	HG		
				240-23054-D-18-C MS				
Hg	1.179	ppb	.0000	1.179				
*** Sample ID:				Seq: 106	13:48:37 16 Apr 13	HG		
				240-23054-D-18-D MSD				
Hg	1.162	ppb	.0000	1.162				
*** Sample ID:				Seq: 107	13:50:30 16 Apr 13	HG		
				240-23054-D-19-B				
Hg	.0586	ppb	.0000	.0586				
*** Sample ID:				Seq: 108	13:52:00 16 Apr 13	HG		
				240-23054-D-20-B				
Hg	.0557	ppb	.0000	.0557				
*** Sample ID:				Seq: 109	13:53:19 16 Apr 13	HG		
				240-23054-D-21-B				
Hg	.1000	ppb	.0000	.1000				
*** Sample ID:				Seq: 110	13:54:36 16 Apr 13	HG		
				240-22954-B-7-E				
Hg	.2832	ppb	.0000	.2832				
*** Sample ID:				Seq: 111	13:56:05 16 Apr 13	HG		
				240-23170-D-3-C				
Hg	.0647	ppb	.0000	.0647				
*** Sample ID:				Seq: 112	13:57:34 16 Apr 13	HG		
				240-22764-I-1-A				
Hg	.0370	ppb	.0000	.0370				

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 17	11:29:34 16 Apr 13	HG		
				240-23183-B-17-B				
Hg	.0498	ppb	.0000	.0498				
*** Sample ID:				Seq: 18	11:30:51 16 Apr 13	HG		
				240-23183-B-18-B				
Hg	.0068	ppb	.0000	.0068				
*** Sample ID:				Seq: 19	11:32:34 16 Apr 13	HG		
				240-23183-B-19-B				
Hg	.0202	ppb	.0000	.0202				
*** Sample ID:				Seq: 20	11:33:51 16 Apr 13	HG		
				240-23183-B-20-B				
Hg	.0074	ppb	.0000	.0074				
*** Sample ID:				Seq: 21	11:35:08 16 Apr 13	HG		
				240-23183-B-21-B				
Hg	61.71 H	ppb	.0000	61.71				
*** Check Standard: 6 Ck6CCV				Seq: 22	11:36:34 16 Apr 13	HG		
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		97.42	4.871	5.000	ppb	.0000		
*** Check Standard: 1 Ck1CCB				Seq: 23	11:38:03 16 Apr 13	HG		
Line	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg		-.0263	.2000	ppb	.0000			
*** Sample ID:				Seq: 24	11:39:43 16 Apr 13	HG		
				240-23183-B-22-B				
Hg	.4077	ppb	.0000	.4077				
*** Sample ID:				Seq: 25	11:41:52 16 Apr 13	HG		
				240-23183-B-23-B				
Hg	.1449	ppb	.0000	.1449				
*** Sample ID:				Seq: 26	11:44:00 16 Apr 13	HG		
				240-23183-A-1-B				
Hg	.0068	ppb	.0000	.0068				
*** Sample ID:				Seq: 27	11:46:01 16 Apr 13	HG		
				240-23183-A-2-B				
Hg	1.292	ppb	.0000	1.292				
*** Sample ID:				Seq: 28	11:47:40 16 Apr 13	HG		
				240-23183-A-3-B				
Hg	.2179	ppb	.0000	.2179				
*** Sample ID:				Seq: 29	11:49:30 16 Apr 13	HG		
				240-23183-B-21-B@20				
Hg	3.075	ppb	.0000	3.075				
*** Check Standard: 6 Ck6CCV				Seq: 30	11:51:25 16 Apr 13	HG		
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		99.62	4.981	5.000	ppb	.0000		
*** Check Standard: 1 Ck1CCB				Seq: 31	11:52:40 16 Apr 13	HG		
Line	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg		-.0222	.2000	ppb	.0000			
*** Sample ID:				Seq: 32	11:53:55 16 Apr 13	HG		
				LB 240-81614/1-C				
Hg	-.0073	ppb	.0000	-.0073				

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 33	11:55:12 16 Apr 13	HG		
				MB 240-81961/2-A				
Hg	-.0089	ppb	.0000	-.0089				
*** Sample ID:				Seq: 34	11:56:38 16 Apr 13	HG		
				LCS 240-81961/3-A				
Hg	4.637	ppb	.0000	4.637				
*** Sample ID:				Seq: 35	11:57:53 16 Apr 13	HG		
				240-22911-A-1-G				
Hg	-.0310	ppb	.0000	-.0310				
*** Sample ID:				Seq: 36	11:59:08 16 Apr 13	HG		
				240-22911-A-1-H MS				
Hg	4.176	ppb	.0000	4.176				
*** Sample ID:				Seq: 37	12:00:46 16 Apr 13	HG		
				240-22911-A-1-I MSD				
Hg	4.085	ppb	.0000	4.085				
*** Sample ID:				Seq: 38	12:02:06 16 Apr 13	HG		
				240-22910-B-1-H				
Hg	.0064	ppb	.0000	.0064				
*** Sample ID:				Seq: 39	12:03:24 16 Apr 13	HG		
				240-22829-A-8-I				
Hg	.0215	ppb	.0000	.0215				
*** Sample ID:				Seq: 40	12:04:42 16 Apr 13	HG		
				MB 240-81976/1-A				
Hg	-.0150	ppb	.0000	-.0150				
*** Sample ID:				Seq: 41	12:06:08 16 Apr 13	HG		
				LCS 240-81976/2-A				
Hg	5.021	ppb	.0000	5.021				
*** Check Standard: 6 Ck6CCV				Seq: 42	12:07:24 16 Apr 13	HG		
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		99.51	4.976	5.000	ppb	.0000		
*** Check Standard: 1 Ck1CCB				Seq: 43	12:09:01 16 Apr 13	HG		
Line	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg		-.0099	.2000	ppb	.0000			
*** Sample ID:				Seq: 44	12:10:32 16 Apr 13	HG		
				240-22663-D-5-E				
Hg	.0951	ppb	.0000	.0951				
*** Sample ID:				Seq: 45	12:11:48 16 Apr 13	HG		
				240-22663-D-5-F MS				
Hg	1.118	ppb	.0000	1.118				
*** Sample ID:				Seq: 46	12:14:26 16 Apr 13	HG		
				240-22663-D-5-G DU				
Hg	.1504	ppb	.0000	.1504				
*** Sample ID:				Seq: 47	12:15:43 16 Apr 13	HG		
				240-22663-E-16-E				
Hg	.0688	ppb	.0000	.0688				
*** Sample ID:				Seq: 48	12:17:24 16 Apr 13	HG		
				240-22663-E-16-F MS				
Hg	1.081	ppb	.0000	1.081				

ADS 4/17/2013

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:					Seq: 49	12:18:39 16 Apr 13			HG
				240-22663-E-16-G DU					
Hg	.1655	ppb	.0000	.1655					
*** Sample ID:					Seq: 50	12:19:56 16 Apr 13			HG
				240-22660-C-28-B					
Hg	.0786	ppb	.0000	.0786					
*** Sample ID:					Seq: 51	12:21:13 16 Apr 13			HG
				240-22663-C-1-B					
Hg	.1245	ppb	.0000	.1245					
*** Sample ID:					Seq: 52	12:22:34 16 Apr 13			HG
				240-22663-C-2-B					
Hg	.1396	ppb	.0000	.1396					
*** Sample ID:					Seq: 53	12:24:25 16 Apr 13			HG
				240-22663-C-3-B					
Hg	.0865	ppb	.0000	.0865					
*** Check Standard: 6 Ck6CCV					Seq: 54	12:25:42 16 Apr 13			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		99.02	4.951	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB					Seq: 55	12:28:22 16 Apr 13			HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		.0123	.2000	ppb	.0000				
*** Sample ID:					Seq: 56	12:29:58 16 Apr 13			HG
				240-22663-G-4-E					
Hg	.0776	ppb	.0000	.0776					
*** Sample ID:					Seq: 57	12:31:14 16 Apr 13			HG
				240-22663-C-6-B					
Hg	.0906	ppb	.0000	.0906					
*** Sample ID:					Seq: 58	12:32:32 16 Apr 13			HG
				240-22663-G-7-E					
Hg	.0965	ppb	.0000	.0965					
*** Sample ID:					Seq: 59	12:33:50 16 Apr 13			HG
				240-22663-C-8-B					
Hg	.1345	ppb	.0000	.1345					
*** Sample ID:					Seq: 60	12:36:17 16 Apr 13			HG
				240-22663-B-9-B					
Hg	.1176	ppb	.0000	.1176					
*** Sample ID:					Seq: 61	12:37:45 16 Apr 13			HG
				240-22663-C-11-B					
Hg	.1484	ppb	.0000	.1484					
*** Sample ID:					Seq: 62	12:40:00 16 Apr 13			HG
				240-22663-C-12-B					
Hg	.0808	ppb	.0000	.0808					
*** Sample ID:					Seq: 63	12:41:17 16 Apr 13			HG
				240-22663-C-13-B					
Hg	.0680	ppb	.0000	.0680					
*** Sample ID:					Seq: 64	12:42:34 16 Apr 13			HG
				240-22663-C-14-B					
Hg	.1023	ppb	.0000	.1023					

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:					Seq: 65	12:43:56 16 Apr 13			HG
				240-22663-C-15-B					
Hg	.1239	ppb	.0000	.1239					
*** Check Standard: 6 Ck6CCV					Seq: 66	12:45:13 16 Apr 13			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		100.4	5.018	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB					Seq: 67	12:46:49 16 Apr 13			HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		.0019	.2000	ppb		.0000			
*** Sample ID:					Seq: 68	12:48:05 16 Apr 13			HG
				240-22663-G-17-E					
Hg	.0908	ppb	.0000	.0908					
*** Sample ID:					Seq: 69	12:49:36 16 Apr 13			HG
				240-22663-C-18-B					
Hg	.0602	ppb	.0000	.0602					
*** Sample ID:					Seq: 70	12:51:17 16 Apr 13			HG
				240-22663-C-19-B					
Hg	.0874	ppb	.0000	.0874					
*** Sample ID:					Seq: 71	12:53:45 16 Apr 13			HG
				240-22663-C-20-A					
Hg	.1304	ppb	.0000	.1304					
*** Sample ID:					Seq: 72	12:55:34 16 Apr 13			HG
				MB 240-81935/1-A					
Hg	.0111	ppb	.0000	.0111					
*** Sample ID:					Seq: 73	12:57:02 16 Apr 13			HG
				LCS 240-81935/2-A					
Hg	4.661	ppb	.0000	4.661					
*** Sample ID:					Seq: 74	12:58:48 16 Apr 13			HG
				240-23054-I-12-D					
Hg	.2861	ppb	.0000	.2861					
*** Sample ID:					Seq: 75	13:00:34 16 Apr 13			HG
				240-23054-I-12-E MS					
Hg	1.248	ppb	.0000	1.248					
*** Sample ID:					Seq: 76	13:01:50 16 Apr 13			HG
				240-23054-I-12-F MSD					
Hg	1.260	ppb	.0000	1.260					
*** Sample ID:					Seq: 77	13:04:36 16 Apr 13			HG
				240-23054-D-2-B					
Hg	.1484	ppb	.0000	.1484					
*** Check Standard: 6 Ck6CCV					Seq: 78	13:05:56 16 Apr 13			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		99.96	4.998	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB					Seq: 79	13:07:16 16 Apr 13			HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		-.0161	.2000	ppb		.0000			
*** Sample ID:					Seq: 80	13:09:03 16 Apr 13			HG
				240-23054-D-3-B					
Hg	.1592	ppb	.0000	.1592					

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 81	13:10:20 16 Apr 13	HG		
				240-23054-D-4-B				
Hg	.0812	ppb	.0000	.0812				
*** Sample ID:				Seq: 82	13:11:48 16 Apr 13	HG		
				240-23054-D-5-B				
Hg	.0957	ppb	.0000	.0957				
*** Sample ID:				Seq: 83	13:14:05 16 Apr 13	HG		
				240-23054-D-6-B				
Hg	.0808	ppb	.0000	.0808				
*** Sample ID:				Seq: 84	13:15:33 16 Apr 13	HG		
				240-23054-D-7-B				
Hg	.1021	ppb	.0000	.1021				
*** Sample ID:				Seq: 85	13:16:49 16 Apr 13	HG		
				240-23054-D-8-B				
Hg	.1390	ppb	.0000	.1390				
*** Sample ID:				Seq: 86	13:18:16 16 Apr 13	HG		
				240-23054-D-9-B				
Hg	.1490	ppb	.0000	.1490				
*** Sample ID:				Seq: 87	13:19:32 16 Apr 13	HG		
				240-23054-D-10-B				
Hg	.1637	ppb	.0000	.1637				
*** Sample ID:				Seq: 88	13:21:19 16 Apr 13	HG		
				240-23054-D-11-B				
Hg	.0868	ppb	.0000	.0868				
*** Sample ID:				Seq: 89	13:23:07 16 Apr 13	HG		
				240-23054-D-13-B				
Hg	.1588	ppb	.0000	.1588				
*** Check Standard: 6 Ck6CCV				Seq: 90	13:24:34 16 Apr 13	HG		
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		100.3	5.015	5.000	ppb	.0000		
*** Check Standard: 1 Ck1CCB				Seq: 91	13:25:49 16 Apr 13	HG		
Line	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg		-.0238	.2000	ppb	.0000			
*** Sample ID:				Seq: 92	13:28:48 16 Apr 13	HG		
				240-23054-D-14-B				
Hg	.0961	ppb	.0000	.0961				
*** Sample ID:				Seq: 93	13:30:06 16 Apr 13	HG		
				240-23054-D-15-B				
Hg	.1836	ppb	.0000	.1836				
*** Sample ID:				Seq: 94	13:31:23 16 Apr 13	HG		
				240-23054-D-16-B				
Hg	.0692	ppb	.0000	.0692				
*** Sample ID:				Seq: 95	13:32:52 16 Apr 13	HG		
				240-23054-D-17-B				
Hg	.0633	ppb	.0000	.0633				
*** Sample ID:				Seq: 96	13:34:10 16 Apr 13	HG		
				240-23081-I-1-B				
Hg	1.959	ppb	.0000	1.959				

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 113 13:58:52 16 Apr 13 HG
240-22764-I-2-A

Hg	.0113	ppb	.0000	.0113				

*** Check Standard: 6 Ck6CCV Seq: 114 14:00:08 16 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.67	4.983	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 115 14:01:28 16 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0073	.2000	ppb	.0000

*** Sample ID: Seq: 116 14:02:49 16 Apr 13 HG
240-22764-I-3-A

Hg	.0886	ppb	.0000	.0886				

*** Sample ID: Seq: 117 14:04:28 16 Apr 13 HG
240-22764-I-4-A

Hg	.2269	ppb	.0000	.2269				

*** Sample ID: Seq: 118 14:05:45 16 Apr 13 HG
240-22764-H-5-A

Hg	.1773	ppb	.0000	.1773				

*** Sample ID: Seq: 119 14:07:04 16 Apr 13 HG
240-22764-H-6-A

Hg	.1271	ppb	.0000	.1271				

*** Sample ID: Seq: 120 14:08:25 16 Apr 13 HG
240-22764-I-7-A

Hg	.0162	ppb	.0000	.0162				

*** Sample ID: Seq: 121 14:09:45 16 Apr 13 HG
240-22764-I-8-A

Hg	.0013	ppb	.0000	.0013				

*** Check Standard: 6 Ck6CCV Seq: 122 14:11:03 16 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.50	4.975	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 123 14:12:32 16 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0073	.2000	ppb	.0000

*** Check Standard: 4 Ck4CRA\MRL Seq: 124 14:33:54 16 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		82.16	.1643	.2000	ppb	.0000

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 09:01:46 12 Apr 13 HG

Hg .0000 ppb -19

*** Standard: 2 Rep: 1 Seq: 2 09:03:59 12 Apr 13 HG

Hg .2000 ppb 907

*** Standard: 3 Rep: 1 Seq: 3 09:06:04 12 Apr 13 HG

Hg .5000 ppb 2323

*** Standard: 4 Rep: 1 Seq: 4 09:07:50 12 Apr 13 HG

Hg 1.000 ppb 4622

*** Standard: 5 Rep: 1 Seq: 5 09:09:32 12 Apr 13 HG

Hg 5.000 ppb 21403

*** Standard: 6 Rep: 1 Seq: 6 09:11:24 12 Apr 13 HG

Hg 10.00 ppb 44987

*** Check Standard: 2 Ck2ICV Seq: 7 09:17:25 12 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.2	2.629	2.500	ppb	.0000

*** Check Standard: 3 Ck3ICB Seq: 8 09:19:12 12 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		^^^^^^	.0284	.0000	ppb	.0000

*** Check Standard: 4 Ck4CRA\MRL Seq: 9 09:22:05 12 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		113.9	.2279	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 10 11:37:49 12 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		89.40	4.470	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 11 11:39:37 12 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0052	.2000	ppb	.0000

*** Sample ID: Seq: 12 11:41:19 12 Apr 13 HG
LB 240-81282/1-C
Hg .0490 ppb .0000 .0490

*** Sample ID: Seq: 13 11:43:21 12 Apr 13 HG
MB 240-81563/2-A
Hg .0472 ppb .0000 .0472

*** Sample ID: Seq: 14 11:45:53 12 Apr 13 HG
LCS 240-81563/3-A
Hg 4.644 ppb .0000 4.644

*** Sample ID: Seq: 15 11:47:54 12 Apr 13 HG
240-22867-A-1-J
Hg .0360 ppb .0000 .0360

*** Sample ID: Seq: 16 11:50:09 12 Apr 13 HG
240-22867-A-1-K MS
Hg 3.738 ppb .0000 3.738

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:				Seq: 17		11:52:02 12 Apr 13			HG
				240-22867-A-1-L MSD					
Hg	3.628	ppb	.0000	3.628					
*** Sample ID:				Seq: 18		11:53:44 12 Apr 13			HG
				MB 240-81545/1-A					
Hg	-.0303	ppb	.0000	-.0303					
*** Sample ID:				Seq: 19		11:55:30 12 Apr 13			HG
				LCS 240-81545/2-A					
Hg	4.696	ppb	.0000	4.696					
*** Sample ID:				Seq: 20		11:57:12 12 Apr 13			HG
				240-22660-F-15-E					
Hg	.2019	ppb	.0000	.2019					
*** Sample ID:				Seq: 21		11:58:54 12 Apr 13			HG
				240-22660-F-15-F DU					
Hg	.1896	ppb	.0000	.1896					
*** Check Standard: 6 Ck6CCV				Seq: 22		12:00:51 12 Apr 13			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		101.4	5.068	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB				Seq: 23		12:02:58 12 Apr 13			HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		.0273	.2000	ppb		.0000			
*** Sample ID:				Seq: 24		12:05:25 12 Apr 13			HG
				240-22660-F-15-G MS					
Hg	1.192	ppb	.0000	1.192					
*** Sample ID:				Seq: 25		12:07:32 12 Apr 13			HG
				240-22660-C-20-B					
Hg	.2120	ppb	.0000	.2120					
*** Sample ID:				Seq: 26		12:09:18 12 Apr 13			HG
				240-22660-C-26-B					
Hg	.2903	ppb	.0000	.2903					
*** Sample ID:				Seq: 27		12:11:10 12 Apr 13			HG
				240-22660-C-21-B					
Hg	.2400	ppb	.0000	.2400					
*** Sample ID:				Seq: 28		12:12:51 12 Apr 13			HG
				240-22660-C-17-B					
Hg	.1638	ppb	.0000	.1638					
*** Sample ID:				Seq: 29		12:15:07 12 Apr 13			HG
				240-22660-C-10-B					
Hg	.1974	ppb	.0000	.1974					
*** Sample ID:				Seq: 30		12:16:48 12 Apr 13			HG
				240-22660-C-12-B					
Hg	.1858	ppb	.0000	.1858					
*** Sample ID:				Seq: 31		12:18:50 12 Apr 13			HG
				240-22660-C-18-B					
Hg	.1925	ppb	.0000	.1925					
*** Sample ID:				Seq: 32		12:21:52 12 Apr 13			HG
				240-22660-C-27-B					
Hg	.2261	ppb	.0000	.2261					

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 33 12:23:35 12 Apr 13 HG
240-22660-C-22-B

Hg	.2174	ppb	.0000	.2174

*** Check Standard: 6 Ck6CCV Seq: 34 12:25:29 12 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.3	5.167	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 35 12:27:13 12 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0027	.2000	ppb	.0000

*** Sample ID: Seq: 36 12:28:58 12 Apr 13 HG
240-22660-C-25-B

Hg	.1594	ppb	.0000	.1594

*** Sample ID: Seq: 37 12:30:41 12 Apr 13 HG
240-22660-C-9-B

Hg	.1694	ppb	.0000	.1694

*** Sample ID: Seq: 38 12:32:26 12 Apr 13 HG
240-22660-C-14-B

Hg	.1712	ppb	.0000	.1712

*** Sample ID: Seq: 39 12:35:02 12 Apr 13 HG
240-22660-C-16-B

Hg	.1782	ppb	.0000	.1782

*** Sample ID: Seq: 40 12:38:09 12 Apr 13 HG
240-22660-C-11-B

Hg	.2064	ppb	.0000	.2064

*** Sample ID: Seq: 41 12:40:03 12 Apr 13 HG
240-22660-C-24-B

Hg	.1244	ppb	.0000	.1244

*** Sample ID: Seq: 42 12:42:28 12 Apr 13 HG
240-23031-E-1-B

Hg	.3443	ppb	.0000	.3443

*** Sample ID: Seq: 43 12:44:11 12 Apr 13 HG
240-22660-C-23-B

Hg	.1614	ppb	.0000	.1614

*** Sample ID: Seq: 44 12:46:13 12 Apr 13 HG
240-22660-C-19-A

Hg	.1972	ppb	.0000	.1972

*** Sample ID: Seq: 45 12:48:07 12 Apr 13 HG
240-22660-C-13-B

Hg	.1741	ppb	.0000	.1741

*** Check Standard: 6 Ck6CCV Seq: 46 12:50:03 12 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.8	5.292	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 47 12:51:50 12 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.0083	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 48 13:48:04 12 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.9	5.145	5.000	ppb	.0000

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 1 Ck1CCB Seq: 49 13:49:48 12 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0094	.2000	ppb	.0000

*** Sample ID: Seq: 50 13:51:50 12 Apr 13 HG
cra

Hg	.2335	ppb	.0000	.2335

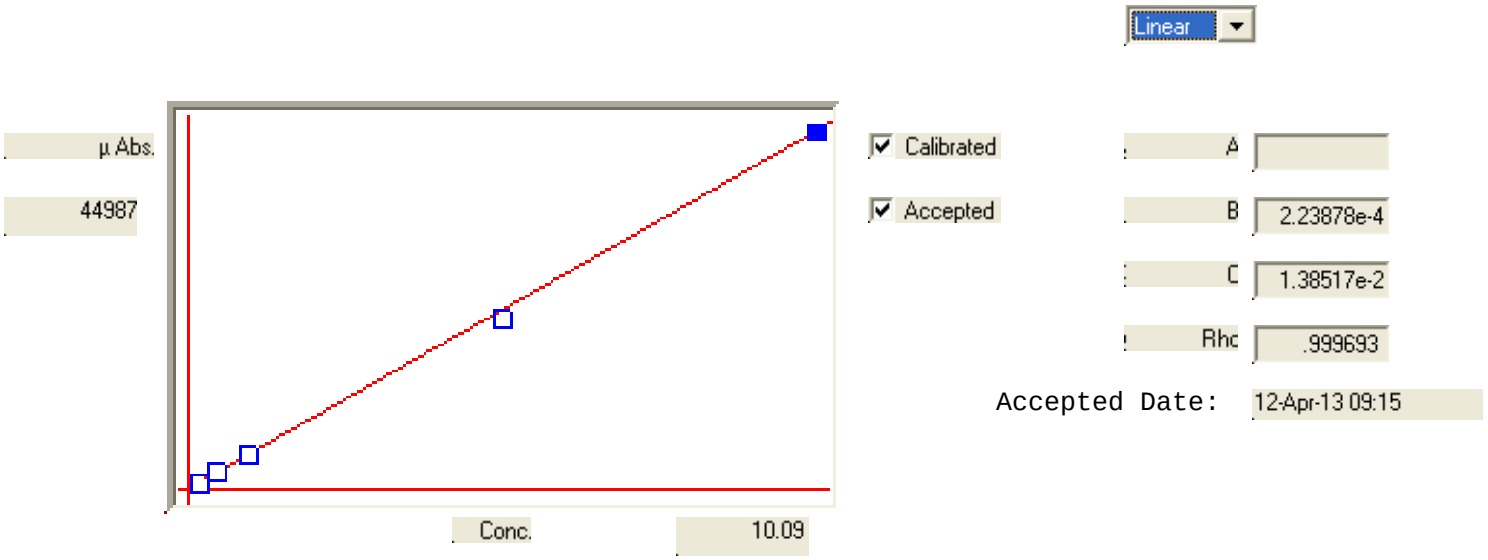
*** Check Standard: 6 Ck6CCV Seq: 51 13:54:32 12 Apr 13 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.1	5.053	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 52 13:56:24 12 Apr 13 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.0177	.2000	ppb	.0000

Protocol: 0412BHG4



S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0096	.0096	-19	1	-19				
02	.20000	.2169	.0169	908	0%	907				
03	.50000	.5339	.0339	2324	0%	2323				
04	1.0000	1.049	.0486	4623	0%	4622				
05	5.0000	4.806	-.1945	21404	0%	21403				
06	10.000	10.09	.0854	44987	0%	44987				
07										
08										
09										
10										

Dilution Corrected Concentrations

STD1 809429 INT STD 4/30/2013 7:53:10 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	19:53:53	100.735%	-0.002	0.059	0.084	0.000	-1.154	-0.013	0.032
2	19:54:36	99.975%	0.004	0.076	-0.030	0.000	0.174	-0.226	-0.085
3	19:55:19	99.289%	-0.002	-0.135	-0.054	0.000	0.980	0.239	0.053
x		100.000%	-0.000	0.000	-0.000	0.000	0.000	-0.000	-0.000
σ		0.723%	0.004	0.117	0.074	0.000	1.078	0.233	0.075
%RSD		0.723	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	19:53:53	0.005	0.084	0.000	-0.150	3.459	-0.420	100.802%	-0.102
2	19:54:36	0.035	-0.083	0.000	0.655	2.188	0.209	100.434%	0.055
3	19:55:19	-0.040	-0.001	0.000	-0.506	-5.647	0.211	98.764%	0.048
x		-0.000	-0.000	0.000	-0.000	-0.000	0.000	100.000%	0.000
σ		0.037	0.083	0.000	0.595	4.931	0.364	1.086%	0.089
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	1.086	0.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:53:53	0.009	0.003	-0.009	0.397	0.271	-0.006	0.011	0.002
2	19:54:36	0.009	0.017	-0.005	-0.180	-0.373	0.006	0.006	-0.028
3	19:55:19	-0.018	-0.019	0.014	-0.217	0.102	-0.000	-0.017	0.026
x		-0.000	0.000	-0.000	0.000	0.000	0.000	-0.000	0.000
σ		0.015	0.018	0.012	0.344	0.334	0.006	0.014	0.027
%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	19:53:53	-0.020	-0.029	0.006	-0.108	-0.001	-0.357	0.000	-0.003
2	19:54:36	0.015	-0.011	0.018	0.100	-0.023	0.374	0.000	0.002
3	19:55:19	0.005	0.041	-0.024	0.008	0.024	-0.017	0.000	0.001
x		0.000	0.000	0.000	-0.000	-0.000	-0.000	0.000	-0.000
σ		0.018	0.036	0.022	0.104	0.024	0.366	0.000	0.002
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:53:53	100.343%	-0.000	0.007	100.505%	-0.007	0.005	0.009	0.006
2	19:54:36	100.770%	0.005	0.002	100.524%	0.009	-0.005	-0.017	-0.011
3	19:55:19	98.887%	-0.005	-0.009	98.971%	-0.002	0.000	0.008	0.005
x		100.000%	-0.000	0.000	100.000%	-0.000	-0.000	-0.000	0.000
σ		0.987%	0.005	0.008	0.891%	0.008	0.005	0.015	0.009
%RSD		0.987	0.000	0.000	0.891	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	19:53:53	100.427%	0.019	0.001	-0.006	-0.003	0.008	100.586%	100.341%
2	19:54:36	100.346%	-0.021	0.005	0.004	-0.007	0.001	100.576%	100.652%
3	19:55:19	99.227%	0.001	-0.006	0.002	0.010	-0.008	98.838%	99.008%
x		100.000%	-0.000	0.000	-0.000	0.000	0.000	100.000%	100.000%
σ		0.670%	0.020	0.006	0.005	0.009	0.008	1.006%	0.873%
%RSD		0.670	0.000	0.000	0.000	0.000	0.000	1.006	0.873

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:53:53	0.001	0.004	0.000	0.004	0.003	101.483%
2	19:54:36	0.002	-0.002	-0.005	-0.005	-0.004	101.287%
3	19:55:19	-0.002	-0.001	0.005	0.001	0.001	97.230%
x		0.000	0.000	0.000	0.000	0.000	100.000%
σ		0.002	0.003	0.005	0.005	0.003	2.401%
%RSD		0.000	0.000	0.000	0.000	0.000	2.401

STD2 781421 4/30/2013 7:59:06 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	19:59:48	91.959%	199.600	0.284	0.278	0.000	100800.000	100800.000	100200.000
2	20:00:31	91.643%	200.300	0.473	0.511	0.000	100500.000	100200.000	100200.000
3	20:01:14	93.082%	200.100	-0.034	0.004	0.000	98740.000	98990.000	99520.000
x		92.228%	200.000	0.241	0.264	0.000	100000.000	100000.000	100000.000
σ		0.756%	0.385	0.256	0.254	0.000	1108.000	930.100	411.700
%RSD		0.820	0.193	106.500	96.050	0.000	1.108	0.930	0.412

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:59:48	1002.000	10.530	0.000	100200.000	99680.000	100100.000	90.352%	-0.026
2	20:00:31	1001.000	11.480	0.000	100700.000	99890.000	100400.000	90.198%	-0.025
3	20:01:14	997.000	11.440	0.000	99070.000	100400.000	99520.000	90.700%	-0.149
x		1000.000	11.150	0.000	100000.000	100000.000	100000.000	90.417%	-0.067
σ		2.761	0.537	0.000	856.100	388.500	443.400	0.258%	0.071
%RSD		0.276	4.813	0.000	0.856	0.389	0.443	0.285	106.800

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:59:48	198.900	198.800	992.600	49700.000	49890.000	200.500	201.800	199.800
2	20:00:31	201.000	201.100	1004.000	50270.000	50240.000	201.000	200.400	200.700
3	20:01:14	200.100	200.100	1004.000	50030.000	49880.000	198.500	197.800	199.500
x		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		1.052	1.173	6.400	282.200	205.300	1.339	2.010	0.657
%RSD		0.526	0.587	0.640	0.564	0.411	0.669	1.005	0.329

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:59:48	200.000	201.200	201.500	199.200	199.600	197.300	0.000	200.400
2	20:00:31	201.300	201.500	201.400	201.300	200.900	203.200	0.000	200.700
3	20:01:14	198.700	197.300	197.100	199.500	199.500	199.500	0.000	198.900
x		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		1.275	2.356	2.548	1.131	0.751	3.011	0.000	0.929
%RSD		0.637	1.178	1.274	0.565	0.375	1.505	0.000	0.465

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:59:48	87.612%	0.254	0.209	78.366%	198.500	199.800	200.300	198.600
2	20:00:31	88.339%	0.265	0.261	78.684%	201.000	200.500	201.100	200.300
3	20:01:14	90.224%	0.221	0.246	79.998%	200.500	199.700	198.600	201.100
x		88.725%	0.247	0.239	79.016%	200.000	200.000	200.000	200.000
σ		1.348%	0.022	0.027	0.865%	1.342	0.457	1.295	1.268
%RSD		1.519	9.105	11.180	1.095	0.671	0.229	0.648	0.634

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:59:48	86.426%	0.131	0.107	0.105	198.900	199.800	87.272%	87.240%
2	20:00:31	86.881%	0.141	0.104	0.112	201.300	201.700	88.067%	87.954%
3	20:01:14	88.716%	0.134	0.097	0.099	199.900	198.500	89.811%	89.681%
x		87.341%	0.135	0.103	0.105	200.000	200.000	88.383%	88.292%
σ		1.212%	0.005	0.006	0.007	1.207	1.604	1.299%	1.255%
%RSD		1.388	3.695	5.367	6.213	0.604	0.802	1.469	1.422

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:59:48	199.700	198.700	199.000	198.300	198.500	72.839%
2	20:00:31	201.700	201.600	201.100	201.500	201.200	73.423%
3	20:01:14	198.600	199.600	199.900	200.200	200.300	76.330%
x		200.000	200.000	200.000	200.000	200.000	74.197%
σ		1.569	1.467	1.065	1.596	1.375	1.870%
%RSD		0.784	0.733	0.532	0.798	0.688	2.520

STD3 781422 4/30/2013 8:03:53 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:04:36	90.676%	0.112	199.900	202.900	0.000	64.360	49.250	48.950
2	20:05:18	90.779%	0.042	203.700	201.300	0.000	63.500	48.850	50.900
3	20:06:01	93.034%	0.116	196.300	195.800	0.000	59.110	46.830	46.030
x		91.496%	0.090	200.000	200.000	0.000	62.320	48.310	48.630
σ		1.333%	0.042	3.689	3.706	0.000	2.818	1.298	2.448
%RSD		1.457	46.270	1.845	1.853	0.000	4.521	2.687	5.034
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:04:36	10.260	10180.000	0.000	61.240	38.050	120.900	89.981%	202.900
2	20:05:18	10.820	10140.000	0.000	56.810	48.560	123.800	89.424%	200.800
3	20:06:01	9.774	9673.000	0.000	50.060	67.490	107.100	91.347%	196.300
x		10.280	10000.000	0.000	56.040	51.370	117.200	90.251%	200.000
σ		0.523	284.100	0.000	5.631	14.920	8.936	0.989%	3.364
%RSD		5.085	2.841	0.000	10.050	29.040	7.622	1.096	1.682
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:04:36	0.085	0.054	1.610	39.080	38.140	0.095	0.153	0.353
2	20:05:18	0.079	0.057	1.695	35.250	33.240	0.109	0.288	0.317
3	20:06:01	0.071	0.031	1.593	31.110	33.330	0.115	0.138	0.287
x		0.078	0.047	1.633	35.150	34.900	0.106	0.193	0.319
σ		0.007	0.014	0.055	3.988	2.803	0.010	0.082	0.033
%RSD		8.707	29.280	3.349	11.350	8.030	9.436	42.710	10.430
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:04:36	0.335	2.817	2.774	0.484	1.114	1.250	0.000	0.200
2	20:05:18	0.377	2.637	2.892	0.494	1.002	1.046	0.000	0.192
3	20:06:01	0.292	2.533	2.553	0.352	0.713	0.458	0.000	0.206
x		0.334	2.662	2.740	0.444	0.943	0.918	0.000	0.199
σ		0.043	0.144	0.172	0.080	0.207	0.411	0.000	0.007
%RSD		12.710	5.395	6.285	17.960	21.950	44.820	0.000	3.544
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:04:36	88.554%	199.100	199.200	84.984%	0.149	0.185	0.210	-0.376
2	20:05:18	89.674%	201.700	201.200	85.155%	0.181	0.141	0.219	-0.283
3	20:06:01	90.830%	199.100	199.600	86.757%	0.151	0.150	0.170	-0.516
x		89.686%	200.000	200.000	85.632%	0.160	0.159	0.200	-0.391
σ		1.138%	1.515	1.082	0.978%	0.018	0.023	0.026	0.117
%RSD		1.269	0.757	0.541	1.142	11.180	14.560	13.200	29.940
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:04:36	88.757%	200.700	201.100	200.900	0.284	0.320	88.641%	88.863%
2	20:05:18	89.962%	202.000	202.000	202.100	0.283	0.351	90.227%	90.843%
3	20:06:01	91.874%	197.300	196.900	197.100	0.267	0.349	92.929%	92.861%
x		90.198%	200.000	200.000	200.000	0.278	0.340	90.599%	90.856%
σ		1.572%	2.466	2.755	2.619	0.010	0.017	2.168%	1.999%
%RSD		1.743	1.233	1.377	1.310	3.509	5.140	2.393	2.200
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:04:36	0.080	0.092	0.190	0.171	0.175	86.069%		
2	20:05:18	0.077	0.078	0.174	0.174	0.172	89.705%		
3	20:06:01	0.092	0.079	0.163	0.177	0.164	90.622%		
x		0.083	0.083	0.176	0.174	0.170	88.799%		
σ		0.008	0.008	0.014	0.003	0.006	2.408%		
%RSD		9.694	9.447	7.849	1.764	3.401	2.712		

ICV 768044 4/30/2013 8:08:41 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	20:09:24	94.207%	80.060	105.100	103.800	0.000	39620.000	39250.000	39330.000
2	20:10:07	95.002%	78.630	104.400	103.100	0.000	38420.000	37990.000	37900.000
3	20:10:50	94.057%	79.280	106.400	104.700	0.000	39870.000	39320.000	39620.000
x		94.422%	99.155%	131.602%	129.814%	0.000	98.252%	97.132%	97.374%
σ		0.508%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.538	0.906	0.957	0.753	0.000	1.974	1.929	2.366
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:09:24	402.200	5207.000	0.000	40280.000	40070.000	37800.000	90.607%	81.710
2	20:10:07	390.100	5084.000	0.000	39190.000	38200.000	36230.000	92.247%	82.100
3	20:10:50	406.300	5323.000	0.000	40590.000	40280.000	37890.000	89.979%	83.020
x		99.879%	130.112%	0.000	100.052%	98.787%	93.270%	90.944%	102.850%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.171%	n/a
%RSD		2.104	2.294	0.000	1.829	2.897	2.497	1.287	0.819
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:09:24	82.700	82.130	382.800	19830.000	19460.000	81.760	83.320	84.910
2	20:10:07	80.020	79.160	370.100	19070.000	18730.000	79.590	79.690	80.960
3	20:10:50	83.090	82.560	390.300	20170.000	19700.000	83.380	84.610	84.480
x		102.423%	101.602%	95.267%	98.443%	96.483%	101.968%	103.178%	104.309%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.040	2.280	2.678	2.861	2.628	2.333	3.088	2.599
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:09:24	84.330	83.430	83.810	81.760	82.650	81.500	0.000	75.310
2	20:10:07	80.220	79.970	79.140	79.100	80.570	79.050	0.000	73.030
3	20:10:50	85.300	84.430	84.120	83.150	84.910	82.880	0.000	76.940
x		104.104%	103.264%	102.947%	101.671%	103.384%	101.431%	0.000	93.865%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		3.238	2.831	3.391	2.531	2.623	2.396	0.000	2.615
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:09:24	93.676%	78.480	78.590	90.431%	76.580	78.570	76.710	79.800
2	20:10:07	95.785%	76.320	77.040	92.229%	73.350	75.200	74.820	75.240
3	20:10:50	93.258%	82.640	83.310	86.228%	79.730	81.230	79.460	80.150
x		94.240%	98.933%	99.559%	89.629%	95.691%	97.916%	96.244%	97.995%
σ		1.355%	n/a	n/a	3.080%	n/a	n/a	n/a	n/a
%RSD		1.438	4.060	4.100	3.436	4.170	3.856	3.029	3.489
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:09:24	92.178%	78.930	78.180	77.650	78.800	77.440	93.139%	93.736%
2	20:10:07	94.541%	76.990	74.860	75.260	75.130	73.960	96.049%	96.472%
3	20:10:50	92.219%	80.670	79.200	79.040	78.110	78.610	94.178%	94.228%
x		92.979%	98.583%	96.767%	96.644%	96.682%	95.839%	94.455%	94.812%
σ		1.353%	n/a	n/a	n/a	n/a	n/a	1.475%	1.458%
%RSD		1.455	2.336	2.930	2.472	2.523	3.157	1.562	1.538
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:09:24	79.550	80.620	76.560	79.710	78.050	85.010%		
2	20:10:07	77.400	77.860	74.530	77.540	76.180	86.637%		
3	20:10:50	80.110	81.130	77.540	80.220	78.710	85.501%		
x		98.774%	99.839%	95.262%	98.948%	97.061%	85.716%		
σ		n/a	n/a	n/a	n/a	n/a	0.835%		
%RSD		1.813	2.201	2.014	1.799	1.691	0.974		

ICB 4/30/2013 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	20:17:39	110.981%	-0.004	0.775	0.781	0.000	-1.609	2.744	3.204
2	20:18:23	105.339%	0.015	0.114	0.342	0.000	3.537	4.697	5.051
3	20:19:05	107.237%	0.008	0.165	0.288	0.000	13.750	14.210	14.290
x		107.852%	0.006	0.351	0.470	0.000	5.225	7.216	7.517
σ		2.871%	0.010	0.368	0.271	0.000	7.816	6.134	5.942
%RSD		2.662	149.700	104.800	57.550	0.000	149.600	85.000	79.050

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:17:39	0.890	1.725	0.000	5.933	0.175	3.100	112.707%	-0.307
2	20:18:23	1.943	1.896	0.000	8.295	1.749	5.652	106.427%	-0.356
3	20:19:05	6.058	1.826	0.000	14.860	13.460	16.740	109.969%	-0.246
x		2.964	1.816	0.000	9.696	5.126	8.497	109.701%	-0.303
σ		2.731	0.086	0.000	4.624	7.256	7.252	3.148%	0.055
%RSD		92.140	4.741	0.000	47.700	141.500	85.340	2.870	18.220

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:17:39	0.007	0.018	0.256	3.705	4.007	0.003	-0.000	0.018
2	20:18:23	0.011	0.037	0.431	6.584	4.635	0.015	0.015	0.011
3	20:19:05	0.011	0.061	1.279	15.090	11.880	0.039	0.046	0.106
x		0.010	0.039	0.656	8.460	6.841	0.019	0.020	0.045
σ		0.003	0.021	0.547	5.921	4.377	0.018	0.024	0.053
%RSD		26.800	54.790	83.460	69.980	63.980	95.080	117.300	117.600

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:17:39	0.003	-0.049	-0.111	0.172	0.277	0.451	0.000	0.023
2	20:18:23	-0.013	-0.091	-0.051	0.235	0.214	0.805	0.000	0.045
3	20:19:05	0.053	0.043	0.091	0.256	0.302	0.859	0.000	0.147
x		0.014	-0.032	-0.023	0.221	0.265	0.705	0.000	0.072
σ		0.035	0.069	0.103	0.044	0.045	0.222	0.000	0.066
%RSD		240.400	211.700	440.500	19.790	17.210	31.430	0.000	92.750

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:17:39	115.472%	0.197	0.213	112.431%	0.012	-0.001	0.099	0.072
2	20:18:23	111.563%	0.210	0.212	107.864%	0.009	-0.000	-0.051	-0.025
3	20:19:05	114.290%	0.178	0.222	110.766%	0.016	0.011	0.119	0.116
x		113.775%	0.195	0.216	110.354%	0.012	0.003	0.056	0.055
σ		2.004%	0.016	0.005	2.311%	0.004	0.007	0.093	0.072
%RSD		1.762	8.269	2.515	2.095	30.120	227.300	166.900	132.800

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:17:39	109.107%	-0.009	-0.004	-0.002	0.014	0.013	104.043%	103.827%
2	20:18:23	105.186%	0.000	0.013	0.011	0.036	0.036	101.341%	100.408%
3	20:19:05	108.581%	0.021	0.017	0.034	0.107	0.105	104.772%	103.803%
x		107.625%	0.004	0.008	0.014	0.052	0.051	103.385%	102.679%
σ		2.128%	0.016	0.011	0.018	0.048	0.048	1.807%	1.967%
%RSD		1.977	372.000	135.000	129.700	92.320	93.190	1.748	1.916

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:17:39	0.003	0.003	0.004	0.005	0.008	93.003%
2	20:18:23	0.006	0.002	0.004	0.013	0.013	91.179%
3	20:19:05	0.021	0.014	0.045	0.039	0.043	94.278%
x		0.010	0.006	0.018	0.019	0.021	92.820%
σ		0.010	0.007	0.023	0.018	0.019	1.558%
%RSD		98.910	106.700	130.700	92.370	89.200	1.678

CRI 806392 4/30/2013 8:25:11 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	20:25:54	109.347%	1.011	4.857	4.965	0.000	89.810	95.800	98.120
2	20:26:37	108.483%	1.014	5.484	4.961	0.000	91.490	99.510	97.420
3	20:27:20	106.963%	1.011	4.649	5.166	0.000	94.640	100.500	102.500
x		108.264%	101.190%	99.934%	100.611%	0.000	91.984%	98.591%	99.335%
σ		1.207%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.115	0.155	8.700	2.338	0.000	2.666	2.498	2.751
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:54	32.810	500.800	0.000	96.370	130.300	97.520	112.062%	4.834
2	20:26:37	32.970	503.200	0.000	95.500	97.080	96.860	111.186%	4.226
3	20:27:20	32.810	507.000	0.000	96.970	114.300	89.290	109.485%	4.483
x		109.540%	100.739%	0.000	96.279%	113.866%	94.557%	110.911%	90.293%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.310%	n/a
%RSD		0.277	0.621	0.000	0.769	14.570	4.835	1.181	6.763
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:54	0.950	1.909	5.597	53.250	50.040	0.486	1.093	2.393
2	20:26:37	0.973	1.971	5.413	52.540	48.540	0.478	1.014	2.206
3	20:27:20	0.852	1.857	5.153	52.670	50.680	0.559	1.062	2.177
x		92.514%	95.623%	1077.545%	105.643%	99.508%	101.561%	105.632%	112.942%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		6.917	2.991	4.139	0.718	2.207	8.798	3.749	5.191
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:54	2.257	5.430	5.241	1.430	5.507	5.452	0.000	4.601
2	20:26:37	1.998	5.281	5.293	0.916	5.347	5.204	0.000	4.559
3	20:27:20	2.131	5.214	5.352	0.949	5.556	5.274	0.000	4.645
x		106.429%	106.164%	105.908%	109.833%	109.398%	106.197%	0.000	92.033%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		6.065	2.079	1.051	26.220	1.989	2.407	0.000	0.939
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:54	110.378%	4.405	4.369	111.115%	0.969	0.975	1.063	1.076
2	20:26:37	110.690%	4.586	4.370	111.866%	0.971	1.009	1.057	1.040
3	20:27:20	109.749%	4.600	4.542	111.371%	0.949	1.001	1.072	1.035
x		110.272%	90.603%	88.541%	111.451%	96.292%	99.479%	106.400%	105.050%
σ		0.479%	n/a	n/a	0.382%	n/a	n/a	n/a	n/a
%RSD		0.435	2.401	2.241	0.343	1.287	1.764	0.746	2.141
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:54	107.911%	4.836	1.862	1.830	9.421	9.499	105.950%	104.921%
2	20:26:37	109.773%	4.823	1.958	1.869	9.829	9.409	107.095%	106.350%
3	20:27:20	109.783%	5.123	1.910	1.884	9.558	9.370	107.232%	107.414%
x		109.155%	98.547%	95.493%	93.033%	96.025%	94.259%	106.759%	106.228%
σ		1.078%	n/a	n/a	n/a	n/a	n/a	0.704%	1.251%
%RSD		0.988	3.441	2.523	1.492	2.160	0.704	0.659	1.178
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:25:54	0.878	0.890	0.946	0.901	0.909	102.858%		
2	20:26:37	0.913	0.876	0.897	0.912	0.905	104.242%		
3	20:27:20	0.878	0.911	0.904	0.970	0.933	105.716%		
x		88.955%	89.232%	91.561%	92.738%	91.602%	104.272%		
σ		n/a	n/a	n/a	n/a	n/a	1.429%		
%RSD		2.254	1.996	2.902	3.995	1.648	1.371		

CRI 806392 4/30/2013 8:33:39 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:34:22	108.425%	1.022	4.876	4.516	0.000	94.800	99.400	102.100
2	20:35:05	107.307%	1.044	4.193	4.756	0.000	93.350	97.730	101.000
3	20:35:48	107.705%	0.941	4.889	4.654	0.000	94.590	98.790	99.540
x		107.812%	100.216%	93.054%	92.840%	0.000	94.245%	98.639%	100.881%
σ		0.567%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.526	5.422	8.562	2.590	0.000	0.834	0.856	1.282
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:34:22	34.910	506.300	0.000	96.550	90.930	98.780	108.619%	4.498
2	20:35:05	33.520	497.600	0.000	95.880	104.400	96.680	108.455%	4.261
3	20:35:48	33.740	502.600	0.000	96.780	112.700	99.490	107.420%	4.799
x		113.528%	100.432%	0.000	96.400%	102.702%	98.316%	108.165%	90.390%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.650%	n/a
%RSD		2.198	0.872	0.000	0.486	10.720	1.482	0.601	5.973
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:34:22	0.869	1.910	5.751	56.170	55.080	0.484	1.079	2.291
2	20:35:05	0.856	1.904	5.417	53.320	53.100	0.521	0.998	2.206
3	20:35:48	0.945	1.940	5.528	53.800	55.790	0.538	1.148	2.055
x		88.993%	95.905%	1113.103%	108.864%	109.316%	102.855%	107.531%	109.208%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		5.405	0.987	3.059	2.801	2.560	5.322	6.984	5.481
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:34:22	2.058	5.646	5.253	1.113	5.377	5.705	0.000	4.726
2	20:35:05	2.238	5.553	5.228	1.263	5.432	5.526	0.000	4.503
3	20:35:48	2.160	5.680	4.996	1.323	5.920	5.645	0.000	4.631
x		107.601%	112.525%	103.179%	123.292%	111.526%	112.509%	0.000	92.402%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		4.184	1.170	2.738	8.765	5.356	1.618	0.000	2.424
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:34:22	106.685%	4.392	4.479	107.836%	0.952	0.982	1.091	1.071
2	20:35:05	106.535%	4.223	4.281	108.085%	1.014	0.992	1.132	1.088
3	20:35:48	106.501%	4.486	4.550	106.883%	0.955	0.967	1.001	1.023
x		106.574%	87.348%	88.734%	107.602%	97.371%	98.018%	107.466%	106.034%
σ		0.098%	n/a	n/a	0.634%	n/a	n/a	n/a	n/a
%RSD		0.092	3.051	3.149	0.590	3.564	1.292	6.202	3.192
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:34:22	104.424%	4.752	1.902	1.902	9.150	9.546	100.245%	100.000%
2	20:35:05	103.999%	5.005	1.842	1.817	9.484	9.464	100.775%	100.089%
3	20:35:48	104.781%	4.966	1.893	1.991	9.151	9.515	101.246%	100.140%
x		104.401%	98.158%	93.938%	95.161%	92.616%	95.082%	100.755%	100.076%
σ		0.392%	n/a	n/a	n/a	n/a	n/a	0.501%	0.071%
%RSD		0.375	2.779	1.715	4.570	2.080	0.436	0.497	0.071
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:34:22	0.893	0.893	0.867	0.930	0.908	92.854%		
2	20:35:05	0.907	0.904	0.880	0.968	0.921	89.208%		
3	20:35:48	0.911	0.902	0.898	0.897	0.908	91.227%		
x		90.385%	89.977%	88.135%	93.158%	91.236%	91.096%		
σ		n/a	n/a	n/a	n/a	n/a	1.827%		
%RSD		1.074	0.668	1.771	3.823	0.812	2.005		

ICSA 787358 4/30/2013 8:41:53 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:36	77.777%	0.284	0.907	0.936	0.000	104200.000	103000.000	103100.000
2	20:43:19	77.066%	0.254	1.104	1.136	0.000	103300.000	102700.000	102900.000
3	20:44:01	78.299%	0.242	0.740	0.599	0.000	102900.000	101500.000	103000.000
x		77.714%	0.260	0.917	0.890	0.000	103500.000	102400.000	103000.000
σ		0.619%	0.022	0.182	0.272	0.000	669.700	767.100	122.700
%RSD		0.796	8.342	19.860	30.530	0.000	0.647	0.749	0.119

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:36	101900.000	32.670	0.000	106000.000	108600.000	107400.000	69.922%	2394.000
2	20:43:19	102300.000	31.530	0.000	106500.000	109200.000	109300.000	68.398%	2396.000
3	20:44:01	102000.000	31.480	0.000	106000.000	108900.000	108900.000	67.518%	2377.000
x		102100.000	31.890	0.000	106100.000	108900.000	108500.000	68.613%	2389.000
σ		212.100	0.672	0.000	275.000	282.400	1032.000	1.216%	10.290
%RSD		0.208	2.108	0.000	0.259	0.259	0.951	1.773	0.431

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:36	-0.445	0.005	0.760	106000.000	105500.000	0.382	0.193	1.112
2	20:43:19	-0.298	0.027	0.800	107500.000	106900.000	0.335	0.269	1.144
3	20:44:01	-0.596	0.023	0.836	106600.000	105900.000	0.334	0.172	1.064
x		-0.446	0.018	0.799	106700.000	106100.000	0.350	0.211	1.107
σ		0.149	0.012	0.038	760.800	736.700	0.027	0.051	0.040
%RSD		33.330	65.620	4.748	0.713	0.694	7.757	24.270	3.652

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:36	1.776	4.079	3.380	0.591	0.904	0.880	0.000	5.078
2	20:43:19	1.409	4.450	4.006	0.193	0.723	0.898	0.000	4.935
3	20:44:01	1.716	3.741	3.126	0.315	1.036	0.813	0.000	5.140
x		1.634	4.090	3.504	0.366	0.888	0.864	0.000	5.051
σ		0.197	0.355	0.453	0.204	0.157	0.045	0.000	0.105
%RSD		12.050	8.673	12.930	55.740	17.660	5.236	0.000	2.083

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:36	74.209%	2099.000	2106.000	72.261%	0.314	0.305	0.602	0.553
2	20:43:19	73.341%	2131.000	2138.000	71.100%	0.247	0.292	0.523	0.328
3	20:44:01	73.618%	2133.000	2136.000	71.298%	0.281	0.315	0.511	0.479
x		73.723%	2121.000	2127.000	71.553%	0.281	0.304	0.545	0.454
σ		0.444%	18.960	17.780	0.621%	0.033	0.012	0.049	0.115
%RSD		0.602	0.894	0.836	0.868	11.890	3.885	8.992	25.290

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:36	83.180%	1.393	0.454	0.523	0.749	0.832	83.211%	82.084%
2	20:43:19	82.591%	2.060	0.534	0.504	0.710	0.694	83.777%	82.921%
3	20:44:01	82.930%	1.414	0.482	0.469	0.648	0.853	84.159%	83.553%
x		82.900%	1.623	0.490	0.499	0.702	0.793	83.716%	82.853%
σ		0.295%	0.379	0.041	0.027	0.051	0.086	0.477%	0.737%
%RSD		0.356	23.380	8.373	5.443	7.259	10.900	0.570	0.889

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:36	0.227	0.235	0.469	0.570	0.503	89.258%
2	20:43:19	0.238	0.240	0.495	0.480	0.483	88.685%
3	20:44:01	0.242	0.236	0.509	0.488	0.497	87.259%
x		0.236	0.237	0.491	0.513	0.494	88.401%
σ		0.008	0.002	0.020	0.050	0.010	1.029%
%RSD		3.217	1.036	4.137	9.757	2.024	1.164

ICSAB 787359 4/30/2013 8:50:07 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:50	77.219%	19.380	45.890	45.120	0.000	96270.000	94250.000	95220.000
2	20:51:33	77.189%	19.010	45.960	44.880	0.000	95540.000	93460.000	94420.000
3	20:52:16	76.352%	19.190	43.810	45.360	0.000	96500.000	95000.000	96010.000
x		76.920%	95.948%	90.444%	90.237%	0.000	96.103%	94.236%	95.218%
σ		0.492%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.640	0.959	2.710	0.539	0.000	0.521	0.820	0.835
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:50	93360.000	498.200	0.000	97050.000	99100.000	99910.000	67.885%	2198.000
2	20:51:33	93010.000	487.900	0.000	96820.000	99450.000	99290.000	67.226%	2183.000
3	20:52:16	94170.000	491.800	0.000	98920.000	102000.000	102400.000	65.016%	2228.000
x		93.514%	98.527%	0.000	97.598%	100.179%	100.549%	66.709%	110.147%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.503%	n/a
%RSD		0.637	1.064	0.000	1.180	1.574	1.664	2.253	1.053
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:50	19.540	19.640	19.860	99960.000	99140.000	19.870	19.450	19.970
2	20:51:33	19.650	19.480	19.560	99390.000	99330.000	19.270	18.270	19.670
3	20:52:16	19.840	20.200	20.420	102300.000	101700.000	19.560	19.880	20.390
x		98.387%	98.869%	86.732%	100.547%	100.049%	97.841%	96.021%	100.048%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.778	1.925	2.191	1.526	1.413	1.542	4.340	1.823
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:50	19.810	23.670	21.340	21.410	49.460	49.790	0.000	25.470
2	20:51:33	20.820	22.890	21.940	20.150	48.930	48.380	0.000	24.840
3	20:52:16	20.360	23.760	22.470	21.240	50.570	49.980	0.000	25.560
x		101.640%	93.763%	87.673%	104.667%	99.307%	98.763%	0.000	126.468%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.474	2.044	2.562	3.249	1.677	1.774	0.000	1.547
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:50	67.669%	2126.000	2132.000	63.153%	19.280	19.140	19.920	18.800
2	20:51:33	68.440%	2097.000	2119.000	63.325%	18.790	18.800	19.380	18.670
3	20:52:16	66.608%	2193.000	2213.000	61.739%	19.630	19.650	20.020	19.730
x		67.572%	106.935%	107.735%	62.739%	96.164%	95.978%	98.867%	95.337%
σ		0.920%	n/a	n/a	0.870%	n/a	n/a	n/a	n/a
%RSD		1.361	2.292	2.378	1.387	2.207	2.231	1.743	3.012
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:50	72.558%	98.990	19.380	19.190	19.920	20.240	71.436%	70.914%
2	20:51:33	73.206%	97.040	19.440	19.190	20.010	19.940	73.188%	72.703%
3	20:52:16	71.324%	102.600	20.380	20.330	20.900	20.880	71.614%	71.582%
x		72.363%	99.544%	98.662%	97.857%	101.396%	101.767%	72.079%	71.733%
σ		0.956%	n/a	n/a	n/a	n/a	n/a	0.965%	0.904%
%RSD		1.321	2.840	2.837	3.370	2.680	2.374	1.338	1.261
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:50:50	19.660	19.690	20.530	20.130	20.240	62.788%		
2	20:51:33	19.900	19.670	20.040	19.680	19.940	64.265%		
3	20:52:16	20.720	20.660	21.190	21.220	21.230	62.137%		
x		100.472%	100.032%	102.944%	101.703%	102.349%	63.063%		
σ		n/a	n/a	n/a	n/a	n/a	1.091%		
%RSD		2.740	2.815	2.793	3.884	3.306	1.729		

CCV 790243 4/30/2013 8:58:22 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	20:59:05	84.134%	-0.006	3.174	2.385	0.000	38.280	25.540	25.700
2	20:59:48	84.098%	0.002	2.294	2.335	0.000	38.610	25.670	25.330
3	21:00:31	82.308%	0.274	2.244	2.013	0.000	42.420	23.560	25.120
x		83.513%	0.090	2.571	2.244	0.000	39.770	24.920	25.380
σ		1.044%	0.160	0.523	0.202	0.000	2.302	1.183	0.292
%RSD		1.250	177.500	20.350	8.989	0.000	5.788	4.748	1.149

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:05	483600.000	171.100	0.000	37.560	393.400	43.730	79.969%	1.807
2	20:59:48	480500.000	167.200	0.000	34.430	384.700	48.310	78.681%	1.322
3	21:00:31	461900.000	160.600	0.000	36.140	384.200	42.630	76.410%	1.704
x		475300.000	166.300	0.000	36.040	387.400	44.890	78.353%	1.611
σ		11710.000	5.322	0.000	1.565	5.194	3.012	1.802%	0.256
%RSD		2.464	3.200	0.000	4.342	1.341	6.709	2.300	15.870

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:05	-656.200	21350.000	20850.000	518400.000	524700.000	9.267	10850.000	18650.000
2	20:59:48	-612.300	21800.000	21220.000	524400.000	534300.000	9.509	10910.000	18790.000
3	21:00:31	-601.800	21090.000	20440.000	507500.000	514400.000	9.187	10440.000	18000.000
x		-623.400	21420.000	20840.000	516800.000	524400.000	9.321	10730.000	18480.000
σ		28.860	358.600	386.700	8570.000	9935.000	0.168	255.500	422.300
%RSD		4.628	1.675	1.856	1.658	1.894	1.800	2.380	2.285

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:05	20540.000	20820.000	20980.000	0.720	0.951	1.527	0.000	0.226
2	20:59:48	20710.000	21060.000	21300.000	0.890	0.668	2.408	0.000	0.258
3	21:00:31	19860.000	20400.000	20580.000	0.797	0.277	2.424	0.000	0.203
x		20370.000	20760.000	20950.000	0.802	0.632	2.119	0.000	0.229
σ		446.500	333.800	356.900	0.085	0.338	0.513	0.000	0.028
%RSD		2.192	1.608	1.703	10.580	53.520	24.220	0.000	12.040

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:05	68.579%	4.701	4.856	73.663%	0.252	0.271	0.021	0.037
2	20:59:48	68.730%	4.363	4.280	73.867%	0.256	0.224	0.021	0.038
3	21:00:31	66.932%	4.320	3.781	71.652%	0.279	0.258	0.059	0.046
x		68.080%	4.461	4.306	73.061%	0.262	0.251	0.034	0.040
σ		0.997%	0.208	0.538	1.224%	0.015	0.024	0.022	0.005
%RSD		1.464	4.672	12.490	1.675	5.585	9.725	66.290	12.010

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:05	84.622%	0.319	0.860	0.773	16090.000	16140.000	76.419%	71.530%
2	20:59:48	84.691%	0.286	0.819	0.819	16190.000	16270.000	77.271%	72.739%
3	21:00:31	83.066%	0.288	0.757	0.816	15670.000	15770.000	75.708%	71.537%
x		84.126%	0.297	0.812	0.803	15980.000	16060.000	76.466%	71.935%
σ		0.919%	0.018	0.052	0.026	275.900	261.500	0.783%	0.696%
%RSD		1.092	6.130	6.429	3.195	1.726	1.628	1.024	0.967

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:05	0.080	0.093	20150.000	21630.000	20700.000	77.884%
2	20:59:48	0.086	0.084	20930.000	22500.000	21460.000	76.887%
3	21:00:31	0.073	0.078	20380.000	21780.000	20840.000	75.891%
x		0.080	0.085	20490.000	21970.000	21000.000	76.887%
σ		0.007	0.007	403.400	468.100	405.400	0.996%
%RSD		8.388	8.750	1.969	2.130	1.930	1.296

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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	21:07:19	82.367%	-0.021	0.596	0.618	0.000	479800.000	931700.000	930900.000
2	21:08:02	86.706%	-0.021	0.381	0.784	0.000	475500.000	930800.000	928700.000
3	21:08:45	89.619%	-0.007	0.706	0.718	0.000	475200.000	926400.000	923700.000
x		86.231%	-0.016	0.561	0.707	0.000	476800.000	929600.000	927800.000
σ		3.649%	0.008	0.166	0.084	0.000	2582.000	2870.000	3688.000
%RSD		4.232	49.630	29.550	11.830	0.000	0.541	0.309	0.398

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:07:19	51.030	151.900	0.000	483900.000	1046000.000	973200.000	82.908%	0.955
2	21:08:02	49.940	150.200	0.000	483500.000	1058000.000	972300.000	87.855%	1.374
3	21:08:45	50.220	150.700	0.000	483700.000	1051000.000	980000.000	92.007%	0.883
x		50.400	150.900	0.000	483700.000	1052000.000	975200.000	87.590%	1.071
σ		0.564	0.832	0.000	168.500	5714.000	4239.000	4.555%	0.265
%RSD		1.120	0.551	0.000	0.035	0.543	0.435	5.200	24.770

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:07:19	0.124	2.286	2.602	70.600	2028.000	0.686	-8.072	3.033
2	21:08:02	-0.037	2.325	2.583	68.600	1905.000	0.611	-8.554	3.138
3	21:08:45	-0.047	2.182	2.626	68.130	1861.000	0.585	-8.642	3.189
x		0.014	2.264	2.604	69.110	1931.000	0.627	-8.422	3.120
σ		0.096	0.074	0.022	1.308	86.870	0.052	0.307	0.079
%RSD		709.900	3.257	0.830	1.893	4.498	8.354	3.644	2.545

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:07:19	2.870	4.333	3.700	0.633	0.634	1.912	0.000	38.480
2	21:08:02	3.037	4.325	4.088	0.561	1.010	1.694	0.000	39.230
3	21:08:45	3.019	4.103	3.831	0.500	1.138	1.385	0.000	38.520
x		2.976	4.254	3.873	0.565	0.927	1.664	0.000	38.740
σ		0.092	0.131	0.197	0.066	0.262	0.265	0.000	0.423
%RSD		3.077	3.078	5.096	11.770	28.290	15.920	0.000	1.092

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:07:19	83.624%	1.590	1.209	67.117%	0.087	0.078	0.110	0.053
2	21:08:02	88.523%	1.682	1.204	70.696%	0.093	0.092	0.124	0.080
3	21:08:45	93.656%	1.448	1.055	74.192%	0.087	0.084	0.080	0.060
x		88.601%	1.573	1.156	70.668%	0.089	0.085	0.105	0.064
σ		5.016%	0.118	0.087	3.537%	0.004	0.007	0.022	0.014
%RSD		5.662	7.496	7.566	5.006	4.096	8.270	21.310	21.470

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:07:19	76.941%	0.432	0.357	0.319	2.785	2.797	80.913%	80.756%
2	21:08:02	81.963%	0.462	0.337	0.356	2.942	2.913	86.073%	84.917%
3	21:08:45	85.971%	0.373	0.348	0.371	2.831	2.893	88.965%	89.224%
x		81.625%	0.422	0.347	0.348	2.853	2.867	85.317%	84.966%
σ		4.525%	0.045	0.010	0.027	0.081	0.062	4.079%	4.234%
%RSD		5.543	10.750	2.894	7.693	2.828	2.163	4.781	4.983

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:07:19	0.112	0.093	2.690	2.828	2.763	56.833%
2	21:08:02	0.103	0.094	2.754	2.886	2.832	59.104%
3	21:08:45	0.091	0.092	2.756	2.931	2.819	61.742%
x		0.102	0.093	2.733	2.882	2.805	59.226%
σ		0.010	0.001	0.038	0.052	0.037	2.457%
%RSD		10.230	1.097	1.373	1.794	1.316	4.148

CCV 801624 4/30/2013 9:14:50 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	21:15:33	82.644%	99.520	94.620	95.670	0.000	48250.000	48890.000	48790.000
2	21:16:16	83.111%	98.890	97.910	97.670	0.000	48880.000	49020.000	48910.000
3	21:16:59	82.316%	101.700	99.590	99.440	0.000	49300.000	49600.000	49500.000
x		82.690%	100.049%	97.372%	97.592%	0.000	97.618%	98.340%	98.128%
σ		0.399%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.483	1.498	2.597	1.933	0.000	1.075	0.771	0.780

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:33	476.000	5065.000	0.000	48610.000	47890.000	48140.000	80.135%	99.850
2	21:16:16	480.200	5051.000	0.000	48560.000	47820.000	47970.000	80.114%	99.700
3	21:16:59	485.800	5095.000	0.000	48790.000	48100.000	45030.000	79.512%	99.980
x		96.128%	101.408%	0.000	97.309%	95.869%	94.097%	79.920%	99.844%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.354%	n/a
%RSD		1.027	0.436	0.000	0.243	0.306	3.722	0.443	0.137

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:33	97.760	97.730	458.500	24540.000	23790.000	98.700	102.000	102.800
2	21:16:16	97.240	97.470	459.300	24500.000	23670.000	98.460	100.600	101.500
3	21:16:59	97.860	99.440	465.700	24900.000	24200.000	99.480	100.300	101.900
x		97.622%	98.213%	92.235%	98.599%	95.542%	98.881%	100.984%	102.079%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.339	1.090	0.862	0.896	1.154	0.541	0.906	0.676

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:33	101.800	100.200	101.700	102.900	100.700	99.620	0.000	95.610
2	21:16:16	102.900	100.000	100.200	98.000	102.700	98.380	0.000	95.860
3	21:16:59	103.500	100.300	101.400	101.100	101.200	99.440	0.000	96.270
x		102.725%	100.163%	101.078%	100.655%	101.539%	99.145%	0.000	95.912%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.862	0.158	0.810	2.453	1.043	0.676	0.000	0.348

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:33	78.896%	101.000	100.300	73.248%	98.360	99.020	97.040	98.670
2	21:16:16	79.467%	102.800	103.200	73.111%	98.520	99.160	97.160	97.130
3	21:16:59	79.069%	106.100	105.300	72.856%	98.880	99.580	99.400	99.340
x		79.144%	103.281%	102.919%	73.072%	98.588%	99.253%	97.868%	98.380%
σ		0.293%	n/a	n/a	0.199%	n/a	n/a	n/a	n/a
%RSD		0.370	2.492	2.434	0.272	0.269	0.295	1.358	1.150

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:33	78.238%	96.890	94.100	94.540	95.820	95.660	79.816%	80.287%
2	21:16:16	79.287%	96.800	95.200	94.130	96.090	95.250	80.870%	81.063%
3	21:16:59	78.425%	98.570	96.770	96.710	97.430	95.820	81.169%	81.689%
x		78.650%	97.420%	95.356%	95.126%	96.447%	95.579%	80.618%	81.013%
σ		0.559%	n/a	n/a	n/a	n/a	n/a	0.711%	0.702%
%RSD		0.711	1.025	1.404	1.455	0.895	0.309	0.882	0.867

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:33	93.490	94.190	94.960	94.570	94.840	74.909%
2	21:16:16	94.870	96.140	97.270	96.920	96.620	74.742%
3	21:16:59	95.260	96.700	96.310	96.460	96.040	75.379%
x		94.541%	95.676%	96.181%	95.983%	95.832%	75.010%
σ		n/a	n/a	n/a	n/a	n/a	0.331%
%RSD		0.986	1.375	1.203	1.300	0.949	0.441

CCB1 4/30/2013 9:23:06 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:49	105.838%	0.003	-0.641	-0.626	0.000	2.110	8.321	8.262
2	21:24:32	101.849%	0.022	-0.477	-0.610	0.000	8.650	11.060	11.440
3	21:25:15	107.848%	-0.004	-0.477	-0.629	0.000	6.252	11.620	12.520
x		105.179%	0.007	-0.532	-0.622	0.000	5.671	10.330	10.740
σ		3.054%	0.014	0.095	0.010	0.000	3.309	1.766	2.213
%RSD		2.903	186.900	17.780	1.619	0.000	58.350	17.090	20.600
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:49	3.226	-1.255	0.000	14.110	6.552	7.620	107.571%	-0.299
2	21:24:32	4.158	-0.785	0.000	18.010	7.023	11.140	103.577%	-0.399
3	21:25:15	4.621	-0.975	0.000	16.190	11.260	13.590	108.639%	-0.242
x		4.002	-1.005	0.000	16.100	8.277	10.780	106.596%	-0.313
σ		0.711	0.236	0.000	1.954	2.591	3.001	2.668%	0.079
%RSD		17.760	23.510	0.000	12.130	31.300	27.830	2.503	25.240
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:49	0.006	0.035	0.606	6.607	9.166	0.016	0.039	0.052
2	21:24:32	0.016	0.114	0.859	10.350	11.010	0.018	0.052	0.099
3	21:25:15	0.001	0.087	0.888	9.874	11.990	0.012	0.029	0.087
x		0.008	0.079	0.785	8.943	10.720	0.015	0.040	0.079
σ		0.008	0.040	0.155	2.037	1.435	0.003	0.011	0.024
%RSD		98.500	50.940	19.780	22.780	13.380	21.690	28.010	30.820
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:49	0.037	-0.062	-0.065	-0.027	0.470	-0.066	0.000	0.052
2	21:24:32	0.081	0.045	-0.024	0.327	0.182	1.154	0.000	0.089
3	21:25:15	0.068	0.094	0.153	0.059	0.176	0.253	0.000	0.093
x		0.062	0.026	0.021	0.119	0.276	0.447	0.000	0.078
σ		0.023	0.080	0.116	0.184	0.168	0.632	0.000	0.023
%RSD		36.670	308.800	547.900	154.600	60.890	141.600	0.000	28.890
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:49	99.452%	0.328	0.381	97.374%	-0.007	-0.005	0.075	0.062
2	21:24:32	96.190%	0.454	0.374	93.712%	0.012	0.010	0.106	0.096
3	21:25:15	101.138%	0.378	0.380	99.305%	0.008	-0.008	0.066	0.056
x		98.927%	0.386	0.379	96.797%	0.004	-0.001	0.082	0.072
σ		2.516%	0.063	0.004	2.841%	0.010	0.010	0.021	0.021
%RSD		2.543	16.410	1.011	2.935	238.200	938.000	25.810	29.930
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:49	93.701%	0.062	0.066	0.055	0.080	0.078	91.144%	90.315%
2	21:24:32	90.490%	0.079	0.071	0.068	0.083	0.126	88.745%	87.605%
3	21:25:15	95.552%	0.084	0.077	0.074	0.081	0.091	93.818%	93.043%
x		93.248%	0.075	0.072	0.066	0.081	0.098	91.236%	90.321%
σ		2.561%	0.012	0.005	0.010	0.002	0.025	2.538%	2.719%
%RSD		2.746	15.700	7.366	14.550	2.240	24.990	2.781	3.011
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:23:49	0.007	0.014	0.086	0.075	0.083	83.785%		
2	21:24:32	0.009	0.013	0.089	0.104	0.092	82.633%		
3	21:25:15	0.004	0.009	0.095	0.108	0.103	87.947%		
x		0.007	0.012	0.090	0.096	0.093	84.788%		
σ		0.002	0.002	0.005	0.018	0.010	2.795%		
%RSD		34.140	20.150	5.301	18.700	10.580	3.297		

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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	21:32:02	99.010%	-0.015	-0.699	-0.652	0.000	5.631	9.222	8.578
2	21:32:45	100.194%	-0.009	-0.922	-1.096	0.000	5.707	9.486	9.349
3	21:33:28	102.152%	-0.009	-0.823	-1.026	0.000	6.070	9.251	9.224
x		100.452%	-0.011	-0.815	-0.925	0.000	5.802	9.320	9.050
σ		1.586%	0.004	0.112	0.239	0.000	0.235	0.145	0.413
%RSD		1.579	33.290	13.680	25.820	0.000	4.047	1.552	4.568

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:32:02	1.626	2.090	0.000	15.850	5.942	22.110	101.988%	0.262
2	21:32:45	1.851	1.725	0.000	16.620	22.670	22.800	101.945%	0.047
3	21:33:28	2.144	1.445	0.000	16.790	9.830	19.990	101.640%	-0.059
x		1.874	1.753	0.000	16.420	12.820	21.630	101.858%	0.083
σ		0.260	0.323	0.000	0.502	8.757	1.466	0.190%	0.164
%RSD		13.860	18.450	0.000	3.056	68.330	6.777	0.187	196.800

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:32:02	-0.010	0.076	0.182	6.576	5.121	0.015	-0.004	0.131
2	21:32:45	0.009	0.093	0.174	6.216	5.353	0.022	0.018	0.113
3	21:33:28	0.009	0.058	0.148	6.448	4.393	0.016	0.064	0.139
x		0.003	0.075	0.168	6.413	4.956	0.018	0.026	0.128
σ		0.011	0.018	0.018	0.183	0.501	0.004	0.035	0.013
%RSD		415.900	23.190	10.590	2.846	10.100	23.150	132.300	10.400

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:32:02	0.120	0.839	0.922	0.120	0.356	0.505	0.000	0.051
2	21:32:45	0.080	0.587	0.816	0.105	0.293	0.327	0.000	0.054
3	21:33:28	0.069	0.651	0.802	0.183	0.103	0.452	0.000	0.037
x		0.090	0.692	0.847	0.136	0.251	0.428	0.000	0.047
σ		0.027	0.131	0.065	0.041	0.132	0.091	0.000	0.009
%RSD		29.720	18.880	7.731	30.420	52.490	21.330	0.000	19.940

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:32:02	101.101%	0.360	0.484	107.098%	-0.008	-0.019	0.042	0.036
2	21:32:45	102.958%	0.373	0.311	107.565%	-0.006	-0.011	0.009	0.016
3	21:33:28	103.104%	0.309	0.282	107.457%	-0.004	-0.007	0.002	-0.004
x		102.388%	0.347	0.359	107.373%	-0.006	-0.012	0.018	0.016
σ		1.117%	0.034	0.109	0.245%	0.002	0.006	0.021	0.020
%RSD		1.091	9.770	30.470	0.228	32.830	49.010	119.900	123.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:32:02	100.102%	0.733	0.036	0.036	0.092	0.109	99.460%	99.183%
2	21:32:45	102.560%	0.924	0.026	0.047	0.070	0.114	100.109%	100.752%
3	21:33:28	101.824%	0.696	0.041	0.023	0.097	0.141	101.631%	101.625%
x		101.496%	0.784	0.034	0.035	0.086	0.121	100.400%	100.520%
σ		1.262%	0.122	0.007	0.012	0.015	0.017	1.114%	1.237%
%RSD		1.243	15.590	21.550	34.630	17.100	14.240	1.110	1.231

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:32:02	0.013	0.009	0.032	0.052	0.043	100.848%
2	21:32:45	0.007	0.011	0.036	0.061	0.051	101.878%
3	21:33:28	0.010	0.011	0.061	0.068	0.062	102.633%
x		0.010	0.010	0.043	0.061	0.052	101.786%
σ		0.003	0.001	0.016	0.008	0.009	0.896%
%RSD		27.880	9.700	37.460	13.070	17.930	0.880

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:12	74.790%	43.540	865.400	855.100	0.000	47630.000	47750.000	47550.000
2	21:40:55	74.958%	43.430	889.000	867.500	0.000	47790.000	48080.000	48120.000
3	21:41:38	74.716%	42.230	882.000	876.100	0.000	47560.000	46930.000	47300.000
x		74.821%	43.070	878.800	866.200	0.000	47660.000	47590.000	47660.000
σ		0.124%	0.727	12.090	10.610	0.000	115.100	590.600	419.600
%RSD		0.166	1.688	1.376	1.224	0.000	0.241	1.241	0.880
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:12	1916.000	8607.000	0.000	47200.000	47570.000	44360.000	70.584%	962.500
2	21:40:55	1943.000	8645.000	0.000	47570.000	47790.000	45420.000	70.044%	979.700
3	21:41:38	1893.000	8458.000	0.000	47060.000	47030.000	43540.000	70.529%	966.200
x		1917.000	8570.000	0.000	47280.000	47460.000	44440.000	70.386%	969.500
σ		25.370	98.620	0.000	264.400	393.800	943.700	0.297%	9.079
%RSD		1.323	1.151	0.000	0.559	0.830	2.124	0.422	0.937
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:12	486.000	191.800	454.100	973.700	1077.000	486.400	493.200	245.800
2	21:40:55	483.100	192.700	463.900	983.400	1073.000	486.700	490.400	245.400
3	21:41:38	475.700	189.500	448.600	958.800	1059.000	476.000	479.800	242.000
x		481.600	191.300	455.500	972.000	1070.000	483.000	487.800	244.400
σ		5.277	1.662	7.773	12.390	9.176	6.090	7.046	2.078
%RSD		1.096	0.869	1.706	1.275	0.858	1.261	1.444	0.850
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:12	250.100	418.900	423.500	33.200	8.198	9.123	0.000	1006.000
2	21:40:55	248.500	422.100	421.000	33.790	7.753	9.251	0.000	1020.000
3	21:41:38	246.100	419.600	415.300	33.360	8.168	8.129	0.000	1011.000
x		248.200	420.200	419.900	33.450	8.040	8.834	0.000	1012.000
σ		2.013	1.680	4.219	0.304	0.249	0.614	0.000	7.187
%RSD		0.811	0.400	1.005	0.908	3.092	6.953	0.000	0.710
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:12	65.700%	1032.000	1020.000	63.864%	45.960	46.260	43.760	37.830
2	21:40:55	65.597%	1042.000	1027.000	64.064%	45.620	46.680	42.920	37.920
3	21:41:38	65.791%	1029.000	1019.000	64.476%	45.110	45.820	43.220	37.530
x		65.696%	1034.000	1022.000	64.135%	45.570	46.250	43.300	37.760
σ		0.097%	6.595	4.436	0.312%	0.425	0.429	0.424	0.203
%RSD		0.147	0.638	0.434	0.487	0.933	0.928	0.980	0.538
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:12	67.604%	1930.000	434.100	430.500	1864.000	1854.000	69.687%	69.716%
2	21:40:55	68.728%	1944.000	436.000	434.900	1879.000	1876.000	70.832%	71.483%
3	21:41:38	68.785%	1917.000	431.000	429.900	1843.000	1839.000	71.480%	72.178%
x		68.372%	1930.000	433.700	431.800	1862.000	1856.000	70.666%	71.126%
σ		0.666%	13.840	2.561	2.736	17.990	18.470	0.908%	1.269%
%RSD		0.974	0.717	0.591	0.634	0.966	0.995	1.285	1.784
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:40:12	46.500	46.220	17.810	19.550	18.760	58.605%		
2	21:40:55	47.470	47.200	18.130	20.080	18.990	59.143%		
3	21:41:38	46.990	46.990	17.930	19.990	18.960	59.781%		
x		46.990	46.800	17.960	19.870	18.910	59.176%		
σ		0.484	0.511	0.161	0.285	0.126	0.589%		
%RSD		1.029	1.092	0.896	1.433	0.667	0.996		

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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	21:48:22	76.052%	4.440	22.760	24.350	0.000	362.800	24550.000	24660.000
2	21:49:05	75.251%	4.141	23.650	23.840	0.000	363.800	24480.000	24400.000
3	21:49:48	74.387%	4.404	24.500	23.300	0.000	370.100	24570.000	24730.000
x		75.230%	4.328	23.640	23.830	0.000	365.600	24530.000	24590.000
σ		0.833%	0.163	0.868	0.524	0.000	3.947	48.450	175.200
%RSD		1.107	3.775	3.673	2.201	0.000	1.080	0.198	0.713

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:48:22	80250.000	9228.000	0.000	7924.000	9681.000	9108.000	76.215%	880.600
2	21:49:05	79100.000	9073.000	0.000	7790.000	9697.000	9045.000	75.526%	879.800
3	21:49:48	80600.000	9254.000	0.000	7883.000	9493.000	9084.000	74.328%	897.400
x		79980.000	9185.000	0.000	7866.000	9623.000	9079.000	75.356%	885.900
σ		786.000	97.910	0.000	68.630	113.600	31.830	0.955%	9.907
%RSD		0.983	1.066	0.000	0.873	1.181	0.351	1.267	1.118

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:48:22	140.000	120.300	3505.000	235100.000	233600.000	94.930	216.900	192.500
2	21:49:05	138.300	119.300	3521.000	233400.000	233000.000	93.780	216.200	188.300
3	21:49:48	140.300	121.500	3594.000	239500.000	237500.000	95.300	219.400	192.300
x		139.600	120.400	3540.000	236000.000	234700.000	94.670	217.500	191.000
σ		1.085	1.094	47.300	3154.000	2470.000	0.791	1.683	2.383
%RSD		0.777	0.909	1.336	1.336	1.053	0.836	0.774	1.248

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:48:22	196.000	541.600	546.500	132.600	1.579	2.366	0.000	58.920
2	21:49:05	189.600	535.500	547.100	130.400	1.439	3.132	0.000	59.160
3	21:49:48	193.800	556.600	563.200	134.800	1.467	3.021	0.000	60.290
x		193.100	544.600	552.300	132.600	1.495	2.840	0.000	59.460
σ		3.214	10.880	9.446	2.186	0.074	0.414	0.000	0.733
%RSD		1.664	1.997	1.711	1.649	4.955	14.570	0.000	1.232

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:48:22	0.000	9.095	8.918	67.195%	0.192	0.122	1.315	1.002
2	21:49:05	0.000	9.034	9.012	66.657%	0.207	0.127	1.451	1.055
3	21:49:48	0.000	9.116	9.243	66.327%	0.199	0.136	1.542	1.131
x		0.000	9.082	9.058	66.726%	0.199	0.128	1.436	1.063
σ		0.000	0.042	0.167	0.438%	0.008	0.007	0.114	0.065
%RSD		0.000	0.465	1.844	0.656	3.779	5.341	7.971	6.109

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:48:22	72.910%	3.942	0.555	0.596	475.000	468.400	79.057%	78.048%
2	21:49:05	73.216%	3.509	0.530	0.521	467.700	466.100	80.170%	78.850%
3	21:49:48	72.852%	2.891	0.537	0.546	479.000	477.300	80.475%	78.793%
x		72.992%	3.447	0.540	0.554	473.900	470.600	79.901%	78.564%
σ		0.196%	0.528	0.013	0.038	5.735	5.931	0.746%	0.447%
%RSD		0.268	15.320	2.415	6.821	1.210	1.260	0.934	0.569

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:48:22	1.289	1.290	149.500	147.400	148.400	67.669%
2	21:49:05	1.346	1.290	150.100	148.600	149.300	68.159%
3	21:49:48	1.309	1.295	153.000	151.000	152.000	68.302%
x		1.315	1.292	150.900	149.000	149.900	68.044%
σ		0.029	0.003	1.907	1.802	1.900	0.332%
%RSD		2.232	0.243	1.264	1.209	1.268	0.488

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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	21:56:32	86.228%	0.937	5.329	6.200	0.000	77.700	4653.000	4672.000
2	21:57:15	85.470%	0.946	5.935	5.476	0.000	80.640	4765.000	4789.000
3	21:57:58	87.348%	0.904	5.076	4.977	0.000	79.040	4677.000	4681.000
x		86.349%	0.929	5.446	5.551	0.000	79.120	4698.000	4714.000
σ		0.945%	0.022	0.442	0.615	0.000	1.473	59.150	65.450
%RSD		1.094	2.374	8.112	11.080	0.000	1.861	1.259	1.388

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:32	15980.000	1856.000	0.000	1509.000	1872.000	1864.000	77.895%	178.200
2	21:57:15	16290.000	1879.000	0.000	1484.000	1981.000	1847.000	77.123%	181.600
3	21:57:58	15890.000	1829.000	0.000	1494.000	1992.000	1862.000	77.804%	176.200
x		16050.000	1855.000	0.000	1496.000	1948.000	1858.000	77.607%	178.700
σ		210.200	25.390	0.000	12.700	66.190	9.654	0.422%	2.708
%RSD		1.309	1.369	0.000	0.849	3.397	0.520	0.544	1.516

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:32	26.950	23.640	660.000	46050.000	45850.000	18.240	43.660	38.520
2	21:57:15	27.630	23.780	671.500	46680.000	46600.000	18.830	45.130	39.160
3	21:57:58	26.690	23.550	656.400	45830.000	45350.000	17.970	42.850	38.650
x		27.090	23.660	662.600	46190.000	45930.000	18.350	43.880	38.780
σ		0.485	0.117	7.894	442.400	629.700	0.440	1.155	0.340
%RSD		1.792	0.495	1.191	0.958	1.371	2.400	2.632	0.875

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:32	38.330	122.500	124.500	27.260	0.314	-1.053	0.000	9.348
2	21:57:15	39.270	124.900	127.200	27.570	0.269	-0.640	0.000	9.464
3	21:57:58	37.410	123.400	123.500	26.950	0.248	-0.567	0.000	9.235
x		38.340	123.600	125.000	27.260	0.277	-0.753	0.000	9.349
σ		0.928	1.218	1.882	0.311	0.034	0.262	0.000	0.114
%RSD		2.420	0.985	1.505	1.142	12.160	34.790	0.000	1.224

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:32	92.676%	1.435	1.600	73.670%	0.027	0.013	0.262	0.229
2	21:57:15	92.671%	1.511	1.628	73.552%	0.024	0.010	0.389	0.377
3	21:57:58	93.948%	1.435	1.576	74.007%	0.051	0.006	0.292	0.217
x		93.098%	1.460	1.602	73.743%	0.034	0.010	0.315	0.274
σ		0.736%	0.044	0.026	0.236%	0.015	0.004	0.066	0.089
%RSD		0.790	2.991	1.627	0.321	43.800	39.600	21.100	32.550

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:32	77.579%	0.590	0.098	0.124	95.520	95.780	78.143%	76.997%
2	21:57:15	77.791%	0.629	0.122	0.133	98.490	96.780	78.816%	78.375%
3	21:57:58	79.284%	0.681	0.110	0.130	94.950	94.570	80.172%	79.734%
x		78.218%	0.633	0.110	0.129	96.320	95.710	79.043%	78.368%
σ		0.929%	0.046	0.012	0.004	1.900	1.104	1.033%	1.369%
%RSD		1.188	7.205	10.980	3.244	1.972	1.153	1.307	1.746

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:56:32	0.234	0.235	28.630	27.930	28.270	70.212%
2	21:57:15	0.256	0.248	28.770	28.710	28.570	70.893%
3	21:57:58	0.256	0.225	28.240	28.210	28.110	73.086%
x		0.249	0.236	28.540	28.280	28.320	71.397%
σ		0.013	0.012	0.274	0.397	0.233	1.502%
%RSD		5.152	5.025	0.961	1.402	0.822	2.104

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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	22:04:42	76.696%	4.471	20.400	18.980	0.000	356.500	25270.000	25260.000
2	22:05:25	77.661%	4.300	20.280	19.230	0.000	358.000	25150.000	25120.000
3	22:06:09	76.392%	3.902	19.480	19.090	0.000	354.100	25000.000	25020.000
x		76.916%	4.224	20.050	19.100	0.000	356.200	25140.000	25130.000
σ		0.662%	0.292	0.498	0.129	0.000	1.935	134.500	121.700
%RSD		0.861	6.904	2.483	0.673	0.000	0.543	0.535	0.484

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:42	81430.000	9296.000	0.000	7814.000	9818.000	9269.000	80.294%	891.100
2	22:05:25	80120.000	9145.000	0.000	7753.000	9914.000	9250.000	79.445%	889.700
3	22:06:09	79490.000	9100.000	0.000	7743.000	9839.000	9302.000	79.344%	888.900
x		80350.000	9180.000	0.000	7770.000	9857.000	9274.000	79.694%	889.900
σ		988.500	103.100	0.000	38.260	50.580	26.550	0.522%	1.104
%RSD		1.230	1.123	0.000	0.492	0.513	0.286	0.655	0.124

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:42	134.700	119.400	3337.000	232200.000	229400.000	91.910	213.900	192.400
2	22:05:25	138.000	120.400	3360.000	233500.000	233000.000	90.910	215.400	192.700
3	22:06:09	134.900	119.200	3317.000	231000.000	230500.000	91.880	212.700	191.300
x		135.900	119.700	3338.000	232200.000	231000.000	91.570	214.000	192.100
σ		1.862	0.651	21.290	1237.000	1800.000	0.567	1.368	0.746
%RSD		1.370	0.544	0.638	0.533	0.779	0.619	0.639	0.388

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:42	194.100	543.800	551.200	129.200	1.140	2.429	0.000	59.320
2	22:05:25	195.200	551.800	557.900	131.800	1.485	2.688	0.000	60.350
3	22:06:09	195.100	548.400	555.200	130.700	1.277	1.991	0.000	60.870
x		194.800	548.000	554.800	130.600	1.300	2.369	0.000	60.180
σ		0.626	4.001	3.352	1.314	0.174	0.352	0.000	0.788
%RSD		0.321	0.730	0.604	1.007	13.360	14.870	0.000	1.309

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:42	0.000	9.026	9.171	71.197%	0.213	0.124	1.409	1.087
2	22:05:25	0.000	9.138	9.257	70.378%	0.202	0.148	1.515	1.134
3	22:06:09	0.000	9.487	9.088	69.767%	0.205	0.133	1.243	1.109
x		0.000	9.217	9.172	70.448%	0.206	0.135	1.389	1.110
σ		0.000	0.240	0.084	0.718%	0.005	0.012	0.137	0.024
%RSD		0.000	2.604	0.917	1.019	2.650	9.103	9.854	2.124

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:42	77.140%	1.988	0.470	0.445	447.800	446.300	83.854%	82.261%
2	22:05:25	77.193%	2.023	0.449	0.466	458.500	455.700	84.204%	83.161%
3	22:06:09	76.716%	2.052	0.489	0.494	452.400	449.500	84.451%	82.692%
x		77.016%	2.021	0.469	0.468	452.900	450.500	84.170%	82.705%
σ		0.262%	0.032	0.020	0.025	5.385	4.796	0.300%	0.450%
%RSD		0.340	1.601	4.264	5.354	1.189	1.065	0.356	0.544

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:42	1.263	1.227	134.700	132.000	133.500	71.475%
2	22:05:25	1.280	1.279	136.500	135.100	135.000	72.427%
3	22:06:09	1.227	1.242	134.700	133.400	134.300	72.551%
x		1.257	1.249	135.300	133.500	134.200	72.151%
σ		0.027	0.027	1.027	1.555	0.746	0.589%
%RSD		2.164	2.126	0.759	1.164	0.556	0.816

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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	22:12:53	71.508%	45.880	824.800	824.500	0.000	46800.000	72460.000	72340.000
2	22:13:36	71.031%	46.220	848.400	831.900	0.000	46540.000	73040.000	73410.000
3	22:14:19	71.414%	46.320	836.300	829.300	0.000	46200.000	72600.000	72250.000
x		71.317%	46.140	836.500	828.600	0.000	46510.000	72700.000	72670.000
σ		0.253%	0.235	11.810	3.753	0.000	301.700	306.200	644.500
%RSD		0.354	0.508	1.412	0.453	0.000	0.649	0.421	0.887

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:53	108400.000	27200.000	0.000	52610.000	55380.000	55360.000	73.096%	1834.000
2	22:13:36	110800.000	27420.000	0.000	52920.000	54380.000	55350.000	72.572%	1876.000
3	22:14:19	107800.000	26840.000	0.000	52310.000	54060.000	55110.000	72.529%	1832.000
x		109000.000	27150.000	0.000	52610.000	54610.000	55270.000	72.733%	1847.000
σ		1605.000	288.800	0.000	309.500	689.500	139.900	0.316%	24.820
%RSD		1.472	1.063	0.000	0.588	1.263	0.253	0.434	1.344

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:53	631.800	324.600	3855.000	240700.000	240400.000	547.000	674.000	418.000
2	22:13:36	624.100	318.900	3877.000	240500.000	241100.000	542.600	660.500	407.500
3	22:14:19	626.500	316.500	3870.000	240700.000	239100.000	536.700	647.900	402.300
x		627.500	320.000	3867.000	240600.000	240200.000	542.100	660.800	409.300
σ		3.909	4.166	11.150	105.100	1013.000	5.166	13.040	7.976
%RSD		0.623	1.302	0.288	0.044	0.422	0.953	1.974	1.949

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:53	414.700	959.700	966.800	172.600	8.062	9.570	0.000	1091.000
2	22:13:36	410.900	964.800	970.800	172.700	7.481	9.151	0.000	1098.000
3	22:14:19	405.000	960.700	976.300	169.700	8.176	8.855	0.000	1095.000
x		410.200	961.700	971.300	171.700	7.906	9.192	0.000	1095.000
σ		4.902	2.685	4.774	1.725	0.373	0.359	0.000	3.250
%RSD		1.195	0.279	0.492	1.005	4.713	3.905	0.000	0.297

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:53	0.000	960.900	962.200	61.366%	43.520	43.980	43.220	40.510
2	22:13:36	0.000	964.800	958.800	61.882%	43.770	43.300	44.200	40.120
3	22:14:19	0.000	966.800	959.300	62.106%	43.270	43.530	42.790	39.430
x		0.000	964.200	960.100	61.785%	43.520	43.600	43.400	40.020
σ		0.000	2.956	1.856	0.380%	0.250	0.344	0.721	0.550
%RSD		0.000	0.307	0.193	0.614	0.575	0.789	1.661	1.375

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:53	68.021%	879.700	201.700	203.000	2253.000	2232.000	73.112%	71.782%
2	22:13:36	68.546%	887.100	204.700	202.400	2260.000	2249.000	75.155%	74.255%
3	22:14:19	69.469%	882.900	204.500	204.400	2242.000	2239.000	75.780%	75.421%
x		68.679%	883.200	203.600	203.300	2252.000	2240.000	74.682%	73.819%
σ		0.733%	3.688	1.699	0.993	8.822	8.334	1.395%	1.858%
%RSD		1.068	0.418	0.834	0.488	0.392	0.372	1.868	2.517

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:53	46.850	47.160	157.300	157.400	157.300	56.218%
2	22:13:36	46.790	47.160	156.400	157.400	157.300	58.910%
3	22:14:19	46.240	46.690	155.300	155.100	155.800	61.321%
x		46.630	47.000	156.300	156.600	156.800	58.816%
σ		0.335	0.271	0.991	1.311	0.840	2.553%
%RSD		0.719	0.576	0.634	0.837	0.536	4.341

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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	22:21:04	75.033%	50.160	927.000	929.900	0.000	368.200	23880.000	23880.000
2	22:21:47	74.709%	49.490	951.100	951.000	0.000	368.500	24200.000	24270.000
3	22:22:30	75.154%	49.550	955.300	943.700	0.000	367.500	23860.000	23750.000
x		74.965%	49.730	944.500	941.500	0.000	368.100	23980.000	23970.000
σ		0.230%	0.370	15.270	10.720	0.000	0.525	189.500	268.500
%RSD		0.307	0.743	1.617	1.139	0.000	0.143	0.790	1.120
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:04	80740.000	18930.000	0.000	7671.000	9746.000	8978.000	75.493%	1878.000
2	22:21:47	81680.000	19060.000	0.000	7704.000	9684.000	9141.000	76.421%	1890.000
3	22:22:30	80570.000	18890.000	0.000	7628.000	9603.000	9068.000	75.795%	1888.000
x		81000.000	18960.000	0.000	7668.000	9678.000	9063.000	75.903%	1886.000
σ		599.400	91.160	0.000	38.300	71.900	81.530	0.473%	6.586
%RSD		0.740	0.481	0.000	0.499	0.743	0.900	0.624	0.349
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:04	638.000	318.600	3970.000	233200.000	232400.000	601.500	730.700	446.000
2	22:21:47	642.000	321.800	3990.000	234700.000	233100.000	605.200	734.700	453.600
3	22:22:30	638.200	320.500	3992.000	235300.000	235800.000	608.900	734.500	445.100
x		639.400	320.300	3984.000	234400.000	233800.000	605.200	733.300	448.200
σ		2.255	1.619	12.110	1070.000	1802.000	3.697	2.267	4.679
%RSD		0.353	0.505	0.304	0.456	0.771	0.611	0.309	1.044
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:04	448.700	984.000	986.200	170.700	9.630	10.890	0.000	1174.000
2	22:21:47	454.500	999.100	1007.000	172.300	9.804	11.100	0.000	1199.000
3	22:22:30	452.900	989.000	1007.000	171.600	9.889	11.390	0.000	1189.000
x		452.000	990.700	1000.000	171.600	9.774	11.120	0.000	1187.000
σ		3.001	7.661	12.090	0.803	0.132	0.252	0.000	12.660
%RSD		0.664	0.773	1.209	0.468	1.352	2.262	0.000	1.066
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:04	0.000	1191.000	1190.000	62.380%	52.770	52.780	47.960	39.540
2	22:21:47	0.000	1216.000	1212.000	62.928%	53.320	52.470	48.140	41.040
3	22:22:30	0.000	1194.000	1195.000	63.449%	53.080	53.100	48.260	38.180
x		0.000	1200.000	1199.000	62.919%	53.060	52.790	48.120	39.590
σ		0.000	13.580	11.720	0.534%	0.276	0.313	0.153	1.431
%RSD		0.000	1.132	0.977	0.849	0.521	0.593	0.318	3.615
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:04	72.655%	2034.000	450.200	448.800	2405.000	2382.000	78.537%	77.709%
2	22:21:47	74.336%	2054.000	457.100	455.500	2407.000	2396.000	80.075%	79.422%
3	22:22:30	74.098%	2142.000	459.500	455.100	2399.000	2381.000	81.751%	81.007%
x		73.697%	2077.000	455.600	453.100	2403.000	2386.000	80.121%	79.379%
σ		0.910%	57.660	4.849	3.800	4.015	8.233	1.607%	1.649%
%RSD		1.234	2.776	1.064	0.839	0.167	0.345	2.006	2.078
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:21:04	52.690	53.160	169.900	170.600	169.400	66.552%		
2	22:21:47	52.230	52.870	167.900	169.200	168.400	69.558%		
3	22:22:30	52.520	53.060	169.800	170.400	170.100	68.893%		
x		52.480	53.030	169.200	170.100	169.300	68.334%		
σ		0.232	0.146	1.095	0.788	0.858	1.579%		
%RSD		0.443	0.276	0.647	0.463	0.507	2.310		

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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	22:29:15	76.664%	3.695	24.130	22.800	0.000	375.800	20660.000	20600.000
2	22:29:58	76.668%	4.078	22.640	22.770	0.000	378.700	20630.000	20570.000
3	22:30:41	76.063%	3.860	21.560	21.810	0.000	371.900	20320.000	20350.000
x		76.465%	3.878	22.780	22.460	0.000	375.400	20540.000	20510.000
σ		0.348%	0.192	1.288	0.564	0.000	3.409	189.500	134.000
%RSD		0.456	4.957	5.656	2.511	0.000	0.908	0.923	0.654

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:29:15	71230.000	9662.000	0.000	6702.000	4831.000	4680.000	78.274%	877.100
2	22:29:58	71000.000	9566.000	0.000	6635.000	4848.000	4757.000	77.575%	878.000
3	22:30:41	70020.000	9468.000	0.000	6618.000	5132.000	4686.000	76.947%	863.000
x		70750.000	9565.000	0.000	6652.000	4937.000	4708.000	77.599%	872.700
σ		645.200	97.070	0.000	44.650	169.000	42.930	0.664%	8.417
%RSD		0.912	1.015	0.000	0.671	3.424	0.912	0.856	0.965

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:29:15	127.000	105.800	2582.000	209000.000	209000.000	80.810	179.800	167.500
2	22:29:58	125.000	104.200	2570.000	210000.000	211200.000	80.830	179.500	168.800
3	22:30:41	125.300	104.700	2586.000	211900.000	209400.000	80.290	178.600	167.000
x		125.800	104.900	2579.000	210300.000	209900.000	80.640	179.300	167.800
σ		1.042	0.827	8.121	1462.000	1181.000	0.303	0.651	0.942
%RSD		0.828	0.789	0.315	0.695	0.563	0.376	0.363	0.562

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:29:15	169.600	499.800	504.000	106.100	1.375	1.895	0.000	50.940
2	22:29:58	170.000	498.500	506.900	105.100	1.544	2.704	0.000	51.070
3	22:30:41	169.200	497.900	505.000	105.300	1.592	3.159	0.000	51.210
x		169.600	498.700	505.300	105.500	1.504	2.586	0.000	51.070
σ		0.365	0.962	1.469	0.516	0.114	0.640	0.000	0.138
%RSD		0.215	0.193	0.291	0.489	7.590	24.750	0.000	0.270

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:29:15	0.000	9.543	9.487	69.654%	0.139	0.095	1.136	0.940
2	22:29:58	0.000	9.259	9.246	69.469%	0.151	0.101	1.232	0.993
3	22:30:41	0.000	9.383	8.810	69.278%	0.164	0.087	1.026	0.811
x		0.000	9.395	9.181	69.467%	0.151	0.095	1.131	0.914
σ		0.000	0.142	0.343	0.188%	0.012	0.007	0.103	0.094
%RSD		0.000	1.513	3.734	0.270	7.982	7.478	9.131	10.240

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:29:15	75.402%	4.379	2.508	2.564	472.000	468.100	80.084%	78.212%
2	22:29:58	74.794%	3.926	1.996	2.048	470.100	469.700	81.351%	79.530%
3	22:30:41	74.913%	3.458	1.696	1.678	473.400	466.800	82.253%	80.478%
x		75.036%	3.921	2.066	2.097	471.800	468.200	81.230%	79.407%
σ		0.322%	0.460	0.411	0.445	1.639	1.447	1.089%	1.138%
%RSD		0.429	11.740	19.870	21.210	0.347	0.309	1.341	1.433

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:29:15	1.112	1.120	116.900	115.800	116.500	64.358%
2	22:29:58	1.125	1.173	121.500	120.500	120.500	64.909%
3	22:30:41	1.123	1.145	118.600	117.400	118.800	67.208%
x		1.120	1.146	119.000	117.900	118.600	65.492%
σ		0.007	0.026	2.351	2.397	1.971	1.512%
%RSD		0.643	2.292	1.976	2.033	1.662	2.308

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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	22:37:27	77.524%	4.591	23.930	24.060	0.000	362.800	23880.000	24080.000
2	22:38:10	75.462%	4.127	24.520	24.120	0.000	366.900	24230.000	24100.000
3	22:38:53	75.787%	3.973	21.080	23.190	0.000	355.700	23450.000	23540.000
x		76.258%	4.230	23.180	23.790	0.000	361.800	23850.000	23900.000
σ		1.109%	0.322	1.841	0.519	0.000	5.686	394.300	319.800
%RSD		1.454	7.610	7.944	2.181	0.000	1.572	1.653	1.338
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:37:27	85520.000	11210.000	0.000	7404.000	16840.000	15630.000	81.929%	998.900
2	22:38:10	85770.000	11260.000	0.000	7487.000	17060.000	15810.000	80.527%	1004.000
3	22:38:53	83090.000	10760.000	0.000	7237.000	16320.000	15460.000	79.470%	976.300
x		84790.000	11080.000	0.000	7376.000	16740.000	15630.000	80.642%	993.200
σ		1480.000	276.100	0.000	127.400	375.100	174.900	1.234%	14.870
%RSD		1.745	2.492	0.000	1.728	2.241	1.119	1.530	1.498
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:37:27	155.600	121.800	4923.000	228900.000	228200.000	88.620	217.000	160.100
2	22:38:10	157.500	124.000	5003.000	231900.000	229800.000	89.160	216.600	159.000
3	22:38:53	153.700	119.200	4794.000	221800.000	222300.000	85.720	209.200	153.500
x		155.600	121.700	4906.000	227500.000	226800.000	87.830	214.300	157.500
σ		1.898	2.387	105.300	5180.000	3966.000	1.850	4.421	3.507
%RSD		1.220	1.962	2.145	2.277	1.749	2.106	2.063	2.226
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:37:27	160.300	472.700	473.800	89.080	1.688	3.115	0.000	88.880
2	22:38:10	161.000	474.800	479.000	88.630	1.319	3.010	0.000	90.040
3	22:38:53	152.500	457.800	459.100	83.560	1.729	1.965	0.000	84.180
x		157.900	468.400	470.600	87.090	1.579	2.697	0.000	87.700
σ		4.708	9.257	10.310	3.067	0.226	0.635	0.000	3.107
%RSD		2.981	1.976	2.192	3.521	14.300	23.570	0.000	3.543
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:37:27	0.000	9.953	9.917	71.800%	0.322	0.256	1.386	1.083
2	22:38:10	0.000	10.420	9.718	71.154%	0.304	0.252	1.452	1.186
3	22:38:53	0.000	9.663	9.310	74.729%	0.273	0.239	1.268	1.090
x		0.000	10.010	9.648	72.561%	0.300	0.249	1.369	1.120
σ		0.000	0.381	0.309	1.905%	0.025	0.009	0.093	0.057
%RSD		0.000	3.809	3.202	2.625	8.237	3.625	6.819	5.118
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:37:27	77.587%	2.442	0.884	0.770	666.900	668.000	84.021%	82.532%
2	22:38:10	77.568%	2.348	0.840	0.824	671.100	670.800	83.567%	82.969%
3	22:38:53	78.316%	2.236	0.766	0.774	648.100	650.600	83.654%	82.888%
x		77.824%	2.342	0.830	0.789	662.000	663.100	83.747%	82.796%
σ		0.426%	0.103	0.059	0.030	12.230	10.950	0.241%	0.233%
%RSD		0.548	4.401	7.160	3.788	1.847	1.652	0.288	0.281
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:37:27	1.309	1.350	122.700	120.700	121.600	72.125%		
2	22:38:10	1.317	1.326	124.000	122.100	123.100	72.334%		
3	22:38:53	1.322	1.359	121.400	118.400	120.000	72.487%		
x		1.316	1.345	122.700	120.400	121.600	72.315%		
σ		0.007	0.017	1.279	1.839	1.584	0.181%		
%RSD		0.512	1.284	1.043	1.528	1.303	0.251		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:39	77.783%	4.376	21.730	19.350	0.000	360.200	21270.000	21160.000
2	22:46:22	76.014%	4.436	19.520	19.950	0.000	362.800	20960.000	20850.000
3	22:47:05	76.143%	3.882	18.480	19.300	0.000	350.900	20500.000	20430.000
x		76.647%	4.231	19.910	19.530	0.000	358.000	20910.000	20810.000
σ		0.986%	0.304	1.662	0.361	0.000	6.248	385.300	366.700
%RSD		1.286	7.178	8.348	1.848	0.000	1.745	1.843	1.762
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:39	87260.000	11190.000	0.000	7257.000	8120.000	7604.000	79.362%	1043.000
2	22:46:22	86600.000	11060.000	0.000	7246.000	7947.000	7463.000	77.606%	1032.000
3	22:47:05	83610.000	10680.000	0.000	7048.000	7775.000	7304.000	76.711%	1021.000
x		85820.000	10980.000	0.000	7184.000	7947.000	7457.000	77.893%	1032.000
σ		1942.000	265.700	0.000	117.700	172.200	150.000	1.349%	11.450
%RSD		2.263	2.420	0.000	1.638	2.167	2.012	1.732	1.110
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:39	156.600	119.500	2469.000	208100.000	208000.000	76.000	162.500	152.200
2	22:46:22	155.900	118.400	2454.000	206200.000	206000.000	74.920	157.100	148.200
3	22:47:05	153.300	115.600	2392.000	202300.000	201100.000	72.410	150.800	143.500
x		155.200	117.800	2438.000	205600.000	205000.000	74.440	156.800	148.000
σ		1.752	1.996	40.570	2962.000	3558.000	1.844	5.893	4.376
%RSD		1.128	1.693	1.664	1.441	1.735	2.476	3.758	2.957
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:39	153.100	401.600	402.900	91.340	1.966	3.791	0.000	47.650
2	22:46:22	147.300	402.900	405.100	91.110	2.018	3.024	0.000	47.520
3	22:47:05	147.100	391.800	395.200	88.020	2.204	2.529	0.000	46.480
x		149.100	398.800	401.000	90.150	2.063	3.114	0.000	47.220
σ		3.425	6.088	5.186	1.855	0.126	0.636	0.000	0.638
%RSD		2.296	1.527	1.293	2.058	6.082	20.410	0.000	1.351
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:39	0.000	7.757	7.885	69.709%	0.314	0.205	1.117	0.886
2	22:46:22	0.000	8.004	7.725	68.796%	0.234	0.211	1.070	0.839
3	22:47:05	0.000	7.849	7.783	69.612%	0.252	0.190	1.086	0.916
x		0.000	7.870	7.798	69.372%	0.267	0.202	1.091	0.880
σ		0.000	0.125	0.081	0.502%	0.042	0.011	0.024	0.039
%RSD		0.000	1.585	1.040	0.723	15.680	5.414	2.211	4.403
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:39	74.982%	1.596	16.030	16.010	516.600	518.000	77.386%	76.551%
2	22:46:22	75.069%	1.468	16.370	16.240	511.300	509.900	77.917%	77.248%
3	22:47:05	75.195%	1.328	16.250	15.620	496.000	497.100	79.510%	78.640%
x		75.082%	1.464	16.220	15.960	507.900	508.300	78.271%	77.479%
σ		0.107%	0.134	0.175	0.311	10.710	10.520	1.106%	1.064%
%RSD		0.143	9.169	1.079	1.948	2.108	2.070	1.413	1.373
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:45:39	1.307	1.286	130.600	128.600	129.000	62.752%		
2	22:46:22	1.246	1.301	126.300	124.700	125.500	64.593%		
3	22:47:05	1.282	1.280	126.300	123.700	125.200	65.468%		
x		1.278	1.289	127.700	125.700	126.600	64.271%		
σ		0.031	0.011	2.526	2.588	2.114	1.386%		
%RSD		2.405	0.844	1.978	2.059	1.670	2.157		

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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	22:53:51	79.182%	100.800	97.610	98.710	0.000	49260.000	49400.000	49660.000
2	22:54:34	78.553%	100.800	101.800	101.500	0.000	49440.000	49390.000	49620.000
3	22:55:17	78.100%	101.600	104.000	101.700	0.000	49240.000	49060.000	49510.000
x		78.611%	101.074%	101.136%	100.641%	0.000	98.627%	98.572%	99.190%
σ		0.543%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.691	0.410	3.196	1.664	0.000	0.222	0.389	0.158

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:51	494.000	5201.000	0.000	49500.000	48480.000	46110.000	75.687%	103.400
2	22:54:34	486.900	5154.000	0.000	49330.000	48720.000	45850.000	74.752%	102.700
3	22:55:17	480.000	5091.000	0.000	49750.000	49240.000	45960.000	74.034%	99.420
x		97.389%	102.978%	0.000	99.052%	97.628%	91.946%	74.824%	101.829%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.829%	n/a
%RSD		1.438	1.069	0.000	0.426	0.799	0.277	1.107	2.073

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:51	99.740	99.780	473.700	25170.000	24220.000	101.800	103.400	104.000
2	22:54:34	99.270	99.000	472.200	24930.000	24010.000	100.200	102.700	102.400
3	22:55:17	96.260	98.700	467.400	24600.000	24040.000	99.740	101.400	101.900
x		98.426%	99.162%	94.221%	99.597%	96.352%	100.575%	102.517%	102.748%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.918	0.562	0.696	1.158	0.482	1.042	0.983	1.039

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:51	106.100	101.600	100.400	101.600	103.200	100.700	0.000	96.050
2	22:54:34	101.800	101.300	101.400	101.000	102.100	101.400	0.000	96.200
3	22:55:17	102.400	100.700	101.100	101.100	102.900	98.790	0.000	96.210
x		103.461%	101.208%	100.944%	101.246%	102.748%	100.321%	0.000	96.153%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.256	0.449	0.517	0.318	0.538	1.367	0.000	0.091

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:51	76.253%	100.400	100.900	70.533%	99.370	99.620	100.200	98.980
2	22:54:34	76.393%	100.700	102.500	70.231%	98.710	99.300	98.200	98.070
3	22:55:17	75.664%	102.600	103.600	69.505%	99.830	99.170	98.480	99.520
x		76.104%	101.213%	102.322%	70.090%	99.303%	99.361%	98.950%	98.857%
σ		0.387%	n/a	n/a	0.528%	n/a	n/a	n/a	n/a
%RSD		0.509	1.180	1.340	0.754	0.568	0.231	1.082	0.746

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:51	75.908%	97.090	94.140	93.810	96.410	95.950	77.277%	77.082%
2	22:54:34	75.713%	97.690	95.330	95.060	95.290	95.830	77.514%	77.855%
3	22:55:17	75.420%	97.430	96.030	96.950	97.120	95.570	77.821%	78.465%
x		75.681%	97.405%	95.166%	95.272%	96.275%	95.785%	77.537%	77.801%
σ		0.246%	n/a	n/a	n/a	n/a	n/a	0.273%	0.693%
%RSD		0.325	0.306	1.003	1.663	0.959	0.205	0.352	0.891

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:51	96.300	97.250	97.810	97.340	97.420	70.745%
2	22:54:34	95.400	97.190	97.270	97.300	97.030	71.774%
3	22:55:17	95.350	96.410	96.940	96.360	96.250	72.800%
x		95.686%	96.949%	97.338%	96.998%	96.898%	71.773%
σ		n/a	n/a	n/a	n/a	n/a	1.028%
%RSD		0.560	0.486	0.451	0.571	0.615	1.432

CCB2 4/30/2013 11:01:22 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	23:02:05	91.374%	-0.000	1.292	1.025	0.000	8.808	8.921	8.035
2	23:02:48	92.053%	-0.014	0.993	0.749	0.000	10.490	9.108	9.631
3	23:03:31	93.102%	-0.008	1.157	0.613	0.000	13.810	13.370	12.460
x		92.177%	-0.007	1.147	0.796	0.000	11.040	10.470	10.040
σ		0.871%	0.007	0.150	0.210	0.000	2.543	2.518	2.240
%RSD		0.945	94.640	13.070	26.400	0.000	23.050	24.060	22.300
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:05	3.286	0.905	0.000	18.850	1.537	7.525	91.249%	-0.167
2	23:02:48	3.736	2.147	0.000	20.030	1.414	7.314	92.892%	-0.358
3	23:03:31	4.913	5.074	0.000	21.280	9.729	10.800	93.843%	-0.192
x		3.979	2.709	0.000	20.050	4.227	8.547	92.661%	-0.239
σ		0.840	2.140	0.000	1.215	4.765	1.955	1.313%	0.104
%RSD		21.110	79.020	0.000	6.059	112.700	22.880	1.417	43.340
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:05	0.015	0.065	0.606	7.961	8.687	0.015	-0.003	0.011
2	23:02:48	0.007	0.044	0.713	9.723	11.280	0.023	0.021	0.029
3	23:03:31	-0.003	0.035	0.918	12.880	14.820	0.036	0.030	0.082
x		0.006	0.048	0.745	10.190	11.590	0.025	0.016	0.040
σ		0.009	0.015	0.159	2.495	3.078	0.011	0.017	0.037
%RSD		141.500	31.550	21.300	24.490	26.550	43.530	107.200	91.470
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:05	0.060	-0.079	-0.097	0.202	0.276	0.538	0.000	0.060
2	23:02:48	0.061	-0.180	0.006	0.134	0.413	0.396	0.000	0.080
3	23:03:31	0.088	0.000	0.141	0.056	0.437	0.071	0.000	0.090
x		0.070	-0.087	0.017	0.131	0.375	0.335	0.000	0.077
σ		0.016	0.090	0.120	0.073	0.087	0.240	0.000	0.015
%RSD		22.730	104.500	718.900	55.800	23.120	71.500	0.000	20.060
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:05	88.246%	0.309	0.340	82.307%	-0.008	-0.004	0.094	0.078
2	23:02:48	90.399%	0.320	0.290	89.255%	0.003	0.007	0.041	0.059
3	23:03:31	91.535%	0.323	0.273	91.460%	-0.006	0.002	0.062	0.060
x		90.060%	0.317	0.301	87.674%	-0.004	0.002	0.066	0.066
σ		1.670%	0.007	0.035	4.777%	0.006	0.005	0.027	0.011
%RSD		1.855	2.261	11.570	5.449	144.300	287.600	40.540	16.420
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:05	85.907%	0.195	0.092	0.089	0.032	0.062	84.053%	83.462%
2	23:02:48	86.989%	0.226	0.117	0.122	0.069	0.099	86.173%	86.002%
3	23:03:31	89.374%	0.204	0.096	0.107	0.126	0.120	87.990%	88.215%
x		87.423%	0.208	0.102	0.106	0.076	0.094	86.072%	85.893%
σ		1.774%	0.016	0.014	0.016	0.048	0.029	1.970%	2.378%
%RSD		2.029	7.542	13.450	15.400	62.880	30.960	2.289	2.769
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:02:05	0.004	0.008	0.033	0.044	0.040	80.744%		
2	23:02:48	0.010	0.011	0.042	0.043	0.045	85.008%		
3	23:03:31	0.011	0.012	0.046	0.040	0.052	87.377%		
x		0.008	0.010	0.040	0.042	0.046	84.376%		
σ		0.004	0.002	0.006	0.002	0.006	3.361%		
%RSD		46.000	23.660	16.080	5.134	13.300	3.983		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:18	74.560%	4.199	18.750	17.750	0.000	382.500	20690.000	20760.000
2	23:11:01	76.761%	4.045	18.280	17.940	0.000	371.000	20490.000	20260.000
3	23:11:44	76.007%	4.321	17.190	17.760	0.000	360.600	20020.000	20060.000
x		75.776%	4.188	18.070	17.820	0.000	371.300	20400.000	20360.000
σ		1.118%	0.138	0.799	0.109	0.000	10.940	344.700	357.800
%RSD		1.476	3.298	4.419	0.609	0.000	2.946	1.690	1.757

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:18	86060.000	10560.000	0.000	7184.000	7780.000	7324.000	78.390%	965.200
2	23:11:01	83870.000	10360.000	0.000	7191.000	7815.000	7324.000	78.503%	952.700
3	23:11:44	81770.000	10180.000	0.000	7152.000	7730.000	7260.000	77.357%	939.800
x		83900.000	10360.000	0.000	7176.000	7775.000	7303.000	78.083%	952.600
σ		2149.000	190.100	0.000	21.090	42.690	37.000	0.632%	12.670
%RSD		2.562	1.834	0.000	0.294	0.549	0.507	0.809	1.330

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:18	147.400	115.700	2476.000	199600.000	199200.000	79.660	159.600	142.500
2	23:11:01	147.100	115.600	2494.000	199700.000	197500.000	78.610	159.400	140.900
3	23:11:44	144.000	113.300	2439.000	196800.000	195800.000	78.380	155.800	139.800
x		146.200	114.900	2470.000	198700.000	197500.000	78.880	158.300	141.100
σ		1.866	1.325	27.920	1671.000	1681.000	0.683	2.178	1.347
%RSD		1.276	1.154	1.130	0.841	0.851	0.865	1.376	0.955

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:18	141.800	390.900	391.700	91.120	1.789	2.588	0.000	47.480
2	23:11:01	140.500	387.400	393.900	92.210	2.146	2.821	0.000	48.440
3	23:11:44	140.400	386.700	394.900	90.840	1.802	2.150	0.000	47.800
x		140.900	388.300	393.500	91.390	1.912	2.520	0.000	47.910
σ		0.772	2.244	1.619	0.726	0.203	0.341	0.000	0.487
%RSD		0.548	0.578	0.411	0.795	10.590	13.520	0.000	1.018

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:18	0.000	7.441	7.636	69.757%	0.305	0.195	1.055	0.806
2	23:11:01	0.000	7.869	7.681	68.686%	0.261	0.233	1.102	0.819
3	23:11:44	0.000	7.635	7.674	69.218%	0.228	0.216	1.002	0.692
x		0.000	7.648	7.664	69.220%	0.265	0.215	1.053	0.772
σ		0.000	0.214	0.024	0.536%	0.038	0.019	0.050	0.070
%RSD		0.000	2.799	0.313	0.774	14.480	8.864	4.731	9.065

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:18	75.277%	1.571	4.887	4.714	499.000	502.200	80.327%	78.873%
2	23:11:01	75.198%	1.613	4.834	4.859	505.100	503.100	80.744%	79.419%
3	23:11:44	75.423%	1.512	4.905	4.740	500.300	502.500	81.124%	80.068%
x		75.299%	1.565	4.876	4.771	501.500	502.600	80.732%	79.454%
σ		0.114%	0.051	0.037	0.078	3.223	0.449	0.399%	0.598%
%RSD		0.151	3.244	0.754	1.626	0.643	0.089	0.494	0.753

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:10:18	1.254	1.259	118.200	115.700	116.600	71.254%
2	23:11:01	1.236	1.299	119.700	117.200	118.400	70.597%
3	23:11:44	1.259	1.272	117.700	115.600	115.800	71.802%
x		1.250	1.277	118.500	116.200	116.900	71.218%
σ		0.012	0.020	1.058	0.914	1.322	0.603%
%RSD		0.960	1.599	0.892	0.786	1.131	0.847

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:29	75.488%	5.013	21.530	21.480	0.000	436.500	28050.000	27960.000
2	23:19:12	74.030%	5.241	22.980	21.480	0.000	433.900	27640.000	27700.000
3	23:19:55	73.224%	5.040	21.200	22.040	0.000	447.000	28370.000	28080.000
x		74.247%	5.098	21.900	21.670	0.000	439.100	28020.000	27920.000
σ		1.148%	0.125	0.946	0.321	0.000	6.937	366.700	195.600
%RSD		1.546	2.448	4.317	1.480	0.000	1.580	1.309	0.701
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:29	78180.000	10060.000	0.000	8669.000	9729.000	8975.000	78.924%	884.300
2	23:19:12	77570.000	9941.000	0.000	8620.000	9334.000	8867.000	77.179%	885.700
3	23:19:55	79390.000	10050.000	0.000	8856.000	9570.000	9059.000	74.528%	886.000
x		78380.000	10020.000	0.000	8715.000	9544.000	8967.000	76.877%	885.300
σ		927.900	66.270	0.000	124.400	198.800	96.520	2.214%	0.879
%RSD		1.184	0.662	0.000	1.428	2.083	1.076	2.879	0.099
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:29	126.600	140.800	4578.000	222300.000	221800.000	117.600	266.200	190.600
2	23:19:12	125.400	138.700	4608.000	223400.000	223200.000	115.100	261.200	187.900
3	23:19:55	127.300	141.500	4709.000	228500.000	228200.000	117.900	270.900	189.100
x		126.400	140.400	4632.000	224700.000	224400.000	116.800	266.100	189.200
σ		0.930	1.465	68.630	3337.000	3374.000	1.554	4.877	1.369
%RSD		0.736	1.044	1.482	1.485	1.504	1.330	1.833	0.723
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:29	188.800	510.400	514.200	89.830	1.372	2.341	0.000	57.100
2	23:19:12	189.500	511.300	523.400	89.520	1.258	2.679	0.000	58.270
3	23:19:55	190.800	518.400	528.700	89.700	1.475	3.467	0.000	58.840
x		189.700	513.400	522.100	89.690	1.368	2.829	0.000	58.070
σ		0.981	4.348	7.335	0.155	0.109	0.578	0.000	0.890
%RSD		0.517	0.847	1.405	0.172	7.938	20.430	0.000	1.532
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:29	0.000	7.866	7.363	69.384%	0.245	0.180	1.696	1.453
2	23:19:12	0.000	8.253	7.692	67.980%	0.261	0.179	1.410	1.153
3	23:19:55	0.000	7.696	7.662	66.713%	0.240	0.156	1.461	1.181
x		0.000	7.939	7.573	68.026%	0.249	0.172	1.522	1.262
σ		0.000	0.285	0.182	1.336%	0.011	0.014	0.152	0.166
%RSD		0.000	3.592	2.403	1.963	4.378	8.102	10.010	13.120
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:29	74.536%	2.016	5.474	5.568	559.100	554.100	79.638%	77.587%
2	23:19:12	74.100%	1.840	5.600	5.797	555.900	553.200	80.476%	78.683%
3	23:19:55	73.633%	1.854	5.646	5.621	554.800	555.500	80.231%	78.452%
x		74.090%	1.903	5.573	5.662	556.600	554.300	80.115%	78.241%
σ		0.452%	0.098	0.089	0.120	2.243	1.169	0.431%	0.578%
%RSD		0.610	5.132	1.600	2.115	0.403	0.211	0.538	0.739
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:18:29	1.162	1.172	129.000	127.600	128.500	62.282%		
2	23:19:12	1.175	1.185	129.000	128.200	128.400	64.140%		
3	23:19:55	1.206	1.168	129.700	128.200	129.700	65.436%		
x		1.181	1.175	129.200	128.000	128.900	63.953%		
σ		0.023	0.009	0.447	0.333	0.726	1.585%		
%RSD		1.916	0.725	0.346	0.260	0.564	2.479		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:38	77.239%	4.433	18.420	20.640	0.000	417.100	26120.000	26090.000
2	23:27:21	76.786%	4.597	19.240	20.860	0.000	411.900	25550.000	25710.000
3	23:28:04	74.301%	4.781	21.120	21.020	0.000	412.200	25480.000	25670.000
x		76.108%	4.604	19.590	20.840	0.000	413.700	25720.000	25820.000
σ		1.582%	0.174	1.389	0.188	0.000	2.952	346.000	230.100
%RSD		2.079	3.777	7.087	0.900	0.000	0.714	1.345	0.891

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:38	73740.000	10330.000	0.000	8215.000	9260.000	8838.000	80.273%	864.000
2	23:27:21	72970.000	10180.000	0.000	8110.000	9110.000	8906.000	78.616%	856.500
3	23:28:04	72640.000	10110.000	0.000	8024.000	9127.000	8737.000	77.037%	847.800
x		73120.000	10210.000	0.000	8116.000	9165.000	8827.000	78.642%	856.100
σ		566.000	111.000	0.000	95.770	82.110	85.250	1.618%	8.112
%RSD		0.774	1.087	0.000	1.180	0.896	0.966	2.057	0.948

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:38	120.600	125.700	3962.000	211400.000	209600.000	107.700	234.100	191.400
2	23:27:21	117.300	121.900	3913.000	209100.000	206800.000	104.800	230.000	187.900
3	23:28:04	118.400	121.400	3938.000	209000.000	207900.000	104.800	226.200	187.800
x		118.700	123.000	3938.000	209800.000	208100.000	105.700	230.100	189.000
σ		1.670	2.381	24.460	1365.000	1410.000	1.684	3.964	2.041
%RSD		1.406	1.935	0.621	0.650	0.677	1.593	1.722	1.080

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:38	191.900	530.500	532.500	98.610	1.158	3.149	0.000	50.470
2	23:27:21	186.200	523.200	525.900	97.740	1.181	2.314	0.000	50.280
3	23:28:04	186.500	526.000	537.700	99.370	1.168	2.437	0.000	50.810
x		188.200	526.600	532.000	98.570	1.169	2.633	0.000	50.520
σ		3.246	3.681	5.906	0.814	0.012	0.451	0.000	0.267
%RSD		1.725	0.699	1.110	0.826	0.995	17.120	0.000	0.528

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:38	0.000	7.117	7.143	70.681%	0.215	0.111	1.504	1.278
2	23:27:21	0.000	7.205	7.160	69.782%	0.201	0.122	1.512	1.180
3	23:28:04	0.000	7.243	7.349	68.400%	0.191	0.122	1.506	1.161
x		0.000	7.188	7.217	69.621%	0.202	0.118	1.507	1.206
σ		0.000	0.065	0.115	1.149%	0.012	0.006	0.004	0.063
%RSD		0.000	0.898	1.588	1.650	5.955	5.472	0.250	5.186

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:38	76.233%	1.685	2.312	2.296	421.100	418.300	81.723%	80.781%
2	23:27:21	75.727%	1.670	2.270	2.194	420.800	415.500	82.293%	81.459%
3	23:28:04	74.716%	1.649	2.289	2.326	419.900	418.300	81.602%	80.459%
x		75.559%	1.668	2.291	2.272	420.600	417.300	81.873%	80.900%
σ		0.773%	0.018	0.021	0.069	0.613	1.623	0.369%	0.511%
%RSD		1.023	1.087	0.920	3.044	0.146	0.389	0.451	0.631

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:38	1.010	1.046	119.900	118.600	119.000	69.412%
2	23:27:21	1.029	1.025	120.300	118.600	119.300	70.307%
3	23:28:04	1.017	1.065	120.900	118.800	119.700	68.713%
x		1.019	1.046	120.300	118.700	119.400	69.477%
σ		0.010	0.020	0.490	0.124	0.374	0.799%
%RSD		0.933	1.915	0.407	0.105	0.314	1.150

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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	23:34:48	75.389%	5.260	22.660	23.710	0.000	435.900	30840.000	30650.000
2	23:35:31	76.545%	4.554	21.850	23.060	0.000	408.900	29130.000	29350.000
3	23:36:14	73.989%	4.905	23.680	23.500	0.000	430.200	30070.000	29860.000
x		75.308%	4.906	22.730	23.420	0.000	425.000	30010.000	29950.000
σ		1.280%	0.353	0.920	0.329	0.000	14.250	859.200	655.600
%RSD		1.700	7.198	4.047	1.405	0.000	3.354	2.863	2.189

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:34:48	92100.000	11350.000	0.000	9719.000	13360.000	12650.000	77.772%	922.400
2	23:35:31	87580.000	10760.000	0.000	9211.000	12870.000	12070.000	78.284%	872.500
3	23:36:14	89420.000	10990.000	0.000	9501.000	13300.000	12360.000	76.526%	898.500
x		89700.000	11030.000	0.000	9477.000	13180.000	12360.000	77.527%	897.800
σ		2275.000	296.300	0.000	255.000	266.300	292.300	0.904%	24.990
%RSD		2.536	2.686	0.000	2.690	2.021	2.365	1.167	2.783

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:34:48	147.200	142.000	2974.000	243400.000	242500.000	102.300	258.700	184.100
2	23:35:31	140.500	133.200	2843.000	231300.000	230700.000	95.100	240.800	170.700
3	23:36:14	141.000	137.600	2913.000	236000.000	237200.000	97.590	245.900	176.300
x		142.900	137.600	2910.000	236900.000	236800.000	98.310	248.500	177.000
σ		3.730	4.395	65.790	6082.000	5908.000	3.633	9.221	6.686
%RSD		2.610	3.194	2.261	2.568	2.495	3.695	3.711	3.777

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:34:48	185.500	577.300	583.800	115.900	1.217	2.804	0.000	67.760
2	23:35:31	171.900	547.700	554.100	111.900	1.229	3.006	0.000	65.040
3	23:36:14	176.500	572.000	571.400	113.000	1.180	1.799	0.000	66.750
x		178.000	565.700	569.800	113.600	1.209	2.537	0.000	66.520
σ		6.916	15.790	14.930	2.090	0.026	0.646	0.000	1.374
%RSD		3.886	2.791	2.621	1.840	2.136	25.480	0.000	2.066

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:34:48	0.000	8.028	8.014	69.021%	0.257	0.126	1.688	1.420
2	23:35:31	0.000	7.812	7.646	70.210%	0.228	0.130	1.365	1.249
3	23:36:14	0.000	8.212	8.117	67.936%	0.206	0.128	1.516	1.258
x		0.000	8.017	7.926	69.056%	0.230	0.128	1.523	1.309
σ		0.000	0.200	0.248	1.137%	0.025	0.002	0.162	0.096
%RSD		0.000	2.498	3.123	1.647	11.030	1.678	10.630	7.337

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:34:48	74.900%	1.525	0.588	0.564	500.600	502.200	80.040%	78.271%
2	23:35:31	75.802%	1.455	0.547	0.558	487.300	485.100	81.347%	79.942%
3	23:36:14	74.065%	1.393	0.635	0.585	501.500	496.700	79.827%	78.497%
x		74.923%	1.458	0.590	0.569	496.400	494.700	80.405%	78.903%
σ		0.869%	0.066	0.044	0.014	7.952	8.711	0.823%	0.906%
%RSD		1.159	4.533	7.525	2.487	1.602	1.761	1.023	1.149

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:34:48	1.235	1.303	125.600	123.600	124.600	66.024%
2	23:35:31	1.230	1.226	121.100	119.400	120.200	68.326%
3	23:36:14	1.293	1.253	124.600	122.200	123.700	67.849%
x		1.253	1.261	123.800	121.700	122.800	67.400%
σ		0.035	0.039	2.382	2.149	2.322	1.215%
%RSD		2.773	3.093	1.924	1.765	1.891	1.802

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:59	77.278%	3.278	14.340	13.470	0.000	263.200	16420.000	16370.000
2	23:43:42	76.620%	3.082	14.160	13.190	0.000	262.700	16010.000	16180.000
3	23:44:24	75.677%	3.317	14.310	13.190	0.000	264.100	16210.000	16380.000
x		76.525%	3.226	14.270	13.280	0.000	263.300	16210.000	16310.000
σ		0.804%	0.126	0.099	0.164	0.000	0.673	201.500	115.600
%RSD		1.051	3.910	0.695	1.231	0.000	0.256	1.243	0.709

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:59	72640.000	11340.000	0.000	6279.000	2732.000	2568.000	79.328%	1027.000
2	23:43:42	72550.000	11160.000	0.000	6164.000	2499.000	2547.000	78.974%	1028.000
3	23:44:24	73560.000	11380.000	0.000	6397.000	2599.000	2601.000	76.750%	1034.000
x		72920.000	11290.000	0.000	6280.000	2610.000	2572.000	78.351%	1030.000
σ		562.000	115.500	0.000	116.500	117.100	27.450	1.397%	3.557
%RSD		0.771	1.023	0.000	1.855	4.486	1.067	1.783	0.345

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:59	118.200	95.840	2268.000	178800.000	178500.000	62.400	132.800	179.100
2	23:43:42	117.500	93.940	2246.000	177600.000	177200.000	62.460	134.200	177.700
3	23:44:24	118.500	95.320	2300.000	181000.000	180400.000	63.090	131.500	175.600
x		118.100	95.030	2271.000	179100.000	178700.000	62.650	132.800	177.500
σ		0.474	0.981	27.280	1695.000	1621.000	0.383	1.326	1.756
%RSD		0.401	1.033	1.201	0.946	0.907	0.611	0.998	0.989

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:59	179.800	460.000	464.100	91.960	1.844	2.724	0.000	19.460
2	23:43:42	176.900	458.000	463.400	91.160	1.961	2.939	0.000	19.650
3	23:44:24	176.900	458.300	468.400	93.510	2.017	2.514	0.000	19.860
x		177.900	458.800	465.300	92.210	1.940	2.726	0.000	19.660
σ		1.680	1.045	2.716	1.197	0.088	0.213	0.000	0.197
%RSD		0.944	0.228	0.584	1.298	4.557	7.802	0.000	1.003

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:59	0.000	9.381	9.276	71.695%	0.146	0.134	1.312	0.997
2	23:43:42	0.000	9.872	9.448	70.097%	0.148	0.085	1.179	0.935
3	23:44:24	0.000	9.310	9.389	69.140%	0.152	0.080	1.255	0.965
x		0.000	9.521	9.371	70.311%	0.149	0.100	1.249	0.966
σ		0.000	0.306	0.087	1.291%	0.003	0.030	0.067	0.031
%RSD		0.000	3.213	0.929	1.836	1.980	30.080	5.339	3.242

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:59	76.320%	1.545	2.492	2.348	243.300	243.700	80.909%	80.328%
2	23:43:42	76.421%	1.588	2.344	2.442	241.200	241.000	81.960%	80.770%
3	23:44:24	75.482%	1.572	2.485	2.405	242.500	241.900	82.160%	81.076%
x		76.074%	1.568	2.441	2.399	242.300	242.200	81.676%	80.725%
σ		0.516%	0.022	0.083	0.047	1.066	1.372	0.672%	0.376%
%RSD		0.678	1.388	3.418	1.978	0.440	0.567	0.823	0.466

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:59	1.043	1.012	124.900	122.900	124.000	73.030%
2	23:43:42	1.020	1.061	125.000	124.700	125.100	72.329%
3	23:44:24	1.048	1.048	126.400	125.600	125.900	71.810%
x		1.037	1.040	125.400	124.400	125.000	72.390%
σ		0.015	0.025	0.821	1.390	0.970	0.612%
%RSD		1.466	2.442	0.654	1.117	0.776	0.845

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:08	82.643%	0.614	2.717	2.595	0.000	55.230	3103.000	3111.000
2	23:51:51	85.249%	0.768	3.037	2.276	0.000	55.190	3051.000	3050.000
3	23:52:34	86.536%	0.698	2.412	2.093	0.000	52.390	2964.000	2986.000
x		84.809%	0.694	2.722	2.321	0.000	54.270	3039.000	3049.000
σ		1.983%	0.077	0.312	0.254	0.000	1.631	70.460	62.320
%RSD		2.338	11.120	11.480	10.960	0.000	3.004	2.318	2.044

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:08	14500.000	2293.000	0.000	1222.000	531.100	530.300	75.135%	211.400
2	23:51:51	14150.000	2239.000	0.000	1220.000	584.000	525.400	76.771%	203.800
3	23:52:34	13800.000	2169.000	0.000	1186.000	580.800	510.300	76.455%	197.800
x		14150.000	2234.000	0.000	1209.000	565.300	522.000	76.120%	204.300
σ		350.600	62.050	0.000	19.950	29.660	10.380	0.868%	6.799
%RSD		2.478	2.777	0.000	1.649	5.248	1.989	1.140	3.327

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:08	23.090	18.520	430.200	35300.000	34200.000	12.220	26.600	35.970
2	23:51:51	23.030	19.220	427.200	35020.000	33650.000	12.050	25.990	35.510
3	23:52:34	22.530	18.120	422.400	34460.000	33000.000	11.490	25.170	34.170
x		22.880	18.620	426.600	34930.000	33620.000	11.920	25.920	35.220
σ		0.307	0.553	3.916	430.200	603.500	0.382	0.717	0.940
%RSD		1.341	2.970	0.918	1.232	1.795	3.207	2.767	2.669

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:08	36.210	105.000	106.700	18.650	0.335	0.186	0.000	3.145
2	23:51:51	35.130	104.400	105.400	18.840	0.320	-0.296	0.000	3.225
3	23:52:34	33.780	101.400	101.100	18.260	0.401	-0.408	0.000	3.121
x		35.040	103.600	104.400	18.580	0.352	-0.173	0.000	3.164
σ		1.219	1.901	2.895	0.297	0.043	0.316	0.000	0.054
%RSD		3.480	1.835	2.773	1.600	12.300	182.800	0.000	1.717

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:08	87.880%	1.490	1.750	71.014%	0.014	0.017	0.337	0.243
2	23:51:51	90.045%	1.657	1.661	73.614%	0.014	0.009	0.282	0.241
3	23:52:34	91.144%	1.482	1.685	74.219%	0.011	0.017	0.140	0.160
x		89.690%	1.543	1.698	72.949%	0.013	0.014	0.253	0.215
σ		1.661%	0.099	0.046	1.703%	0.002	0.004	0.102	0.048
%RSD		1.851	6.435	2.707	2.334	15.570	31.150	40.310	22.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:08	75.713%	0.306	0.482	0.476	48.470	48.260	75.329%	75.418%
2	23:51:51	78.049%	0.300	0.519	0.466	47.910	47.940	78.271%	77.955%
3	23:52:34	79.518%	0.308	0.580	0.502	47.460	47.290	81.450%	80.809%
x		77.760%	0.305	0.527	0.481	47.950	47.830	78.350%	78.061%
σ		1.919%	0.004	0.050	0.019	0.505	0.497	3.062%	2.697%
%RSD		2.468	1.366	9.436	3.907	1.054	1.039	3.908	3.455

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:51:08	0.186	0.196	24.620	24.460	24.520	67.095%
2	23:51:51	0.215	0.199	24.970	24.400	24.720	70.024%
3	23:52:34	0.177	0.192	24.000	23.880	23.990	74.020%
x		0.193	0.196	24.530	24.250	24.410	70.380%
σ		0.020	0.004	0.492	0.320	0.379	3.476%
%RSD		10.320	1.930	2.004	1.321	1.552	4.939

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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	23:59:19	77.631%	3.151	12.770	12.880	0.000	246.500	16110.000	16220.000
2	00:00:02	78.664%	3.282	13.880	12.710	0.000	239.300	15890.000	16020.000
3	00:00:45	77.299%	3.686	13.280	13.180	0.000	247.200	16080.000	16210.000
x		77.865%	3.373	13.310	12.920	0.000	244.300	16030.000	16150.000
σ		0.712%	0.279	0.555	0.237	0.000	4.407	116.200	114.500
%RSD		0.914	8.258	4.168	1.831	0.000	1.804	0.725	0.709

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:19	72470.000	11090.000	0.000	6090.000	2641.000	2446.000	78.737%	978.200
2	00:00:02	70430.000	10910.000	0.000	6037.000	2479.000	2454.000	78.908%	964.500
3	00:00:45	71580.000	11010.000	0.000	6041.000	2709.000	2461.000	77.502%	978.900
x		71490.000	11000.000	0.000	6056.000	2610.000	2454.000	78.382%	973.900
σ		1025.000	90.580	0.000	29.630	117.900	7.332	0.767%	8.136
%RSD		1.433	0.823	0.000	0.489	4.519	0.299	0.979	0.835

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:19	116.500	92.890	2098.000	173800.000	172600.000	59.300	129.400	170.400
2	00:00:02	114.600	91.190	2121.000	176000.000	174200.000	59.610	130.600	170.600
3	00:00:45	114.400	91.740	2112.000	176900.000	176600.000	60.580	130.100	168.600
x		115.200	91.940	2111.000	175600.000	174500.000	59.830	130.000	169.900
σ		1.151	0.870	11.800	1599.000	2040.000	0.666	0.624	1.135
%RSD		0.999	0.946	0.559	0.911	1.169	1.112	0.480	0.668

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:19	171.100	441.700	447.700	86.900	1.638	2.272	0.000	19.030
2	00:00:02	170.000	444.500	440.900	87.870	2.002	3.522	0.000	19.100
3	00:00:45	170.600	439.700	448.900	86.300	1.714	2.849	0.000	18.900
x		170.600	442.000	445.800	87.020	1.785	2.881	0.000	19.010
σ		0.533	2.404	4.298	0.794	0.192	0.625	0.000	0.098
%RSD		0.313	0.544	0.964	0.913	10.750	21.700	0.000	0.515

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:19	0.000	8.903	9.269	71.204%	0.177	0.081	1.236	0.996
2	00:00:02	0.000	8.765	8.927	70.527%	0.150	0.105	1.096	0.891
3	00:00:45	0.000	9.152	9.123	69.880%	0.135	0.087	1.067	0.900
x		0.000	8.940	9.107	70.537%	0.154	0.091	1.133	0.929
σ		0.000	0.196	0.172	0.662%	0.021	0.012	0.091	0.059
%RSD		0.000	2.195	1.885	0.938	13.840	13.500	8.001	6.301

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:19	76.641%	1.512	2.258	2.221	237.700	236.800	80.403%	80.475%
2	00:00:02	77.416%	1.399	2.181	2.234	235.800	235.100	80.888%	81.000%
3	00:00:45	76.529%	1.502	2.330	2.242	237.100	234.300	80.279%	79.687%
x		76.862%	1.471	2.256	2.232	236.800	235.400	80.523%	80.387%
σ		0.483%	0.063	0.074	0.011	0.985	1.246	0.322%	0.661%
%RSD		0.628	4.263	3.297	0.476	0.416	0.529	0.400	0.822

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:19	0.965	0.960	116.500	115.600	116.000	70.485%
2	00:00:02	0.927	0.950	117.600	116.600	116.800	71.432%
3	00:00:45	0.941	0.951	118.200	116.400	117.300	69.357%
x		0.945	0.954	117.500	116.200	116.700	70.424%
σ		0.019	0.006	0.862	0.536	0.666	1.039%
%RSD		2.042	0.595	0.734	0.461	0.571	1.475

240-22660-A-6-B MS 5/1/2013 12:06:48 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:31	70.685%	45.240	822.200	821.700	0.000	45620.000	62160.000	62260.000
2	00:08:14	70.130%	44.080	850.900	826.300	0.000	46070.000	62500.000	62260.000
3	00:08:57	69.410%	44.620	857.400	844.900	0.000	45930.000	63130.000	63300.000
x		70.075%	44.650	843.500	830.900	0.000	45870.000	62600.000	62600.000
σ		0.639%	0.581	18.720	12.260	0.000	233.200	488.700	600.700
%RSD		0.912	1.301	2.219	1.475	0.000	0.508	0.781	0.960

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:31	99980.000	29200.000	0.000	50600.000	46450.000	42550.000	71.890%	1977.000
2	00:08:14	101000.000	29300.000	0.000	51310.000	46860.000	43890.000	70.902%	2008.000
3	00:08:57	101400.000	29590.000	0.000	51330.000	47680.000	44660.000	70.553%	2002.000
x		100800.000	29360.000	0.000	51080.000	46990.000	43700.000	71.115%	1996.000
σ		742.200	205.600	0.000	416.800	623.900	1068.000	0.693%	16.280
%RSD		0.736	0.700	0.000	0.816	1.328	2.444	0.975	0.816

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:31	601.800	289.600	2572.000	178800.000	178200.000	506.200	581.100	394.000
2	00:08:14	611.800	292.500	2599.000	180800.000	180900.000	511.800	584.000	397.300
3	00:08:57	611.600	292.800	2627.000	183000.000	180600.000	513.200	579.300	394.100
x		608.400	291.600	2599.000	180900.000	179900.000	510.400	581.500	395.100
σ		5.694	1.790	27.340	2096.000	1441.000	3.691	2.381	1.916
%RSD		0.936	0.614	1.052	1.159	0.801	0.723	0.409	0.485

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:31	397.400	865.200	873.500	129.200	8.091	9.362	0.000	1038.000
2	00:08:14	399.300	870.100	886.200	127.400	8.112	9.182	0.000	1049.000
3	00:08:57	400.500	881.400	885.900	130.500	7.944	9.206	0.000	1055.000
x		399.100	872.200	881.900	129.000	8.049	9.250	0.000	1047.000
σ		1.566	8.294	7.249	1.553	0.092	0.098	0.000	8.455
%RSD		0.393	0.951	0.822	1.204	1.137	1.058	0.000	0.807

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:31	0.000	986.300	980.700	60.629%	43.950	45.020	43.920	39.310
2	00:08:14	0.000	981.800	987.600	60.798%	44.470	44.460	43.200	38.830
3	00:08:57	0.000	1002.000	996.500	60.465%	45.160	44.980	44.150	40.070
x		0.000	990.100	988.300	60.631%	44.530	44.820	43.760	39.400
σ		0.000	10.780	7.920	0.166%	0.608	0.311	0.497	0.623
%RSD		0.000	1.088	0.801	0.274	1.366	0.694	1.135	1.581

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:31	67.664%	954.700	228.500	230.400	2040.000	2023.000	73.323%	72.426%
2	00:08:14	68.319%	956.000	230.100	228.900	2023.000	2023.000	75.077%	73.781%
3	00:08:57	67.324%	976.500	233.200	233.300	2072.000	2062.000	73.733%	72.802%
x		67.769%	962.400	230.600	230.900	2045.000	2036.000	74.044%	73.003%
σ		0.506%	12.190	2.429	2.224	25.310	22.160	0.918%	0.699%
%RSD		0.746	1.267	1.054	0.963	1.237	1.089	1.239	0.958

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:31	46.800	47.640	140.900	140.100	140.800	60.685%
2	00:08:14	47.740	47.720	142.000	143.000	142.400	61.401%
3	00:08:57	47.280	48.230	142.300	143.000	143.000	61.982%
x		47.270	47.860	141.700	142.000	142.100	61.356%
σ		0.469	0.318	0.730	1.654	1.141	0.650%
%RSD		0.993	0.663	0.515	1.165	0.803	1.059

240-22660-C-6-A PDS 5/1/2013 12:15:00 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:43	69.621%	48.830	960.300	947.200	0.000	49580.000	63710.000	63520.000
2	00:16:26	69.729%	48.320	949.400	937.900	0.000	48880.000	63070.000	62940.000
3	00:17:09	70.370%	47.640	948.400	926.200	0.000	48360.000	62490.000	62650.000
x		69.907%	48.260	952.700	937.100	0.000	48940.000	63090.000	63040.000
σ		0.405%	0.598	6.601	10.510	0.000	613.100	611.300	443.200
%RSD		0.579	1.239	0.693	1.122	0.000	1.253	0.969	0.703
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:43	71000.000	20620.000	0.000	52750.000	49610.000	46630.000	69.670%	1961.000
2	00:16:26	70610.000	20480.000	0.000	53170.000	49940.000	46760.000	69.284%	2010.000
3	00:17:09	70120.000	20390.000	0.000	52950.000	49500.000	46710.000	69.964%	1959.000
x		70580.000	20490.000	0.000	52960.000	49680.000	46700.000	69.639%	1977.000
σ		441.000	115.100	0.000	207.200	225.800	61.340	0.341%	28.830
%RSD		0.625	0.562	0.000	0.391	0.454	0.131	0.490	1.459
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:43	612.600	289.800	2668.000	172300.000	171700.000	570.300	630.300	417.700
2	00:16:26	617.400	292.100	2712.000	173700.000	174600.000	571.600	631.300	415.600
3	00:17:09	612.600	290.100	2695.000	173800.000	173300.000	568.900	624.500	416.900
x		614.200	290.700	2691.000	173300.000	173200.000	570.300	628.700	416.700
σ		2.771	1.252	22.290	834.200	1451.000	1.325	3.701	1.016
%RSD		0.451	0.431	0.828	0.481	0.838	0.232	0.589	0.244
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:43	419.800	884.700	906.000	125.700	10.080	11.210	0.000	1187.000
2	00:16:26	419.600	898.200	908.600	127.300	10.170	12.260	0.000	1202.000
3	00:17:09	423.600	891.500	905.800	125.600	10.020	11.840	0.000	1202.000
x		421.000	891.500	906.800	126.200	10.090	11.770	0.000	1197.000
σ		2.272	6.775	1.548	0.969	0.075	0.530	0.000	9.069
%RSD		0.540	0.760	0.171	0.768	0.746	4.503	0.000	0.758
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:43	0.000	1196.000	1202.000	55.828%	52.850	52.450	49.030	40.260
2	00:16:26	0.000	1219.000	1226.000	56.068%	52.510	52.640	48.480	40.940
3	00:17:09	0.000	1225.000	1219.000	56.033%	52.480	52.320	48.370	38.320
x		0.000	1213.000	1215.000	55.976%	52.610	52.470	48.620	39.840
σ		0.000	15.120	12.330	0.130%	0.204	0.160	0.352	1.363
%RSD		0.000	1.246	1.015	0.232	0.388	0.305	0.725	3.420
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:43	65.872%	2046.000	458.100	454.700	2246.000	2224.000	70.054%	69.630%
2	00:16:26	66.927%	2048.000	462.400	462.800	2217.000	2219.000	71.949%	70.631%
3	00:17:09	66.707%	2153.000	463.800	463.000	2242.000	2219.000	72.341%	71.686%
x		66.502%	2082.000	461.400	460.200	2235.000	2221.000	71.448%	70.649%
σ		0.557%	61.250	2.931	4.746	15.530	3.106	1.223%	1.028%
%RSD		0.837	2.942	0.635	1.031	0.695	0.140	1.712	1.455
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:15:43	53.400	53.380	142.700	143.500	142.900	54.516%		
2	00:16:26	53.800	54.040	144.400	145.300	145.100	55.457%		
3	00:17:09	53.650	53.910	146.500	145.100	145.400	56.255%		
x		53.620	53.770	144.500	144.600	144.500	55.409%		
σ		0.201	0.351	1.916	0.976	1.356	0.870%		
%RSD		0.375	0.652	1.325	0.675	0.938	1.571		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:55	72.610%	5.297	26.340	26.700	0.000	503.500	24830.000	24600.000
2	00:24:38	72.759%	5.538	25.460	25.760	0.000	497.900	24410.000	24330.000
3	00:25:21	73.450%	5.019	23.930	24.380	0.000	490.200	23900.000	23730.000
x		72.940%	5.285	25.240	25.610	0.000	497.200	24380.000	24220.000
σ		0.448%	0.260	1.220	1.166	0.000	6.678	468.800	444.400
%RSD		0.614	4.912	4.832	4.553	0.000	1.343	1.923	1.835

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:55	93760.000	12540.000	0.000	7481.000	6583.000	6410.000	76.375%	954.200
2	00:24:38	92960.000	12270.000	0.000	7307.000	6678.000	6309.000	76.705%	940.900
3	00:25:21	91120.000	12060.000	0.000	7262.000	6867.000	6219.000	75.889%	936.300
x		92610.000	12290.000	0.000	7350.000	6709.000	6313.000	76.323%	943.800
σ		1358.000	241.400	0.000	115.500	144.400	95.350	0.411%	9.332
%RSD		1.467	1.963	0.000	1.572	2.153	1.510	0.538	0.989

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:55	168.100	148.700	3486.000	230800.000	229600.000	93.310	211.800	148.700
2	00:24:38	164.600	145.500	3447.000	225500.000	226700.000	92.710	207.900	146.000
3	00:25:21	163.300	142.600	3420.000	224800.000	224100.000	91.440	202.700	143.200
x		165.300	145.600	3451.000	227000.000	226800.000	92.490	207.500	146.000
σ		2.451	3.050	33.180	3286.000	2789.000	0.956	4.539	2.737
%RSD		1.483	2.095	0.962	1.448	1.230	1.033	2.188	1.875

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:55	149.900	426.700	431.700	77.560	1.510	3.126	0.000	51.320
2	00:24:38	145.500	423.500	424.100	75.220	1.745	1.891	0.000	51.720
3	00:25:21	142.600	421.600	422.700	74.330	1.579	2.681	0.000	50.320
x		146.000	423.900	426.200	75.700	1.611	2.566	0.000	51.120
σ		3.705	2.567	4.850	1.665	0.121	0.626	0.000	0.723
%RSD		2.538	0.606	1.138	2.200	7.516	24.380	0.000	1.415

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:55	0.000	8.607	8.754	66.888%	0.260	0.176	1.217	0.878
2	00:24:38	0.000	8.290	8.381	67.109%	0.276	0.205	1.025	0.818
3	00:25:21	0.000	8.152	7.976	67.662%	0.245	0.241	1.163	0.950
x		0.000	8.350	8.371	67.220%	0.260	0.207	1.135	0.882
σ		0.000	0.234	0.389	0.398%	0.015	0.032	0.099	0.066
%RSD		0.000	2.796	4.651	0.593	5.932	15.630	8.716	7.489

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:55	73.236%	3.165	2.169	2.183	674.100	667.500	78.792%	77.157%
2	00:24:38	73.812%	2.683	1.642	1.707	672.000	668.800	80.072%	78.995%
3	00:25:21	73.915%	2.502	1.439	1.394	665.100	663.000	80.539%	79.392%
x		73.654%	2.784	1.750	1.761	670.400	666.400	79.801%	78.515%
σ		0.366%	0.343	0.377	0.397	4.674	3.027	0.904%	1.192%
%RSD		0.497	12.310	21.540	22.540	0.697	0.454	1.133	1.519

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:55	1.301	1.329	110.900	108.200	109.500	67.574%
2	00:24:38	1.282	1.328	108.300	107.900	108.000	69.804%
3	00:25:21	1.307	1.321	109.400	107.200	108.100	69.640%
x		1.297	1.326	109.600	107.800	108.600	69.006%
σ		0.013	0.005	1.318	0.511	0.834	1.242%
%RSD		0.986	0.344	1.203	0.474	0.768	1.800

CCV 801624 5/1/2013 12:31:24 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	00:32:07	76.768%	99.470	103.500	99.770	0.000	48190.000	48550.000	49020.000
2	00:32:50	75.929%	97.750	100.400	102.500	0.000	48860.000	48930.000	48750.000
3	00:33:34	73.467%	101.400	108.700	105.700	0.000	50790.000	50380.000	50360.000
x		75.388%	99.536%	104.201%	102.650%	0.000	98.559%	98.574%	98.753%
σ		1.716%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.276	1.829	3.997	2.869	0.000	2.741	1.952	1.747
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:32:07	486.600	5136.000	0.000	48350.000	47720.000	45150.000	74.026%	98.390
2	00:32:50	479.200	5096.000	0.000	48070.000	47870.000	44930.000	72.706%	95.960
3	00:33:34	497.100	5228.000	0.000	49610.000	49020.000	46260.000	70.306%	100.300
x		97.528%	103.066%	0.000	97.356%	96.410%	90.900%	72.346%	98.225%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.886%	n/a
%RSD		1.850	1.309	0.000	1.683	1.478	1.569	2.607	2.229
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:32:07	97.250	97.000	458.500	24450.000	23520.000	98.860	101.000	102.500
2	00:32:50	95.330	96.670	460.400	24360.000	23530.000	98.140	98.830	99.130
3	00:33:34	97.930	99.740	476.600	25250.000	24360.000	101.100	102.600	102.700
x		96.839%	97.804%	93.031%	98.743%	95.226%	99.375%	100.811%	101.418%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.393	1.723	2.134	1.981	2.028	1.569	1.876	1.957
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:32:07	101.900	98.620	97.820	101.000	101.200	101.100	0.000	95.700
2	00:32:50	100.400	99.440	97.790	101.800	102.100	100.400	0.000	96.470
3	00:33:34	102.900	99.760	102.700	103.500	104.300	104.500	0.000	98.230
x		101.750%	99.274%	99.450%	102.105%	102.537%	102.008%	0.000	96.799%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.227	0.589	2.866	1.245	1.524	2.150	0.000	1.338
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:32:07	72.304%	101.500	101.600	66.377%	98.890	100.400	98.760	97.400
2	00:32:50	71.756%	102.900	102.900	65.910%	97.880	99.070	97.440	97.780
3	00:33:34	70.594%	105.700	106.300	64.866%	100.500	100.700	99.860	99.870
x		71.551%	103.382%	103.605%	65.718%	99.079%	100.051%	98.687%	98.346%
σ		0.873%	n/a	n/a	0.774%	n/a	n/a	n/a	n/a
%RSD		1.220	2.075	2.336	1.178	1.316	0.864	1.230	1.351
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:32:07	70.952%	97.340	94.940	95.830	98.010	97.220	71.213%	71.347%
2	00:32:50	70.653%	99.090	96.600	96.660	97.560	97.570	71.366%	71.889%
3	00:33:34	70.181%	100.100	97.630	97.680	99.200	98.170	71.046%	70.948%
x		70.595%	98.849%	96.389%	96.723%	98.256%	97.652%	71.208%	71.395%
σ		0.389%	n/a	n/a	n/a	n/a	n/a	0.160%	0.472%
%RSD		0.550	1.420	1.406	0.956	0.864	0.492	0.225	0.661
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:32:07	96.710	96.480	96.670	96.640	96.630	59.389%		
2	00:32:50	96.860	96.610	97.230	96.510	96.570	60.567%		
3	00:33:34	98.920	99.310	99.690	98.210	99.080	60.681%		
x		97.495%	97.469%	97.867%	97.120%	97.425%	60.212%		
σ		n/a	n/a	n/a	n/a	n/a	0.716%		
%RSD		1.264	1.637	1.640	0.970	1.473	1.188		

CCB3 5/1/2013 12:39:39 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:21	89.337%	0.000	2.199	2.210	0.000	11.340	12.150	11.730
2	00:41:05	95.220%	0.019	1.823	1.844	0.000	9.651	11.820	12.560
3	00:41:48	93.662%	0.020	1.600	1.685	0.000	10.690	12.710	13.230
x		92.739%	0.013	1.874	1.913	0.000	10.560	12.220	12.510
σ		3.048%	0.011	0.303	0.269	0.000	0.853	0.446	0.749
%RSD		3.287	85.750	16.160	14.060	0.000	8.075	3.651	5.988

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:21	4.463	16.180	0.000	22.840	10.260	10.820	90.753%	-0.132
2	00:41:05	4.829	11.730	0.000	20.930	8.144	9.060	95.073%	-0.212
3	00:41:48	5.184	19.850	0.000	21.390	6.847	11.270	94.493%	-0.261
x		4.825	15.920	0.000	21.720	8.417	10.380	93.440%	-0.202
σ		0.361	4.066	0.000	0.999	1.722	1.166	2.345%	0.065
%RSD		7.476	25.550	0.000	4.601	20.460	11.230	2.510	32.300

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:21	0.006	0.049	0.742	11.410	11.730	0.034	0.037	0.070
2	00:41:05	0.024	0.070	0.784	11.940	12.220	0.041	0.029	0.048
3	00:41:48	0.015	0.031	0.772	12.330	14.520	0.028	0.054	0.054
x		0.015	0.050	0.766	11.900	12.820	0.034	0.040	0.057
σ		0.009	0.020	0.021	0.459	1.492	0.007	0.013	0.011
%RSD		57.650	40.000	2.792	3.857	11.640	19.270	31.570	19.220

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:21	-0.005	-0.047	0.044	0.037	0.428	0.078	0.000	0.086
2	00:41:05	0.002	-0.018	0.093	0.039	0.336	0.018	0.000	0.082
3	00:41:48	0.023	-0.050	-0.130	0.043	0.284	0.186	0.000	0.087
x		0.007	-0.038	0.002	0.040	0.349	0.094	0.000	0.085
σ		0.015	0.018	0.117	0.003	0.073	0.085	0.000	0.003
%RSD		218.800	46.620	4800.000	7.671	21.010	90.940	0.000	3.163

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:21	90.768%	0.268	0.337	91.840%	0.007	-0.005	0.123	0.097
2	00:41:05	94.360%	0.285	0.313	95.473%	0.013	0.003	0.049	0.035
3	00:41:48	94.596%	0.322	0.319	95.008%	0.006	-0.006	0.125	0.097
x		93.242%	0.292	0.323	94.107%	0.008	-0.003	0.099	0.076
σ		2.145%	0.028	0.012	1.977%	0.004	0.005	0.044	0.036
%RSD		2.301	9.502	3.842	2.101	45.150	166.700	44.010	47.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:21	82.715%	0.373	0.161	0.172	0.089	0.122	81.746%	81.667%
2	00:41:05	87.481%	0.305	0.136	0.151	0.149	0.099	85.822%	86.279%
3	00:41:48	86.372%	0.376	0.182	0.189	0.074	0.064	85.886%	85.611%
x		85.522%	0.351	0.159	0.171	0.104	0.095	84.485%	84.519%
σ		2.494%	0.040	0.023	0.019	0.040	0.029	2.372%	2.493%
%RSD		2.916	11.290	14.510	11.030	38.140	30.790	2.808	2.949

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:21	0.010	0.015	0.048	0.037	0.046	82.452%
2	00:41:05	0.011	0.012	0.048	0.053	0.050	87.543%
3	00:41:48	0.008	0.017	0.041	0.061	0.046	87.901%
x		0.010	0.015	0.046	0.050	0.047	85.965%
σ		0.001	0.002	0.004	0.012	0.002	3.048%
%RSD		15.000	16.830	8.109	24.750	5.177	3.546

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:35	71.082%	5.817	26.240	27.070	0.000	497.900	31830.000	31500.000
2	00:49:18	72.407%	5.715	26.770	26.050	0.000	464.900	30020.000	30020.000
3	00:50:02	71.783%	5.697	25.950	26.820	0.000	478.900	30800.000	30820.000
x		71.757%	5.743	26.320	26.650	0.000	480.600	30880.000	30780.000
σ		0.663%	0.065	0.417	0.531	0.000	16.570	905.900	743.000
%RSD		0.924	1.129	1.586	1.991	0.000	3.447	2.933	2.414
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:35	104800.000	11790.000	0.000	10090.000	13430.000	12720.000	73.924%	1157.000
2	00:49:18	100100.000	11110.000	0.000	9771.000	13240.000	12270.000	76.006%	1090.000
3	00:50:02	103000.000	11370.000	0.000	9988.000	13340.000	12600.000	74.930%	1132.000
x		102600.000	11420.000	0.000	9949.000	13340.000	12530.000	74.953%	1126.000
σ		2358.000	346.100	0.000	162.700	93.310	231.100	1.041%	34.280
%RSD		2.299	3.030	0.000	1.635	0.700	1.844	1.389	3.043
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:35	171.700	164.900	3754.000	247900.000	247200.000	115.000	268.600	171.300
2	00:49:18	163.200	158.500	3579.000	236500.000	235000.000	108.900	250.100	160.600
3	00:50:02	166.600	161.100	3728.000	244500.000	245000.000	113.200	259.800	167.300
x		167.200	161.500	3687.000	242900.000	242400.000	112.400	259.500	166.400
σ		4.303	3.207	94.560	5835.000	6514.000	3.088	9.225	5.400
%RSD		2.574	1.986	2.565	2.402	2.687	2.748	3.555	3.246
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:35	172.400	456.100	453.100	85.910	1.823	2.994	0.000	86.370
2	00:49:18	159.500	434.000	434.100	81.650	1.511	3.853	0.000	82.230
3	00:50:02	167.100	445.600	448.700	84.580	1.613	3.052	0.000	85.050
x		166.300	445.200	445.300	84.050	1.649	3.300	0.000	84.550
σ		6.459	11.070	9.923	2.181	0.159	0.480	0.000	2.117
%RSD		3.884	2.486	2.228	2.595	9.657	14.540	0.000	2.503
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:35	0.000	8.231	8.420	63.368%	0.379	0.313	1.587	1.240
2	00:49:18	0.000	7.752	7.790	65.293%	0.408	0.269	1.557	1.141
3	00:50:02	0.000	7.972	7.837	64.534%	0.396	0.317	1.524	1.091
x		0.000	7.985	8.016	64.398%	0.395	0.299	1.556	1.158
σ		0.000	0.240	0.351	0.970%	0.015	0.026	0.032	0.076
%RSD		0.000	3.006	4.377	1.506	3.756	8.764	2.051	6.559
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:35	69.053%	3.097	1.456	1.511	765.700	765.400	76.112%	74.360%
2	00:49:18	72.305%	2.847	1.419	1.429	724.700	722.300	79.196%	77.588%
3	00:50:02	71.048%	2.867	1.493	1.474	761.800	753.500	79.262%	77.738%
x		70.802%	2.937	1.456	1.471	750.700	747.100	78.190%	76.562%
σ		1.640%	0.139	0.037	0.041	22.620	22.280	1.800%	1.908%
%RSD		2.316	4.735	2.543	2.774	3.013	2.983	2.302	2.492
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:48:35	1.470	1.496	127.500	125.600	127.400	57.482%		
2	00:49:18	1.371	1.407	122.600	120.300	122.000	61.032%		
3	00:50:02	1.531	1.469	127.100	124.500	126.200	61.808%		
x		1.457	1.457	125.700	123.400	125.200	60.107%		
σ		0.081	0.045	2.687	2.793	2.840	2.307%		
%RSD		5.531	3.121	2.138	2.263	2.269	3.837		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:48	74.064%	4.883	21.510	23.410	0.000	443.600	26910.000	26990.000
2	00:57:31	72.444%	4.734	24.070	23.780	0.000	434.700	26960.000	26840.000
3	00:58:14	73.554%	4.910	20.960	22.110	0.000	417.500	25770.000	25970.000
x		73.354%	4.842	22.180	23.100	0.000	431.900	26550.000	26600.000
σ		0.828%	0.095	1.658	0.875	0.000	13.240	674.800	549.700
%RSD		1.129	1.960	7.474	3.786	0.000	3.066	2.542	2.066

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:48	89550.000	11340.000	0.000	8171.000	9320.000	8541.000	76.589%	1010.000
2	00:57:31	88720.000	11160.000	0.000	7977.000	8962.000	8506.000	74.073%	1014.000
3	00:58:14	84990.000	10700.000	0.000	7823.000	8980.000	8352.000	72.209%	984.600
x		87750.000	11070.000	0.000	7990.000	9087.000	8466.000	74.290%	1003.000
σ		2431.000	330.800	0.000	174.700	201.700	100.600	2.198%	15.910
%RSD		2.771	2.989	0.000	2.187	2.219	1.189	2.959	1.587

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:48	156.500	127.200	3147.000	225600.000	223800.000	100.800	223.500	185.500
2	00:57:31	155.400	127.500	3176.000	224800.000	223400.000	98.740	218.300	183.800
3	00:58:14	149.200	123.800	3108.000	222400.000	223500.000	98.180	216.600	177.500
x		153.700	126.200	3144.000	224300.000	223600.000	99.230	219.500	182.300
σ		3.910	2.032	34.010	1667.000	210.500	1.371	3.602	4.215
%RSD		2.544	1.611	1.082	0.743	0.094	1.381	1.641	2.313

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:48	185.000	451.700	452.100	109.000	1.569	3.799	0.000	58.240
2	00:57:31	184.900	453.600	453.000	107.100	1.950	2.606	0.000	58.360
3	00:58:14	178.700	443.000	445.600	104.800	1.659	2.604	0.000	57.630
x		182.900	449.400	450.200	106.900	1.726	3.003	0.000	58.080
σ		3.652	5.680	4.063	2.077	0.199	0.689	0.000	0.390
%RSD		1.997	1.264	0.902	1.942	11.540	22.950	0.000	0.671

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:48	0.000	7.596	8.088	68.363%	0.236	0.160	1.390	1.063
2	00:57:31	0.000	8.143	8.031	65.794%	0.234	0.170	1.363	1.065
3	00:58:14	0.000	8.028	8.143	65.039%	0.238	0.153	1.098	0.877
x		0.000	7.922	8.088	66.399%	0.236	0.161	1.284	1.001
σ		0.000	0.288	0.056	1.743%	0.002	0.008	0.161	0.108
%RSD		0.000	3.635	0.693	2.624	1.009	5.243	12.570	10.790

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:48	73.677%	1.330	17.450	17.700	604.800	602.100	79.063%	77.805%
2	00:57:31	71.678%	1.200	17.930	17.870	608.500	607.600	77.121%	75.714%
3	00:58:14	70.301%	1.259	17.400	17.410	587.700	593.800	74.836%	74.208%
x		71.885%	1.263	17.590	17.660	600.300	601.200	77.007%	75.909%
σ		1.697%	0.065	0.294	0.234	11.140	6.933	2.116%	1.807%
%RSD		2.361	5.140	1.671	1.324	1.856	1.153	2.747	2.380

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:48	1.236	1.300	141.000	139.400	140.200	67.145%
2	00:57:31	1.309	1.282	141.200	140.700	141.000	63.160%
3	00:58:14	1.287	1.265	138.400	136.600	137.500	59.371%
x		1.277	1.282	140.200	138.900	139.600	63.225%
σ		0.037	0.018	1.554	2.096	1.809	3.887%
%RSD		2.933	1.366	1.108	1.510	1.296	6.149

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:02	75.900%	4.801	15.680	16.390	0.000	391.500	19710.000	19690.000
2	01:05:45	75.216%	4.634	17.330	16.350	0.000	391.500	19720.000	19640.000
3	01:06:28	76.067%	4.564	16.960	15.860	0.000	386.100	19390.000	19300.000
x		75.728%	4.666	16.660	16.200	0.000	389.700	19610.000	19550.000
σ		0.451%	0.122	0.864	0.294	0.000	3.138	186.500	213.300
%RSD		0.595	2.608	5.188	1.818	0.000	0.805	0.951	1.091

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:02	84320.000	12560.000	0.000	7077.000	12820.000	11790.000	77.781%	1178.000
2	01:05:45	84030.000	12470.000	0.000	7071.000	12700.000	11970.000	76.981%	1183.000
3	01:06:28	82370.000	12230.000	0.000	6997.000	12330.000	11800.000	76.371%	1168.000
x		83570.000	12420.000	0.000	7048.000	12620.000	11860.000	77.044%	1176.000
σ		1052.000	171.000	0.000	44.530	257.900	102.500	0.707%	7.626
%RSD		1.259	1.377	0.000	0.632	2.043	0.865	0.917	0.648

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:02	150.600	144.100	3076.000	166500.000	166400.000	92.130	178.000	118.300
2	01:05:45	152.900	146.000	3120.000	168000.000	167400.000	91.560	179.400	118.800
3	01:06:28	147.400	144.000	3064.000	165700.000	164200.000	90.710	172.900	115.400
x		150.300	144.700	3087.000	166800.000	166000.000	91.470	176.800	117.500
σ		2.783	1.136	29.660	1166.000	1651.000	0.712	3.450	1.803
%RSD		1.851	0.785	0.961	0.699	0.995	0.779	1.952	1.534

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:02	117.700	344.500	351.700	45.700	2.385	3.232	0.000	62.390
2	01:05:45	119.600	350.200	346.300	46.390	2.197	4.071	0.000	62.660
3	01:06:28	116.000	346.100	348.200	45.800	2.359	2.666	0.000	63.090
x		117.800	346.900	348.700	45.960	2.314	3.323	0.000	62.710
σ		1.823	2.957	2.730	0.375	0.102	0.707	0.000	0.353
%RSD		1.548	0.852	0.783	0.815	4.412	21.270	0.000	0.563

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:02	0.000	6.340	6.508	69.362%	0.205	0.162	1.333	1.027
2	01:05:45	0.000	6.523	6.736	69.055%	0.212	0.162	1.294	1.087
3	01:06:28	0.000	6.409	6.683	68.609%	0.225	0.190	1.233	0.963
x		0.000	6.424	6.642	69.009%	0.214	0.171	1.287	1.026
σ		0.000	0.092	0.120	0.379%	0.010	0.016	0.050	0.062
%RSD		0.000	1.437	1.799	0.549	4.847	9.491	3.904	6.060

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:02	74.689%	1.123	0.277	0.300	511.000	512.100	78.172%	77.182%
2	01:05:45	74.080%	1.137	0.323	0.327	518.400	516.500	78.215%	77.107%
3	01:06:28	74.966%	1.137	0.310	0.313	516.400	510.700	78.997%	77.851%
x		74.578%	1.132	0.303	0.313	515.300	513.100	78.462%	77.380%
σ		0.453%	0.008	0.024	0.013	3.815	2.995	0.465%	0.410%
%RSD		0.608	0.699	7.869	4.255	0.740	0.584	0.592	0.529

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:02	1.225	1.207	124.100	122.000	122.700	67.955%
2	01:05:45	1.219	1.178	127.000	124.400	125.300	68.034%
3	01:06:28	1.198	1.185	125.500	124.600	124.600	68.304%
x		1.214	1.190	125.500	123.700	124.200	68.098%
σ		0.014	0.015	1.420	1.400	1.330	0.183%
%RSD		1.181	1.276	1.131	1.132	1.071	0.268

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:15	76.398%	4.692	16.560	15.630	0.000	319.800	20030.000	20170.000
2	01:13:58	73.572%	4.844	16.700	15.420	0.000	325.800	20410.000	20300.000
3	01:14:41	72.376%	5.018	15.400	15.850	0.000	321.400	20110.000	20180.000
x		74.115%	4.851	16.220	15.630	0.000	322.300	20180.000	20210.000
σ		2.065%	0.163	0.714	0.210	0.000	3.156	200.100	72.100
%RSD		2.787	3.368	4.400	1.345	0.000	0.979	0.992	0.357

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:15	83680.000	11260.000	0.000	7528.000	7679.000	7131.000	75.372%	1103.000
2	01:13:58	83540.000	11080.000	0.000	7540.000	7361.000	7089.000	73.134%	1090.000
3	01:14:41	82720.000	11040.000	0.000	7519.000	7444.000	7046.000	72.446%	1089.000
x		83310.000	11130.000	0.000	7529.000	7495.000	7089.000	73.651%	1094.000
σ		521.200	116.100	0.000	10.420	164.800	42.240	1.530%	7.950
%RSD		0.626	1.043	0.000	0.138	2.200	0.596	2.077	0.727

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:15	148.600	152.000	2336.000	189800.000	188900.000	91.510	195.500	131.000
2	01:13:58	147.100	150.500	2323.000	188400.000	188800.000	89.870	189.200	129.000
3	01:14:41	147.700	150.400	2351.000	189000.000	189100.000	90.430	190.200	128.900
x		147.800	150.900	2337.000	189100.000	188900.000	90.600	191.600	129.600
σ		0.791	0.891	14.250	683.700	151.100	0.831	3.374	1.220
%RSD		0.535	0.590	0.610	0.362	0.080	0.918	1.761	0.941

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:15	132.900	366.600	366.500	53.850	2.260	3.162	0.000	67.250
2	01:13:58	130.800	365.600	367.000	52.940	1.792	3.137	0.000	67.470
3	01:14:41	129.600	368.200	368.200	52.410	2.446	3.368	0.000	67.800
x		131.100	366.800	367.300	53.070	2.166	3.222	0.000	67.510
σ		1.639	1.302	0.896	0.726	0.337	0.127	0.000	0.280
%RSD		1.250	0.355	0.244	1.367	15.560	3.947	0.000	0.414

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:15	0.000	6.973	7.088	66.048%	0.218	0.141	1.368	1.021
2	01:13:58	0.000	7.058	6.795	65.301%	0.230	0.130	1.252	1.019
3	01:14:41	0.000	7.396	7.026	63.543%	0.252	0.124	1.073	0.926
x		0.000	7.142	6.970	64.964%	0.233	0.132	1.231	0.989
σ		0.000	0.224	0.155	1.286%	0.017	0.009	0.149	0.054
%RSD		0.000	3.130	2.221	1.980	7.467	6.701	12.070	5.480

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:15	71.151%	1.153	0.296	0.276	527.000	526.100	74.178%	72.072%
2	01:13:58	70.343%	1.315	0.255	0.303	525.200	526.200	73.757%	72.537%
3	01:14:41	69.744%	1.217	0.287	0.263	523.600	521.400	73.320%	72.062%
x		70.413%	1.228	0.280	0.281	525.300	524.500	73.751%	72.224%
σ		0.706%	0.081	0.021	0.020	1.660	2.735	0.429%	0.271%
%RSD		1.003	6.612	7.633	7.225	0.316	0.521	0.582	0.376

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:15	1.122	1.184	133.200	132.200	133.300	59.221%
2	01:13:58	1.184	1.223	135.600	131.800	133.500	58.948%
3	01:14:41	1.187	1.194	135.200	132.800	134.300	58.209%
x		1.164	1.200	134.700	132.300	133.700	58.793%
σ		0.037	0.020	1.294	0.499	0.485	0.524%
%RSD		3.161	1.655	0.961	0.378	0.363	0.891

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:26	74.436%	5.039	17.280	17.250	0.000	514.900	25310.000	25180.000
2	01:22:09	75.418%	5.498	16.160	17.090	0.000	497.700	24790.000	24610.000
3	01:22:51	71.806%	5.482	17.310	17.410	0.000	518.400	25170.000	25310.000
x		73.887%	5.340	16.920	17.250	0.000	510.300	25090.000	25040.000
σ		1.868%	0.261	0.654	0.159	0.000	11.040	272.800	371.400
%RSD		2.528	4.884	3.868	0.922	0.000	2.164	1.087	1.483

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:26	88840.000	10470.000	0.000	7522.000	17120.000	16220.000	78.417%	982.900
2	01:22:09	86500.000	10150.000	0.000	7463.000	17070.000	16210.000	76.873%	981.300
3	01:22:51	88550.000	10380.000	0.000	7588.000	17460.000	16440.000	73.619%	986.100
x		87960.000	10330.000	0.000	7524.000	17220.000	16290.000	76.303%	983.500
σ		1273.000	165.800	0.000	62.660	209.500	127.300	2.449%	2.462
%RSD		1.448	1.605	0.000	0.833	1.217	0.781	3.210	0.250

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:26	154.300	151.000	3724.000	229400.000	228600.000	104.700	221.200	157.900
2	01:22:09	151.100	147.900	3691.000	227400.000	226800.000	103.900	217.700	154.400
3	01:22:51	155.700	151.700	3784.000	233300.000	232200.000	107.700	218.800	153.800
x		153.700	150.200	3733.000	230000.000	229200.000	105.400	219.300	155.400
σ		2.345	2.054	47.080	3027.000	2720.000	2.025	1.797	2.226
%RSD		1.525	1.367	1.261	1.316	1.187	1.920	0.820	1.433

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:26	158.400	437.700	445.700	75.170	1.603	3.075	0.000	77.090
2	01:22:09	154.000	438.600	446.400	73.890	2.003	2.793	0.000	76.300
3	01:22:51	156.700	445.100	451.400	74.530	1.784	2.821	0.000	78.130
x		156.400	440.500	447.800	74.530	1.797	2.896	0.000	77.170
σ		2.215	4.024	3.132	0.637	0.201	0.155	0.000	0.919
%RSD		1.416	0.913	0.699	0.854	11.160	5.356	0.000	1.191

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:26	0.000	8.744	9.140	68.264%	0.243	0.152	1.494	1.183
2	01:22:09	0.000	8.854	8.461	67.080%	0.264	0.131	1.446	1.045
3	01:22:51	0.000	9.263	8.546	65.252%	0.224	0.137	1.552	1.249
x		0.000	8.954	8.716	66.865%	0.244	0.140	1.497	1.159
σ		0.000	0.273	0.370	1.517%	0.020	0.011	0.053	0.104
%RSD		0.000	3.051	4.243	2.269	8.194	7.848	3.565	8.971

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:26	74.781%	1.025	0.307	0.254	638.500	639.900	79.814%	79.200%
2	01:22:09	74.446%	1.065	0.286	0.351	627.700	627.600	80.528%	79.587%
3	01:22:51	71.603%	0.989	0.347	0.313	643.000	638.400	79.042%	77.593%
x		73.610%	1.027	0.313	0.306	636.400	635.300	79.795%	78.793%
σ		1.746%	0.038	0.031	0.049	7.867	6.741	0.744%	1.058%
%RSD		2.372	3.715	9.824	16.060	1.236	1.061	0.932	1.342

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:26	1.195	1.229	117.400	115.500	116.500	69.637%
2	01:22:09	1.136	1.211	114.200	112.400	113.500	69.958%
3	01:22:51	1.237	1.260	121.000	118.400	119.400	67.191%
x		1.189	1.233	117.500	115.400	116.500	68.929%
σ		0.050	0.025	3.401	3.008	2.968	1.514%
%RSD		4.245	2.015	2.893	2.605	2.549	2.196

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:36	74.768%	5.509	17.820	17.890	0.000	469.200	25830.000	25630.000
2	01:30:19	73.015%	5.782	17.410	18.230	0.000	469.300	25280.000	25360.000
3	01:31:02	71.715%	5.760	17.930	17.450	0.000	469.600	25440.000	25470.000
x		73.166%	5.683	17.720	17.860	0.000	469.400	25520.000	25490.000
σ		1.532%	0.152	0.277	0.391	0.000	0.208	284.100	133.200
%RSD		2.094	2.672	1.562	2.189	0.000	0.044	1.113	0.523

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:36	86500.000	11560.000	0.000	7512.000	18620.000	17750.000	76.899%	1011.000
2	01:30:19	84760.000	11320.000	0.000	7428.000	18370.000	17610.000	74.803%	1013.000
3	01:31:02	85250.000	11340.000	0.000	7512.000	18770.000	17590.000	72.584%	1013.000
x		85500.000	11410.000	0.000	7484.000	18590.000	17650.000	74.762%	1012.000
σ		898.700	132.600	0.000	48.650	202.200	85.370	2.158%	0.839
%RSD		1.051	1.163	0.000	0.650	1.088	0.484	2.886	0.083

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:36	156.700	152.500	4483.000	228000.000	226700.000	134.800	235.300	156.900
2	01:30:19	157.400	152.600	4533.000	228400.000	227100.000	133.800	232.100	155.400
3	01:31:02	157.300	151.900	4546.000	230100.000	229800.000	136.500	231.600	155.400
x		157.100	152.300	4521.000	228900.000	227900.000	135.000	233.000	155.900
σ		0.367	0.340	33.500	1117.000	1720.000	1.382	1.990	0.821
%RSD		0.234	0.223	0.741	0.488	0.755	1.023	0.854	0.526

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:36	157.000	452.300	461.300	75.630	1.694	2.725	0.000	84.990
2	01:30:19	155.500	456.600	462.600	75.070	1.639	3.218	0.000	86.860
3	01:31:02	154.800	458.100	471.400	75.830	1.711	2.915	0.000	87.210
x		155.800	455.700	465.100	75.510	1.681	2.953	0.000	86.350
σ		1.123	3.051	5.504	0.393	0.037	0.249	0.000	1.191
%RSD		0.721	0.670	1.183	0.520	2.223	8.429	0.000	1.380

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:36	0.000	8.390	8.507	67.113%	0.223	0.128	1.749	1.342
2	01:30:19	0.000	8.842	8.938	65.402%	0.234	0.111	1.647	1.265
3	01:31:02	0.000	8.994	8.638	64.755%	0.235	0.148	1.727	1.341
x		0.000	8.742	8.694	65.757%	0.231	0.129	1.708	1.316
σ		0.000	0.314	0.221	1.218%	0.007	0.018	0.054	0.045
%RSD		0.000	3.595	2.542	1.852	2.911	14.340	3.163	3.383

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:36	72.364%	1.109	0.247	0.308	785.000	785.100	77.599%	76.243%
2	01:30:19	71.286%	1.059	0.268	0.292	791.800	791.800	77.486%	76.070%
3	01:31:02	70.985%	1.066	0.278	0.304	795.900	792.700	77.571%	76.557%
x		71.545%	1.078	0.264	0.301	790.900	789.900	77.552%	76.290%
σ		0.725%	0.027	0.016	0.008	5.478	4.163	0.059%	0.247%
%RSD		1.014	2.523	6.051	2.812	0.693	0.527	0.076	0.324

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:36	1.221	1.203	118.600	116.500	117.300	60.750%
2	01:30:19	1.189	1.229	119.100	116.600	117.800	62.820%
3	01:31:02	1.217	1.267	119.600	117.800	119.000	63.819%
x		1.209	1.233	119.100	117.000	118.000	62.463%
σ		0.017	0.032	0.498	0.673	0.863	1.565%
%RSD		1.427	2.616	0.418	0.576	0.731	2.506

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:47	74.444%	5.884	17.130	16.710	0.000	616.800	25560.000	25640.000
2	01:38:30	73.808%	5.810	15.730	17.290	0.000	616.200	25720.000	25750.000
3	01:39:13	71.692%	5.613	17.840	17.910	0.000	629.600	26120.000	26150.000
x		73.315%	5.769	16.900	17.300	0.000	620.900	25800.000	25850.000
σ		1.441%	0.140	1.070	0.599	0.000	7.554	287.300	269.500
%RSD		1.965	2.421	6.330	3.459	0.000	1.217	1.113	1.043

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:47	92200.000	12090.000	0.000	7780.000	7711.000	7439.000	77.768%	1101.000
2	01:38:30	93130.000	12030.000	0.000	7890.000	7883.000	7530.000	74.825%	1106.000
3	01:39:13	93240.000	12170.000	0.000	8013.000	8125.000	7586.000	72.165%	1103.000
x		92860.000	12100.000	0.000	7895.000	7906.000	7518.000	74.920%	1103.000
σ		574.900	71.580	0.000	116.600	207.900	74.290	2.803%	2.493
%RSD		0.619	0.592	0.000	1.477	2.629	0.988	3.741	0.226

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:47	156.200	156.900	2911.000	198800.000	198000.000	148.300	229.200	160.200
2	01:38:30	159.900	158.400	2961.000	200300.000	200100.000	147.100	229.100	160.700
3	01:39:13	159.100	159.900	2987.000	203100.000	202300.000	149.300	233.100	160.700
x		158.400	158.400	2953.000	200800.000	200100.000	148.200	230.500	160.600
σ		1.919	1.502	38.790	2184.000	2159.000	1.091	2.304	0.263
%RSD		1.211	0.948	1.314	1.088	1.079	0.736	1.000	0.164

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:47	161.100	433.500	436.900	68.390	1.924	3.001	0.000	57.970
2	01:38:30	161.200	438.000	442.100	68.330	1.689	3.084	0.000	58.150
3	01:39:13	162.200	437.200	444.900	69.850	1.970	3.032	0.000	59.370
x		161.500	436.200	441.300	68.860	1.861	3.039	0.000	58.490
σ		0.594	2.421	4.062	0.858	0.150	0.042	0.000	0.759
%RSD		0.368	0.555	0.920	1.247	8.085	1.371	0.000	1.298

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:47	0.000	7.244	7.458	67.382%	0.260	0.157	1.512	1.053
2	01:38:30	0.000	7.360	7.512	65.843%	0.241	0.165	1.287	0.987
3	01:39:13	0.000	7.312	7.674	62.967%	0.265	0.163	1.327	1.098
x		0.000	7.306	7.548	65.397%	0.256	0.162	1.376	1.046
σ		0.000	0.058	0.112	2.241%	0.012	0.004	0.120	0.056
%RSD		0.000	0.797	1.487	3.426	4.859	2.713	8.727	5.373

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:47	72.789%	0.892	0.260	0.247	635.600	627.500	79.068%	76.741%
2	01:38:30	71.464%	0.990	0.213	0.242	628.000	631.400	77.305%	75.381%
3	01:39:13	69.136%	0.969	0.284	0.283	642.300	638.400	74.098%	72.303%
x		71.130%	0.950	0.252	0.257	635.300	632.400	76.824%	74.808%
σ		1.850%	0.051	0.036	0.022	7.129	5.553	2.519%	2.274%
%RSD		2.600	5.380	14.300	8.645	1.122	0.878	3.280	3.040

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:47	1.267	1.326	134.400	132.000	132.800	66.432%
2	01:38:30	1.364	1.307	135.600	132.500	134.400	62.037%
3	01:39:13	1.355	1.343	136.500	135.900	136.400	57.345%
x		1.329	1.325	135.500	133.500	134.500	61.938%
σ		0.054	0.018	1.079	2.163	1.775	4.544%
%RSD		4.048	1.378	0.796	1.620	1.319	7.336

MB 180-68991/1-A 5/1/2013 1:45:16 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:45:59	74.738%	-0.004	0.118	-0.340	0.000	10.070	6.090	5.615
2	01:46:42	75.369%	-0.013	-0.146	-0.593	0.000	10.320	5.289	5.964
3	01:47:25	75.673%	-0.013	-0.127	-0.339	0.000	10.110	5.645	6.101
x		75.260%	-0.010	-0.052	-0.423	0.000	10.170	5.675	5.893
σ		0.477%	0.005	0.147	0.146	0.000	0.133	0.401	0.250
%RSD		0.634	50.260	285.800	34.570	0.000	1.304	7.072	4.249

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:45:59	0.333	4.180	0.000	22.780	12.320	19.440	72.901%	1.385
2	01:46:42	2.304	8.610	0.000	22.130	14.220	16.820	72.448%	1.396
3	01:47:25	3.607	20.550	0.000	23.720	15.940	18.000	72.754%	0.830
x		2.081	11.110	0.000	22.880	14.160	18.080	72.701%	1.204
σ		1.648	8.469	0.000	0.799	1.811	1.311	0.231%	0.324
%RSD		79.200	76.200	0.000	3.491	12.790	7.250	0.318	26.920

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:45:59	0.002	0.009	0.019	5.264	4.556	0.000	-0.005	0.141
2	01:46:42	-0.001	-0.005	0.139	8.213	9.053	0.010	0.021	0.101
3	01:47:25	-0.025	0.036	0.142	11.130	9.109	0.006	0.020	0.066
x		-0.008	0.013	0.100	8.204	7.573	0.006	0.012	0.103
σ		0.015	0.021	0.070	2.935	2.612	0.005	0.015	0.037
%RSD		183.400	159.800	69.820	35.780	34.500	88.590	124.500	36.340

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:45:59	0.016	0.375	0.472	0.151	0.329	0.176	0.000	0.042
2	01:46:42	0.059	0.506	0.627	0.282	0.222	0.672	0.000	0.045
3	01:47:25	0.100	0.498	0.425	-0.050	0.321	-0.354	0.000	0.027
x		0.058	0.460	0.508	0.128	0.291	0.165	0.000	0.038
σ		0.042	0.073	0.105	0.167	0.060	0.513	0.000	0.009
%RSD		72.090	15.940	20.740	131.100	20.510	311.700	0.000	24.730

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:45:59	73.652%	0.055	0.086	70.532%	-0.009	-0.010	0.087	0.055
2	01:46:42	73.503%	0.085	0.066	70.269%	0.002	-0.009	0.098	0.059
3	01:47:25	74.145%	0.069	0.076	70.805%	-0.004	-0.011	0.055	0.034
x		73.767%	0.070	0.076	70.535%	-0.004	-0.010	0.080	0.049
σ		0.336%	0.015	0.010	0.268%	0.006	0.001	0.023	0.013
%RSD		0.455	21.550	13.110	0.379	150.000	11.570	28.360	27.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:45:59	74.023%	1.004	0.003	0.000	0.064	0.074	75.037%	75.242%
2	01:46:42	74.029%	0.765	0.014	0.014	0.074	0.092	76.085%	76.474%
3	01:47:25	74.961%	0.900	0.017	0.004	0.062	0.106	76.877%	77.103%
x		74.338%	0.890	0.011	0.006	0.066	0.091	76.000%	76.273%
σ		0.540%	0.120	0.007	0.007	0.007	0.016	0.923%	0.947%
%RSD		0.726	13.460	66.590	113.100	9.829	17.790	1.214	1.241

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:45:59	-0.002	-0.000	-0.005	0.006	0.002	76.153%
2	01:46:42	-0.002	0.002	0.007	0.012	0.005	77.049%
3	01:47:25	-0.000	0.001	0.007	0.013	0.007	78.053%
x		-0.002	0.001	0.003	0.010	0.005	77.085%
σ		0.001	0.001	0.007	0.004	0.003	0.951%
%RSD		72.150	120.800	226.000	37.710	60.840	1.233

LCS 180-68991/2-A 5/1/2013 1:53:28 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:54:11	68.416%	44.910	926.300	921.900	0.000	51600.000	50500.000	50220.000
2	01:54:53	69.772%	44.110	907.400	894.400	0.000	48900.000	48270.000	48460.000
3	01:55:36	67.934%	45.060	954.600	938.900	0.000	50870.000	50090.000	50400.000
x		68.707%	44.690	929.400	918.400	0.000	50460.000	49620.000	49700.000
σ		0.953%	0.510	23.750	22.480	0.000	1393.000	1189.000	1071.000
%RSD		1.387	1.142	2.556	2.448	0.000	2.761	2.397	2.154

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:54:11	2063.000	9194.000	0.000	50060.000	50760.000	47450.000	65.336%	1019.000
2	01:54:53	1976.000	8833.000	0.000	47790.000	48790.000	45370.000	66.195%	992.800
3	01:55:36	2062.000	9216.000	0.000	51340.000	51490.000	47730.000	64.669%	1043.000
x		2034.000	9081.000	0.000	49730.000	50350.000	46850.000	65.400%	1018.000
σ		49.700	214.800	0.000	1801.000	1395.000	1289.000	0.765%	24.980
%RSD		2.444	2.366	0.000	3.621	2.770	2.751	1.170	2.454

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:54:11	513.500	203.300	479.800	1018.000	1131.000	516.800	514.800	258.800
2	01:54:53	498.000	196.800	468.100	981.000	1108.000	496.200	495.200	249.700
3	01:55:36	516.500	204.100	481.900	1025.000	1146.000	516.700	527.100	260.500
x		509.300	201.400	476.600	1008.000	1128.000	509.900	512.400	256.300
σ		9.939	4.032	7.430	23.670	18.840	11.840	16.070	5.782
%RSD		1.952	2.002	1.559	2.348	1.670	2.323	3.135	2.256

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:54:11	264.600	434.200	428.400	35.860	8.551	8.675	0.000	1093.000
2	01:54:53	252.700	420.100	418.700	33.840	8.091	9.550	0.000	1051.000
3	01:55:36	260.800	433.500	435.200	33.940	8.741	8.580	0.000	1090.000
x		259.400	429.300	427.400	34.550	8.461	8.935	0.000	1078.000
σ		6.067	7.968	8.285	1.138	0.334	0.535	0.000	23.300
%RSD		2.339	1.856	1.938	3.295	3.949	5.984	0.000	2.161

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:54:11	60.279%	1101.000	1082.000	59.391%	48.720	50.230	45.250	36.570
2	01:54:53	61.536%	1058.000	1055.000	59.882%	47.240	48.100	42.900	37.320
3	01:55:36	61.327%	1089.000	1084.000	59.635%	49.250	49.750	45.740	40.000
x		61.047%	1082.000	1073.000	59.636%	48.400	49.360	44.630	37.960
σ		0.674%	22.300	16.040	0.245%	1.043	1.121	1.517	1.804
%RSD		1.104	2.060	1.495	0.412	2.155	2.271	3.400	4.751

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:54:11	63.359%	2117.000	444.500	441.800	1957.000	1947.000	68.469%	68.372%
2	01:54:53	65.307%	1952.000	426.000	427.900	1875.000	1875.000	70.804%	70.615%
3	01:55:36	64.447%	2034.000	443.500	442.900	1947.000	1954.000	69.969%	70.527%
x		64.371%	2034.000	438.000	437.500	1926.000	1925.000	69.747%	69.838%
σ		0.977%	82.820	10.430	8.326	44.370	43.860	1.183%	1.270%
%RSD		1.517	4.071	2.380	1.903	2.303	2.278	1.696	1.819

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:54:11	49.720	50.290	19.170	21.310	20.390	54.099%
2	01:54:53	48.470	48.670	18.800	20.400	19.670	56.350%
3	01:55:36	50.700	51.140	19.240	21.600	20.490	55.985%
x		49.630	50.030	19.070	21.100	20.180	55.478%
σ		1.121	1.251	0.234	0.623	0.447	1.208%
%RSD		2.258	2.500	1.229	2.952	2.212	2.177

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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	02:02:22	70.680%	6.559	29.430	30.390	0.000	450.800	31500.000	31610.000
2	02:03:05	70.760%	6.539	29.220	28.800	0.000	448.800	31030.000	31020.000
3	02:03:48	71.204%	6.333	28.860	28.050	0.000	436.000	30160.000	30190.000
x		70.881%	6.477	29.170	29.080	0.000	445.200	30900.000	30940.000
σ		0.283%	0.125	0.290	1.196	0.000	8.045	683.100	714.000
%RSD		0.399	1.926	0.996	4.111	0.000	1.807	2.211	2.308
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:22	113600.000	19410.000	0.000	9805.000	17100.000	15660.000	73.512%	1581.000
2	02:03:05	111600.000	18940.000	0.000	9808.000	16540.000	15530.000	72.803%	1575.000
3	02:03:48	107600.000	18350.000	0.000	9454.000	15910.000	15140.000	72.513%	1517.000
x		110900.000	18900.000	0.000	9689.000	16510.000	15450.000	72.943%	1558.000
σ		3051.000	534.400	0.000	203.900	593.300	269.900	0.514%	35.280
%RSD		2.751	2.828	0.000	2.105	3.592	1.747	0.705	2.265
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:22	188.500	183.300	3238.000	248800.000	247600.000	131.700	273.800	184.100
2	02:03:05	186.600	180.800	3221.000	245000.000	243900.000	129.000	272.700	181.200
3	02:03:48	182.300	176.900	3149.000	241500.000	239000.000	125.100	260.200	174.200
x		185.800	180.300	3202.000	245100.000	243500.000	128.600	268.900	179.900
σ		3.165	3.225	47.330	3641.000	4321.000	3.312	7.522	5.094
%RSD		1.703	1.789	1.478	1.486	1.774	2.575	2.797	2.832
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:22	184.800	494.800	495.600	86.170	2.366	4.724	0.000	86.100
2	02:03:05	183.500	492.200	491.800	83.840	2.471	4.691	0.000	85.000
3	02:03:48	174.300	477.100	480.400	80.040	2.315	4.012	0.000	82.620
x		180.900	488.000	489.300	83.350	2.384	4.475	0.000	84.570
σ		5.725	9.537	7.881	3.096	0.080	0.402	0.000	1.782
%RSD		3.165	1.954	1.611	3.714	3.347	8.981	0.000	2.107
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:22	0.000	9.336	9.111	63.138%	0.208	0.140	1.372	1.110
2	02:03:05	0.000	9.492	9.600	63.434%	0.230	0.129	1.476	1.079
3	02:03:48	0.000	9.043	9.174	64.129%	0.207	0.151	1.366	1.037
x		0.000	9.291	9.295	63.567%	0.215	0.140	1.405	1.075
σ		0.000	0.228	0.266	0.509%	0.013	0.011	0.062	0.036
%RSD		0.000	2.453	2.862	0.800	5.822	7.639	4.417	3.386
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:22	69.133%	3.217	0.426	0.365	881.600	875.200	75.307%	73.740%
2	02:03:05	70.080%	2.518	0.375	0.397	868.000	866.900	75.981%	75.319%
3	02:03:48	71.090%	2.126	0.404	0.347	827.700	832.400	78.686%	76.681%
x		70.101%	2.620	0.402	0.370	859.100	858.100	76.658%	75.247%
σ		0.979%	0.553	0.026	0.025	28.040	22.720	1.788%	1.472%
%RSD		1.396	21.100	6.357	6.864	3.264	2.647	2.333	1.956
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:02:22	1.558	1.547	145.800	142.600	144.000	62.360%		
2	02:03:05	1.517	1.536	144.900	141.800	143.100	63.422%		
3	02:03:48	1.445	1.439	137.700	134.300	135.500	66.740%		
x		1.506	1.507	142.800	139.600	140.900	64.174%		
σ		0.057	0.059	4.420	4.587	4.675	2.285%		
%RSD		3.792	3.920	3.096	3.287	3.319	3.560		

CCV 801624 5/1/2013 2:09:52 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:35	75.608%	99.370	100.400	99.390	0.000	49350.000	49430.000	49440.000
2	02:11:17	75.557%	99.560	102.800	101.500	0.000	48660.000	48850.000	48590.000
3	02:12:00	73.676%	101.000	102.400	103.700	0.000	49430.000	49010.000	49160.000
x		74.947%	99.990%	101.843%	101.554%	0.000	98.301%	98.187%	98.128%
σ		1.101%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.469	0.912	1.264	2.138	0.000	0.862	0.609	0.884

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:35	497.700	5186.000	0.000	49230.000	48070.000	45590.000	73.768%	101.100
2	02:11:17	487.500	5047.000	0.000	48270.000	47990.000	45460.000	72.723%	96.190
3	02:12:00	490.000	5103.000	0.000	49290.000	48800.000	45480.000	70.849%	99.930
x		98.348%	102.239%	0.000	97.858%	96.574%	91.019%	72.447%	99.065%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.479%	n/a
%RSD		1.078	1.362	0.000	1.165	0.928	0.150	2.042	2.576

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:35	97.900	98.240	464.200	24530.000	23840.000	100.600	101.200	102.500
2	02:11:17	97.020	97.860	461.200	24360.000	23570.000	98.680	98.890	100.200
3	02:12:00	96.470	97.360	463.300	24510.000	23650.000	97.660	99.000	100.700
x		97.127%	97.819%	92.578%	97.872%	94.738%	98.964%	99.684%	101.126%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.745	0.453	0.339	0.385	0.585	1.483	1.286	1.220

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:35	102.100	99.770	98.580	102.200	103.200	103.400	0.000	96.380
2	02:11:17	100.400	98.470	98.950	100.400	102.200	99.910	0.000	95.640
3	02:12:00	100.400	98.510	98.190	100.200	102.000	101.600	0.000	95.870
x		100.996%	98.919%	98.572%	100.956%	102.433%	101.610%	0.000	95.967%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.987	0.749	0.387	1.103	0.617	1.699	0.000	0.395

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:35	72.726%	100.900	101.000	67.213%	98.720	99.380	96.090	97.220
2	02:11:17	72.490%	100.700	102.300	66.283%	98.890	99.510	97.320	96.230
3	02:12:00	71.800%	103.900	103.700	65.521%	99.600	100.500	97.510	98.170
x		72.339%	101.813%	102.341%	66.339%	99.070%	99.786%	96.970%	97.207%
σ		0.481%	n/a	n/a	0.847%	n/a	n/a	n/a	n/a
%RSD		0.665	1.782	1.330	1.277	0.469	0.591	0.796	0.999

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:35	72.360%	97.020	93.940	93.750	96.780	96.940	72.855%	72.764%
2	02:11:17	71.458%	98.530	94.950	94.330	97.030	95.910	73.254%	72.898%
3	02:12:00	70.898%	98.620	96.500	96.660	96.110	97.600	73.409%	73.481%
x		71.572%	98.059%	95.128%	94.912%	96.639%	96.817%	73.173%	73.048%
σ		0.738%	n/a	n/a	n/a	n/a	n/a	0.286%	0.381%
%RSD		1.031	0.914	1.355	1.624	0.489	0.881	0.391	0.522

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:35	96.750	96.900	96.790	96.670	96.640	65.102%
2	02:11:17	94.850	96.000	96.540	95.910	95.770	67.062%
3	02:12:00	96.000	96.660	97.350	96.760	96.970	67.138%
x		95.867%	96.520%	96.891%	96.445%	96.463%	66.434%
σ		n/a	n/a	n/a	n/a	n/a	1.154%
%RSD		1.002	0.486	0.431	0.487	0.643	1.738

CCB4 5/1/2013 2:18:06 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:49	99.603%	-0.015	1.310	1.074	0.000	3.919	11.140	11.480
2	02:19:32	103.131%	-0.009	0.626	0.497	0.000	5.487	12.390	12.740
3	02:20:15	105.855%	-0.003	0.812	0.324	0.000	8.111	14.720	14.790
x		102.863%	-0.009	0.916	0.632	0.000	5.839	12.750	13.000
σ		3.134%	0.006	0.354	0.393	0.000	2.118	1.815	1.671
%RSD		3.047	65.130	38.650	62.220	0.000	36.280	14.240	12.850

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:49	4.242	4.092	0.000	17.400	7.485	11.030	99.863%	-0.128
2	02:19:32	5.068	-0.019	0.000	19.690	8.229	13.960	103.991%	-0.172
3	02:20:15	5.394	0.615	0.000	20.730	14.400	10.900	104.581%	-0.158
x		4.902	1.563	0.000	19.270	10.040	11.960	102.812%	-0.153
σ		0.594	2.213	0.000	1.701	3.797	1.731	2.570%	0.022
%RSD		12.120	141.600	0.000	8.824	37.820	14.470	2.500	14.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:49	0.011	0.084	0.716	11.250	12.530	0.019	0.014	0.059
2	02:19:32	0.014	0.060	0.850	11.610	13.980	0.039	0.016	0.024
3	02:20:15	0.048	0.086	0.843	13.140	15.560	0.049	0.053	0.038
x		0.024	0.077	0.803	12.000	14.020	0.036	0.028	0.040
σ		0.020	0.015	0.075	1.001	1.514	0.015	0.022	0.018
%RSD		83.360	19.090	9.371	8.345	10.800	42.600	78.720	44.650

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:49	-0.004	-0.063	0.059	-0.027	0.262	-0.067	0.000	0.072
2	02:19:32	0.051	-0.095	-0.084	-0.106	0.411	-0.151	0.000	0.093
3	02:20:15	0.002	-0.027	-0.149	-0.039	0.121	-0.233	0.000	0.107
x		0.016	-0.062	-0.058	-0.057	0.265	-0.150	0.000	0.091
σ		0.030	0.034	0.107	0.043	0.145	0.083	0.000	0.017
%RSD		187.200	54.660	183.800	75.140	54.720	55.300	0.000	19.260

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:49	86.720%	0.246	0.288	91.333%	0.010	0.000	0.070	0.064
2	02:19:32	90.573%	0.244	0.253	89.953%	0.014	0.010	0.092	0.084
3	02:20:15	91.854%	0.283	0.238	96.106%	0.020	0.018	0.032	0.051
x		89.716%	0.258	0.260	92.464%	0.015	0.009	0.065	0.066
σ		2.672%	0.022	0.026	3.228%	0.005	0.009	0.030	0.017
%RSD		2.979	8.557	9.938	3.491	32.880	93.790	46.970	24.870

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:49	84.289%	0.218	0.076	0.084	0.085	0.073	85.930%	85.462%
2	02:19:32	87.588%	0.218	0.075	0.097	0.067	0.107	88.762%	89.717%
3	02:20:15	88.912%	0.254	0.106	0.092	0.093	0.132	89.877%	90.525%
x		86.930%	0.230	0.086	0.091	0.082	0.104	88.190%	88.568%
σ		2.381%	0.021	0.017	0.007	0.013	0.029	2.035%	2.720%
%RSD		2.739	9.136	20.220	7.261	16.420	28.170	2.307	3.071

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:49	0.021	0.014	0.036	0.033	0.040	89.669%
2	02:19:32	0.019	0.021	0.039	0.049	0.044	93.562%
3	02:20:15	0.022	0.023	0.047	0.077	0.056	94.914%
x		0.021	0.019	0.041	0.053	0.047	92.715%
σ		0.002	0.005	0.005	0.022	0.008	2.723%
%RSD		8.971	23.960	13.460	41.450	16.870	2.937

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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	02:27:04	69.585%	5.609	22.100	20.690	0.000	551.600	23520.000	23510.000
2	02:27:47	68.830%	6.297	22.720	21.600	0.000	556.300	23610.000	23500.000
3	02:28:30	68.944%	5.987	23.390	21.040	0.000	557.500	23710.000	23810.000
x		69.119%	5.964	22.740	21.110	0.000	555.100	23610.000	23600.000
σ		0.407%	0.344	0.647	0.458	0.000	3.139	92.090	176.200
%RSD		0.589	5.775	2.847	2.168	0.000	0.565	0.390	0.747

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:04	103000.000	22790.000	0.000	8555.000	29580.000	27520.000	71.827%	1423.000
2	02:27:47	103500.000	22650.000	0.000	8514.000	29550.000	27500.000	71.111%	1407.000
3	02:28:30	103500.000	22850.000	0.000	8604.000	29490.000	28000.000	70.592%	1433.000
x		103300.000	22770.000	0.000	8558.000	29540.000	27680.000	71.177%	1421.000
σ		318.700	100.800	0.000	44.970	46.740	281.700	0.620%	13.370
%RSD		0.308	0.443	0.000	0.525	0.158	1.018	0.871	0.941

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:04	212.500	183.200	6107.000	242600.000	240600.000	154.400	212.000	139.700
2	02:27:47	208.600	179.400	6094.000	241000.000	240300.000	152.600	206.800	137.700
3	02:28:30	207.000	180.900	6194.000	242900.000	242500.000	153.900	208.800	140.400
x		209.400	181.200	6132.000	242200.000	241100.000	153.600	209.200	139.300
σ		2.859	1.923	54.420	1029.000	1190.000	0.950	2.582	1.362
%RSD		1.366	1.062	0.887	0.425	0.493	0.619	1.234	0.978

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:04	140.800	429.900	438.100	68.830	2.430	4.172	0.000	113.500
2	02:27:47	141.200	434.400	441.800	69.590	3.035	3.908	0.000	113.800
3	02:28:30	140.400	438.700	443.800	69.810	3.056	4.605	0.000	114.700
x		140.800	434.300	441.200	69.410	2.840	4.228	0.000	114.000
σ		0.391	4.411	2.897	0.511	0.356	0.352	0.000	0.630
%RSD		0.278	1.016	0.657	0.736	12.520	8.322	0.000	0.553

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:04	0.000	9.514	9.537	61.810%	0.387	0.298	1.246	1.102
2	02:27:47	0.000	10.200	9.608	61.904%	0.359	0.269	1.308	1.064
3	02:28:30	0.000	10.020	10.050	62.072%	0.361	0.294	1.211	0.943
x		0.000	9.912	9.731	61.928%	0.369	0.287	1.255	1.036
σ		0.000	0.356	0.276	0.133%	0.015	0.015	0.049	0.083
%RSD		0.000	3.591	2.831	0.214	4.171	5.382	3.921	8.022

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:04	68.008%	1.430	0.431	0.469	681.000	678.200	72.489%	70.289%
2	02:27:47	68.095%	1.457	0.413	0.419	687.200	685.600	73.696%	72.771%
3	02:28:30	69.276%	1.379	0.412	0.407	686.900	682.000	75.063%	73.107%
x		68.460%	1.422	0.419	0.432	685.100	681.900	73.749%	72.056%
σ		0.708%	0.040	0.010	0.033	3.491	3.689	1.288%	1.539%
%RSD		1.035	2.796	2.470	7.653	0.510	0.541	1.746	2.136

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:04	1.428	1.487	169.100	165.800	167.400	59.680%
2	02:27:47	1.488	1.520	168.900	164.900	167.300	62.588%
3	02:28:30	1.498	1.530	171.100	167.100	169.000	63.402%
x		1.472	1.513	169.700	165.900	167.900	61.890%
σ		0.038	0.023	1.220	1.090	0.964	1.956%
%RSD		2.566	1.514	0.719	0.657	0.574	3.161

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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	02:35:17	75.146%	1.553	4.321	4.710	0.000	116.800	4691.000	4711.000
2	02:36:00	74.896%	1.458	4.573	4.631	0.000	117.800	4732.000	4736.000
3	02:36:43	73.788%	1.265	4.678	4.065	0.000	120.300	4750.000	4763.000
x		74.610%	1.425	4.524	4.469	0.000	118.300	4724.000	4737.000
σ		0.723%	0.147	0.184	0.352	0.000	1.812	30.200	25.990
%RSD		0.969	10.310	4.057	7.877	0.000	1.532	0.639	0.549

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:17	21200.000	4813.000	0.000	1710.000	6190.000	5664.000	74.289%	292.200
2	02:36:00	21340.000	4850.000	0.000	1665.000	6013.000	5702.000	73.099%	287.000
3	02:36:43	21410.000	4876.000	0.000	1637.000	6134.000	5837.000	71.789%	292.700
x		21320.000	4846.000	0.000	1671.000	6112.000	5734.000	73.059%	290.600
σ		103.200	31.620	0.000	36.980	90.770	90.960	1.251%	3.135
%RSD		0.484	0.652	0.000	2.214	1.485	1.586	1.712	1.079

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:17	41.150	35.870	1194.000	47770.000	47210.000	30.340	41.430	28.440
2	02:36:00	41.710	36.360	1207.000	47800.000	47290.000	30.080	41.560	27.960
3	02:36:43	41.010	36.200	1226.000	48240.000	47680.000	29.960	41.780	27.920
x		41.290	36.140	1209.000	47940.000	47390.000	30.130	41.590	28.110
σ		0.369	0.251	16.260	261.200	250.200	0.189	0.176	0.287
%RSD		0.894	0.695	1.345	0.545	0.528	0.629	0.422	1.020

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:17	29.280	99.330	99.400	14.160	0.618	-0.300	0.000	17.230
2	02:36:00	29.120	99.420	100.300	14.450	0.463	-0.569	0.000	17.160
3	02:36:43	28.310	99.290	98.280	13.730	0.400	-0.393	0.000	17.530
x		28.900	99.350	99.320	14.110	0.494	-0.421	0.000	17.310
σ		0.520	0.068	1.002	0.361	0.112	0.137	0.000	0.197
%RSD		1.799	0.068	1.008	2.559	22.730	32.520	0.000	1.136

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:17	90.237%	1.504	1.757	70.238%	0.081	0.048	0.339	0.232
2	02:36:00	89.844%	1.644	1.675	68.855%	0.065	0.045	0.210	0.172
3	02:36:43	89.384%	1.513	1.750	68.201%	0.066	0.044	0.354	0.278
x		89.822%	1.554	1.727	69.098%	0.071	0.045	0.301	0.227
σ		0.427%	0.078	0.045	1.040%	0.009	0.002	0.079	0.053
%RSD		0.475	5.046	2.621	1.505	12.060	4.391	26.200	23.370

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:17	74.263%	0.304	0.117	0.096	137.700	138.000	74.078%	73.333%
2	02:36:00	73.189%	0.317	0.098	0.100	137.000	137.500	73.883%	72.112%
3	02:36:43	72.597%	0.303	0.098	0.086	140.700	140.500	72.705%	72.202%
x		73.350%	0.308	0.104	0.094	138.500	138.700	73.556%	72.549%
σ		0.844%	0.008	0.011	0.007	1.954	1.599	0.743%	0.680%
%RSD		1.151	2.562	10.740	7.910	1.411	1.153	1.010	0.937

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:17	0.290	0.285	33.870	33.060	33.300	66.537%
2	02:36:00	0.290	0.315	34.270	33.660	33.700	62.104%
3	02:36:43	0.287	0.307	34.220	33.660	33.870	62.095%
x		0.289	0.302	34.120	33.460	33.620	63.578%
σ		0.002	0.016	0.217	0.342	0.292	2.562%
%RSD		0.676	5.227	0.637	1.023	0.868	4.030

240-22660-A-15-A DU 5/1/2013 2:42:48 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:31	73.210%	5.875	23.000	21.630	0.000	555.600	23970.000	24150.000
2	02:44:14	73.086%	6.479	22.360	22.240	0.000	555.800	24070.000	24030.000
3	02:44:57	71.146%	6.025	21.660	22.050	0.000	545.300	23640.000	23630.000
x		72.481%	6.127	22.340	21.970	0.000	552.200	23890.000	23940.000
σ		1.158%	0.314	0.672	0.309	0.000	6.016	220.600	268.000
%RSD		1.597	5.127	3.007	1.407	0.000	1.089	0.923	1.120

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:31	106900.000	23630.000	0.000	9114.000	17460.000	16460.000	75.628%	1454.000
2	02:44:14	107100.000	23450.000	0.000	9087.000	17120.000	16380.000	74.966%	1467.000
3	02:44:57	103700.000	23210.000	0.000	9067.000	17060.000	16320.000	74.033%	1442.000
x		105900.000	23430.000	0.000	9090.000	17210.000	16390.000	74.876%	1454.000
σ		1901.000	210.600	0.000	23.590	214.700	70.340	0.801%	12.780
%RSD		1.795	0.899	0.000	0.260	1.247	0.429	1.070	0.879

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:31	206.000	185.800	6180.000	242300.000	241100.000	158.100	215.000	149.600
2	02:44:14	207.500	184.800	6146.000	241700.000	241200.000	156.400	216.600	146.600
3	02:44:57	204.500	181.800	6158.000	240100.000	239300.000	155.600	212.400	147.100
x		206.000	184.100	6161.000	241400.000	240500.000	156.700	214.600	147.800
σ		1.497	2.064	17.480	1108.000	1030.000	1.265	2.118	1.628
%RSD		0.727	1.121	0.284	0.459	0.428	0.807	0.987	1.101

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:31	150.700	447.500	450.900	70.360	2.868	4.010	0.000	83.060
2	02:44:14	150.900	442.600	449.300	70.520	2.874	3.744	0.000	82.970
3	02:44:57	149.300	443.600	447.500	70.240	2.678	3.757	0.000	82.300
x		150.300	444.600	449.200	70.370	2.807	3.837	0.000	82.780
σ		0.887	2.582	1.672	0.140	0.111	0.150	0.000	0.418
%RSD		0.590	0.581	0.372	0.199	3.963	3.902	0.000	0.505

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:31	0.000	9.675	9.368	64.985%	0.333	0.271	1.239	1.039
2	02:44:14	0.000	9.078	9.565	65.039%	0.315	0.280	1.404	1.208
3	02:44:57	0.000	9.987	9.432	63.893%	0.376	0.268	1.214	1.033
x		0.000	9.580	9.455	64.639%	0.341	0.273	1.286	1.093
σ		0.000	0.462	0.101	0.647%	0.032	0.006	0.103	0.100
%RSD		0.000	4.821	1.063	1.001	9.251	2.226	8.015	9.113

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:31	70.877%	1.374	0.405	0.382	770.200	768.700	74.475%	72.595%
2	02:44:14	70.957%	1.442	0.378	0.420	763.600	759.300	75.806%	74.082%
3	02:44:57	70.548%	1.464	0.388	0.378	756.700	755.100	75.422%	73.526%
x		70.794%	1.427	0.391	0.393	763.500	761.000	75.234%	73.401%
σ		0.217%	0.047	0.014	0.023	6.736	6.990	0.685%	0.752%
%RSD		0.307	3.311	3.480	5.936	0.882	0.918	0.910	1.024

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:31	1.546	1.569	167.400	166.300	166.300	63.185%
2	02:44:14	1.592	1.598	169.700	166.600	167.800	63.739%
3	02:44:57	1.519	1.585	168.100	163.100	165.500	64.694%
x		1.552	1.584	168.400	165.300	166.500	63.873%
σ		0.037	0.014	1.209	1.972	1.143	0.764%
%RSD		2.400	0.911	0.718	1.192	0.686	1.195

240-22660-A-15-B MS 5/1/2013 2:51:01 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:44	65.538%	48.910	843.300	851.100	0.000	47920.000	74550.000	74620.000
2	02:52:27	65.275%	48.870	841.200	832.000	0.000	47200.000	72140.000	72170.000
3	02:53:10	66.288%	47.520	851.900	838.500	0.000	46970.000	72690.000	73340.000
x		65.700%	48.430	845.500	840.500	0.000	47360.000	73130.000	73380.000
σ		0.526%	0.789	5.712	9.724	0.000	496.800	1263.000	1224.000
%RSD		0.800	1.629	0.676	1.157	0.000	1.049	1.727	1.668

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:44	161500.000	41410.000	0.000	55670.000	67700.000	67160.000	69.121%	2418.000
2	02:52:27	156300.000	40260.000	0.000	54420.000	65970.000	65440.000	68.927%	2343.000
3	02:53:10	157600.000	40630.000	0.000	55370.000	67020.000	67140.000	67.700%	2406.000
x		158500.000	40770.000	0.000	55150.000	66900.000	66580.000	68.583%	2389.000
σ		2666.000	585.800	0.000	651.600	871.500	986.800	0.771%	40.420
%RSD		1.682	1.437	0.000	1.181	1.303	1.482	1.124	1.692

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:44	742.700	421.300	7051.000	263000.000	262700.000	627.000	692.400	369.400
2	02:52:27	710.400	405.000	6871.000	255600.000	257300.000	610.400	667.600	362.400
3	02:53:10	723.000	415.900	7009.000	261100.000	261700.000	613.900	669.400	366.800
x		725.400	414.100	6977.000	259900.000	260600.000	617.100	676.400	366.200
σ		16.230	8.297	93.980	3826.000	2904.000	8.778	13.830	3.562
%RSD		2.238	2.004	1.347	1.472	1.114	1.423	2.045	0.973

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:44	376.100	894.800	907.900	101.900	8.988	9.442	0.000	1169.000
2	02:52:27	367.400	883.200	885.100	100.000	8.287	10.430	0.000	1132.000
3	02:53:10	369.300	897.100	905.100	101.500	9.410	9.817	0.000	1178.000
x		370.900	891.700	899.300	101.100	8.895	9.898	0.000	1160.000
σ		4.566	7.462	12.400	0.968	0.568	0.501	0.000	24.550
%RSD		1.231	0.837	1.379	0.957	6.379	5.061	0.000	2.117

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:44	0.000	985.800	985.400	55.866%	43.310	43.990	44.410	41.480
2	02:52:27	0.000	967.300	961.600	56.243%	42.180	42.300	42.200	39.600
3	02:53:10	0.000	987.300	985.100	56.061%	43.530	42.770	43.090	40.850
x		0.000	980.200	977.400	56.056%	43.000	43.020	43.230	40.640
σ		0.000	11.170	13.680	0.188%	0.725	0.872	1.112	0.955
%RSD		0.000	1.140	1.400	0.336	1.686	2.026	2.572	2.350

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:44	62.824%	478.200	157.500	156.900	2684.000	2669.000	66.265%	64.897%
2	02:52:27	63.600%	465.900	154.400	153.800	2588.000	2577.000	68.111%	66.310%
3	02:53:10	63.800%	478.400	159.700	156.400	2637.000	2633.000	68.644%	66.495%
x		63.408%	474.200	157.200	155.700	2636.000	2627.000	67.673%	65.901%
σ		0.516%	7.121	2.627	1.672	48.080	46.310	1.249%	0.874%
%RSD		0.813	1.502	1.671	1.074	1.824	1.763	1.845	1.327

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:44	50.510	50.280	204.900	205.000	204.500	50.665%
2	02:52:27	48.750	48.150	198.500	197.100	198.000	52.200%
3	02:53:10	50.290	50.340	207.100	205.400	205.200	52.109%
x		49.850	49.590	203.500	202.500	202.600	51.658%
σ		0.956	1.246	4.442	4.654	3.981	0.861%
%RSD		1.918	2.512	2.183	2.298	1.965	1.667

240-22660-C-15-A PDS 5/1/2013 2:59:16 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:59	66.616%	51.270	946.500	947.400	0.000	51640.000	72760.000	72190.000
2	03:00:42	66.049%	51.240	967.700	964.300	0.000	51660.000	71800.000	71750.000
3	03:01:25	65.511%	52.730	974.500	976.700	0.000	52060.000	73020.000	72990.000
x		66.059%	51.740	962.900	962.800	0.000	51790.000	72530.000	72310.000
σ		0.553%	0.853	14.620	14.730	0.000	239.100	643.900	629.600
%RSD		0.836	1.649	1.518	1.529	0.000	0.462	0.888	0.871

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:59	102500.000	32100.000	0.000	58550.000	79500.000	80000.000	67.307%	2459.000
2	03:00:42	100800.000	31920.000	0.000	58340.000	79000.000	78820.000	66.325%	2447.000
3	03:01:25	102400.000	32150.000	0.000	58330.000	79820.000	80220.000	66.373%	2480.000
x		101900.000	32060.000	0.000	58410.000	79440.000	79680.000	66.668%	2462.000
σ		939.000	118.800	0.000	123.800	412.900	752.700	0.554%	16.740
%RSD		0.922	0.371	0.000	0.212	0.520	0.945	0.830	0.680

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:59	741.500	387.400	6527.000	239700.000	239300.000	677.000	721.500	391.700
2	03:00:42	732.600	384.700	6571.000	238200.000	238900.000	667.700	717.400	387.800
3	03:01:25	738.100	388.900	6630.000	242200.000	241300.000	681.000	727.600	391.900
x		737.400	387.000	6576.000	240000.000	239800.000	675.200	722.200	390.500
σ		4.513	2.160	51.770	2010.000	1289.000	6.818	5.096	2.333
%RSD		0.612	0.558	0.787	0.837	0.538	1.010	0.706	0.598

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:59	394.300	867.800	871.900	106.600	10.680	13.600	0.000	1317.000
2	03:00:42	385.700	859.800	865.500	104.600	11.010	11.890	0.000	1319.000
3	03:01:25	400.000	876.500	892.500	107.400	11.230	12.500	0.000	1335.000
x		393.300	868.000	876.600	106.200	10.980	12.660	0.000	1324.000
σ		7.164	8.312	14.110	1.454	0.280	0.863	0.000	10.200
%RSD		1.821	0.958	1.610	1.370	2.546	6.812	0.000	0.771

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:59	0.000	1234.000	1233.000	53.711%	52.930	52.320	47.600	39.850
2	03:00:42	0.000	1220.000	1222.000	54.164%	52.250	51.630	47.740	38.200
3	03:01:25	0.000	1255.000	1253.000	53.598%	53.550	52.780	47.920	39.960
x		0.000	1236.000	1236.000	53.824%	52.910	52.240	47.760	39.340
σ		0.000	17.790	16.030	0.299%	0.650	0.576	0.163	0.985
%RSD		0.000	1.439	1.297	0.556	1.229	1.103	0.341	2.504

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:59	64.277%	2028.000	442.200	439.700	2691.000	2668.000	70.844%	69.244%
2	03:00:42	64.920%	2089.000	447.200	446.500	2662.000	2659.000	71.490%	70.572%
3	03:01:25	64.278%	2071.000	454.300	453.600	2719.000	2692.000	70.861%	70.146%
x		64.492%	2063.000	447.900	446.600	2691.000	2673.000	71.065%	69.987%
σ		0.371%	31.550	6.076	6.975	28.420	17.020	0.368%	0.678%
%RSD		0.575	1.530	1.356	1.562	1.056	0.637	0.518	0.968

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:59	54.400	55.270	187.100	185.200	186.300	58.586%
2	03:00:42	54.560	55.440	187.400	185.300	186.700	59.338%
3	03:01:25	54.880	55.000	188.100	187.700	187.800	59.749%
x		54.610	55.240	187.500	186.000	186.900	59.224%
σ		0.245	0.225	0.500	1.407	0.772	0.590%
%RSD		0.449	0.407	0.266	0.756	0.413	0.996

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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	03:08:12	66.518%	6.070	34.020	33.290	0.000	465.700	28150.000	28020.000
2	03:08:55	67.784%	5.990	34.940	32.030	0.000	446.700	27410.000	27420.000
3	03:09:38	66.363%	5.980	32.430	31.740	0.000	460.700	27960.000	27980.000
x		66.888%	6.013	33.800	32.350	0.000	457.700	27840.000	27810.000
σ		0.779%	0.050	1.271	0.823	0.000	9.834	382.900	335.500
%RSD		1.165	0.826	3.760	2.543	0.000	2.149	1.375	1.206

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:12	102600.000	20950.000	0.000	9437.000	6190.000	5732.000	68.423%	1329.000
2	03:08:55	101400.000	20730.000	0.000	9458.000	6291.000	5793.000	68.925%	1343.000
3	03:09:38	103100.000	20750.000	0.000	9561.000	6003.000	5853.000	68.231%	1335.000
x		102300.000	20810.000	0.000	9485.000	6161.000	5792.000	68.526%	1336.000
σ		842.800	123.800	0.000	66.250	146.400	60.700	0.359%	6.969
%RSD		0.823	0.595	0.000	0.699	2.375	1.048	0.523	0.522

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:12	166.800	166.700	2795.000	228300.000	227800.000	118.500	255.300	184.000
2	03:08:55	168.100	167.200	2826.000	228500.000	227800.000	116.600	246.200	179.800
3	03:09:38	167.400	166.800	2829.000	228600.000	227900.000	115.500	242.500	183.000
x		167.400	166.900	2817.000	228500.000	227900.000	116.900	248.000	182.300
σ		0.637	0.256	18.680	176.700	69.860	1.501	6.571	2.204
%RSD		0.380	0.153	0.663	0.077	0.031	1.284	2.650	1.210

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:12	184.200	432.100	439.500	84.200	2.435	4.391	0.000	56.980
2	03:08:55	182.300	432.700	438.600	84.820	2.483	4.002	0.000	58.020
3	03:09:38	185.500	436.800	440.600	83.530	2.508	4.775	0.000	57.740
x		184.000	433.900	439.600	84.180	2.475	4.389	0.000	57.580
σ		1.591	2.554	1.015	0.645	0.037	0.387	0.000	0.536
%RSD		0.865	0.589	0.231	0.766	1.503	8.805	0.000	0.932

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:12	0.000	12.350	12.140	59.192%	0.215	0.115	1.297	0.960
2	03:08:55	0.000	11.760	11.940	59.442%	0.191	0.150	1.222	0.943
3	03:09:38	0.000	11.690	11.870	59.591%	0.187	0.153	1.347	1.020
x		0.000	11.930	11.980	59.408%	0.198	0.139	1.289	0.975
σ		0.000	0.361	0.140	0.201%	0.015	0.021	0.063	0.041
%RSD		0.000	3.023	1.172	0.339	7.564	14.870	4.905	4.163

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:12	65.119%	4.264	2.269	2.262	683.500	671.900	70.041%	68.863%
2	03:08:55	65.757%	3.508	1.772	1.825	688.700	677.200	72.104%	70.906%
3	03:09:38	66.257%	3.104	1.475	1.436	685.000	673.200	73.216%	71.907%
x		65.711%	3.625	1.839	1.841	685.700	674.100	71.787%	70.559%
σ		0.571%	0.589	0.401	0.413	2.698	2.775	1.611%	1.552%
%RSD		0.868	16.240	21.830	22.450	0.394	0.412	2.244	2.199

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:12	1.523	1.530	136.500	135.500	136.000	55.479%
2	03:08:55	1.555	1.571	137.900	136.100	137.000	58.138%
3	03:09:38	1.538	1.558	138.300	136.100	136.900	59.828%
x		1.539	1.553	137.600	135.900	136.600	57.815%
σ		0.016	0.021	0.989	0.334	0.575	2.193%
%RSD		1.055	1.345	0.719	0.245	0.420	3.792

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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	03:16:24	70.911%	5.443	25.290	25.700	0.000	408.600	23440.000	23640.000
2	03:17:07	70.682%	5.994	27.950	25.530	0.000	411.500	23470.000	23430.000
3	03:17:50	68.520%	5.971	25.850	26.000	0.000	416.300	23710.000	23670.000
x		70.038%	5.802	26.360	25.740	0.000	412.100	23540.000	23580.000
σ		1.319%	0.311	1.399	0.240	0.000	3.899	150.100	134.600
%RSD		1.884	5.366	5.306	0.933	0.000	0.946	0.637	0.571

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:24	99720.000	21320.000	0.000	8499.000	15440.000	14390.000	72.832%	1343.000
2	03:17:07	98580.000	21120.000	0.000	8471.000	15430.000	14350.000	70.670%	1338.000
3	03:17:50	99870.000	21310.000	0.000	8579.000	15820.000	14620.000	68.418%	1338.000
x		99390.000	21250.000	0.000	8516.000	15560.000	14460.000	70.640%	1339.000
σ		707.300	111.400	0.000	56.010	218.700	142.800	2.207%	2.811
%RSD		0.712	0.524	0.000	0.658	1.406	0.988	3.124	0.210

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:24	170.600	159.300	2649.000	208400.000	207300.000	102.000	225.800	152.100
2	03:17:07	172.300	159.800	2687.000	212000.000	210800.000	102.200	229.500	150.800
3	03:17:50	173.400	162.100	2725.000	213700.000	214200.000	104.100	229.700	152.100
x		172.100	160.400	2687.000	211400.000	210700.000	102.800	228.300	151.700
σ		1.405	1.495	37.920	2692.000	3435.000	1.153	2.243	0.715
%RSD		0.817	0.932	1.411	1.274	1.630	1.122	0.983	0.471

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:24	151.300	452.500	459.600	69.690	2.632	4.134	0.000	79.450
2	03:17:07	150.600	454.100	462.000	69.940	2.651	3.738	0.000	80.150
3	03:17:50	151.500	464.500	465.700	69.760	2.698	4.805	0.000	81.650
x		151.100	457.000	462.400	69.800	2.660	4.226	0.000	80.420
σ		0.454	6.525	3.084	0.124	0.034	0.539	0.000	1.128
%RSD		0.301	1.428	0.667	0.177	1.285	12.760	0.000	1.402

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:24	0.000	9.554	8.996	63.565%	0.266	0.250	2.056	1.757
2	03:17:07	0.000	9.340	9.471	61.944%	0.257	0.183	2.005	1.793
3	03:17:50	0.000	9.633	9.879	59.549%	0.272	0.204	2.112	1.725
x		0.000	9.509	9.449	61.686%	0.265	0.212	2.058	1.759
σ		0.000	0.152	0.442	2.020%	0.008	0.034	0.054	0.034
%RSD		0.000	1.593	4.682	3.275	2.856	15.910	2.613	1.942

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:24	68.856%	2.310	0.745	0.778	744.100	747.400	72.797%	71.513%
2	03:17:07	67.959%	2.147	0.779	0.710	741.600	733.700	71.845%	70.162%
3	03:17:50	66.075%	2.152	0.686	0.599	747.100	745.100	70.282%	68.966%
x		67.630%	2.203	0.737	0.696	744.300	742.100	71.641%	70.214%
σ		1.420%	0.093	0.047	0.091	2.758	7.312	1.269%	1.275%
%RSD		2.099	4.209	6.364	13.020	0.371	0.985	1.772	1.815

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:24	1.447	1.426	137.100	135.100	136.000	61.320%
2	03:17:07	1.367	1.415	136.800	134.300	135.600	57.342%
3	03:17:50	1.408	1.426	137.400	134.400	135.800	55.214%
x		1.407	1.422	137.100	134.600	135.800	57.959%
σ		0.040	0.007	0.313	0.445	0.212	3.100%
%RSD		2.843	0.463	0.228	0.331	0.156	5.348

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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	03:24:36	71.018%	4.654	20.950	21.060	0.000	585.900	20010.000	20130.000
2	03:25:19	71.598%	4.098	20.460	20.180	0.000	574.000	19830.000	19860.000
3	03:26:02	69.663%	3.705	21.040	20.150	0.000	573.500	19570.000	19500.000
x		70.760%	4.152	20.820	20.460	0.000	577.800	19800.000	19830.000
σ		0.993%	0.477	0.313	0.514	0.000	7.002	217.000	314.700
%RSD		1.403	11.480	1.502	2.513	0.000	1.212	1.096	1.587
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:24:36	91910.000	21030.000	0.000	8232.000	13470.000	12940.000	71.998%	1473.000
2	03:25:19	90580.000	20560.000	0.000	8090.000	13520.000	12830.000	71.295%	1453.000
3	03:26:02	89380.000	20220.000	0.000	7990.000	13380.000	12640.000	70.857%	1439.000
x		90620.000	20600.000	0.000	8104.000	13460.000	12800.000	71.383%	1455.000
σ		1267.000	407.000	0.000	121.700	71.210	155.000	0.575%	16.890
%RSD		1.398	1.976	0.000	1.502	0.529	1.211	0.806	1.161
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:24:36	171.600	182.900	1875.000	170900.000	168700.000	65.830	173.600	130.100
2	03:25:19	174.100	179.600	1880.000	169900.000	168900.000	64.400	171.400	128.800
3	03:26:02	168.500	175.700	1823.000	165700.000	165700.000	62.910	166.400	126.400
x		171.400	179.400	1859.000	168800.000	167800.000	64.380	170.500	128.400
σ		2.829	3.595	31.750	2763.000	1788.000	1.458	3.679	1.871
%RSD		1.651	2.004	1.707	1.637	1.065	2.265	2.158	1.457
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:24:36	129.100	334.900	336.100	53.400	2.806	2.359	0.000	58.100
2	03:25:19	132.400	338.200	338.100	54.670	2.674	3.925	0.000	58.570
3	03:26:02	126.900	325.300	329.000	52.350	2.606	3.761	0.000	57.420
x		129.500	332.800	334.400	53.470	2.696	3.348	0.000	58.030
σ		2.742	6.723	4.822	1.164	0.102	0.861	0.000	0.576
%RSD		2.118	2.020	1.442	2.177	3.769	25.700	0.000	0.992
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:24:36	0.000	11.590	11.400	63.141%	0.208	0.180	1.313	0.936
2	03:25:19	0.000	11.880	11.830	62.473%	0.229	0.151	1.026	0.860
3	03:26:02	0.000	11.010	11.590	63.142%	0.213	0.172	1.085	0.821
x		0.000	11.500	11.610	62.919%	0.217	0.168	1.141	0.872
σ		0.000	0.442	0.215	0.386%	0.011	0.015	0.151	0.059
%RSD		0.000	3.847	1.856	0.614	4.912	8.934	13.250	6.711
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:24:36	68.969%	2.032	0.464	0.492	485.400	482.900	71.136%	70.794%
2	03:25:19	68.960%	2.018	0.506	0.466	486.000	481.100	72.100%	71.068%
3	03:26:02	69.081%	1.957	0.451	0.517	470.600	467.800	73.603%	72.530%
x		69.003%	2.002	0.474	0.492	480.700	477.300	72.279%	71.464%
σ		0.067%	0.040	0.028	0.026	8.771	8.261	1.243%	0.934%
%RSD		0.098	1.992	6.009	5.244	1.825	1.731	1.720	1.306
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:24:36	1.274	1.231	134.000	131.500	132.700	62.055%		
2	03:25:19	1.218	1.255	135.700	133.700	134.700	62.660%		
3	03:26:02	1.191	1.266	131.600	129.800	130.400	64.421%		
x		1.228	1.251	133.800	131.700	132.600	63.046%		
σ		0.042	0.018	2.067	1.929	2.150	1.229%		
%RSD		3.443	1.439	1.545	1.465	1.622	1.949		

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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	03:32:48	68.728%	6.166	23.340	25.450	0.000	556.300	26810.000	27000.000
2	03:33:31	68.967%	5.515	26.500	25.190	0.000	549.900	26350.000	26260.000
3	03:34:14	67.500%	5.232	25.200	25.430	0.000	561.800	26830.000	26860.000
x		68.398%	5.638	25.010	25.350	0.000	556.000	26660.000	26700.000
σ		0.787%	0.479	1.588	0.143	0.000	5.921	273.200	392.700
%RSD		1.151	8.489	6.348	0.565	0.000	1.065	1.025	1.471

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:48	108700.000	22680.000	0.000	9260.000	7085.000	6709.000	69.902%	1366.000
2	03:33:31	106700.000	22120.000	0.000	9075.000	7115.000	6688.000	69.147%	1361.000
3	03:34:14	108300.000	22300.000	0.000	9207.000	7187.000	6673.000	67.443%	1365.000
x		107900.000	22370.000	0.000	9181.000	7129.000	6690.000	68.831%	1364.000
σ		1076.000	287.900	0.000	94.800	52.340	18.120	1.260%	2.766
%RSD		0.997	1.287	0.000	1.033	0.734	0.271	1.830	0.203

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:48	189.100	162.900	4081.000	269100.000	267900.000	121.800	236.400	179.800
2	03:33:31	185.900	158.700	4063.000	266200.000	267300.000	119.500	233.000	179.000
3	03:34:14	186.200	159.500	4102.000	267300.000	267900.000	120.100	237.000	179.600
x		187.100	160.400	4082.000	267500.000	267700.000	120.500	235.500	179.500
σ		1.760	2.229	19.390	1469.000	363.600	1.183	2.171	0.452
%RSD		0.941	1.390	0.475	0.549	0.136	0.982	0.922	0.252

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:48	180.900	517.600	523.200	91.280	2.174	3.719	0.000	58.430
2	03:33:31	178.600	511.600	526.700	89.660	2.160	4.126	0.000	58.090
3	03:34:14	180.100	521.100	526.000	89.380	2.231	3.521	0.000	58.810
x		179.900	516.700	525.300	90.100	2.188	3.789	0.000	58.440
σ		1.178	4.814	1.841	1.024	0.038	0.309	0.000	0.361
%RSD		0.655	0.932	0.350	1.137	1.725	8.147	0.000	0.618

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:48	0.000	10.500	10.070	59.536%	0.283	0.185	1.366	1.197
2	03:33:31	0.000	9.979	10.310	59.104%	0.274	0.221	1.484	1.161
3	03:34:14	0.000	10.020	10.630	58.194%	0.254	0.199	1.219	1.050
x		0.000	10.170	10.330	58.945%	0.270	0.202	1.357	1.136
σ		0.000	0.289	0.282	0.685%	0.015	0.018	0.133	0.076
%RSD		0.000	2.844	2.731	1.163	5.497	8.816	9.799	6.730

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:48	65.328%	1.876	0.549	0.531	664.000	659.500	69.759%	68.655%
2	03:33:31	65.177%	1.772	0.615	0.544	667.600	659.700	70.074%	68.310%
3	03:34:14	64.730%	1.730	0.491	0.588	659.100	663.200	69.729%	68.233%
x		65.078%	1.793	0.551	0.554	663.600	660.800	69.854%	68.399%
σ		0.311%	0.075	0.062	0.030	4.260	2.084	0.191%	0.225%
%RSD		0.478	4.182	11.260	5.357	0.642	0.315	0.273	0.329

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:48	1.562	1.567	136.300	133.800	135.200	54.564%
2	03:33:31	1.548	1.601	136.300	133.400	135.300	54.663%
3	03:34:14	1.600	1.592	138.400	136.000	136.300	54.332%
x		1.570	1.587	137.000	134.400	135.600	54.520%
σ		0.027	0.018	1.230	1.372	0.608	0.170%
%RSD		1.728	1.105	0.898	1.021	0.449	0.311

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:01	68.768%	5.691	24.890	25.410	0.000	541.600	27100.000	26980.000
2	03:41:43	68.830%	6.027	26.150	24.380	0.000	541.200	26940.000	26900.000
3	03:42:26	69.236%	6.245	24.170	25.760	0.000	537.700	26590.000	26770.000
x		68.945%	5.988	25.070	25.180	0.000	540.200	26880.000	26880.000
σ		0.254%	0.279	1.002	0.720	0.000	2.139	261.000	109.100
%RSD		0.369	4.662	3.997	2.860	0.000	0.396	0.971	0.406

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:01	118300.000	21980.000	0.000	9659.000	7528.000	6947.000	71.500%	1367.000
2	03:41:43	116700.000	21750.000	0.000	9573.000	7392.000	6927.000	70.114%	1367.000
3	03:42:26	116000.000	21440.000	0.000	9511.000	7486.000	6913.000	69.551%	1371.000
x		117000.000	21720.000	0.000	9581.000	7469.000	6929.000	70.388%	1368.000
σ		1206.000	273.100	0.000	74.290	69.930	17.410	1.003%	2.514
%RSD		1.031	1.257	0.000	0.775	0.936	0.251	1.425	0.184

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:01	202.600	166.400	3659.000	265500.000	264500.000	120.600	229.900	179.200
2	03:41:43	204.200	166.000	3683.000	267900.000	268200.000	121.500	232.800	177.500
3	03:42:26	201.500	166.800	3679.000	266800.000	266300.000	120.400	225.400	178.800
x		202.800	166.400	3674.000	266700.000	266300.000	120.800	229.400	178.500
σ		1.372	0.401	12.990	1179.000	1848.000	0.602	3.765	0.887
%RSD		0.676	0.241	0.354	0.442	0.694	0.498	1.641	0.497

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:01	179.100	531.800	532.300	90.540	2.522	3.652	0.000	59.640
2	03:41:43	180.900	531.200	540.700	91.410	2.591	3.930	0.000	61.160
3	03:42:26	177.400	536.900	538.600	90.230	2.296	3.452	0.000	60.660
x		179.200	533.300	537.200	90.730	2.469	3.678	0.000	60.480
σ		1.765	3.105	4.376	0.612	0.154	0.240	0.000	0.773
%RSD		0.985	0.582	0.815	0.674	6.253	6.526	0.000	1.279

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:01	0.000	9.796	9.968	61.722%	0.286	0.187	1.564	1.137
2	03:41:43	0.000	10.080	10.230	60.614%	0.319	0.201	1.392	1.003
3	03:42:26	0.000	10.070	10.200	60.349%	0.277	0.236	1.495	1.127
x		0.000	9.981	10.130	60.895%	0.294	0.208	1.484	1.089
σ		0.000	0.160	0.142	0.729%	0.022	0.026	0.086	0.075
%RSD		0.000	1.607	1.406	1.196	7.455	12.370	5.828	6.864

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:01	67.670%	1.613	0.475	0.440	703.200	701.900	72.384%	71.547%
2	03:41:43	67.088%	1.558	0.476	0.444	699.500	698.300	73.107%	72.162%
3	03:42:26	66.040%	1.740	0.495	0.534	696.900	700.200	72.725%	71.573%
x		66.933%	1.637	0.482	0.473	699.900	700.100	72.739%	71.761%
σ		0.826%	0.093	0.011	0.053	3.174	1.767	0.361%	0.348%
%RSD		1.234	5.696	2.369	11.260	0.454	0.252	0.497	0.485

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:01	1.642	1.651	139.800	137.000	138.100	62.212%
2	03:41:43	1.613	1.669	140.600	138.300	139.200	62.538%
3	03:42:26	1.641	1.628	142.200	139.700	140.600	61.882%
x		1.632	1.649	140.800	138.300	139.300	62.211%
σ		0.016	0.021	1.191	1.326	1.238	0.328%
%RSD		1.009	1.253	0.846	0.958	0.888	0.527

CCV 801624 5/1/2013 3:48:30 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:49:13	71.347%	99.540	99.000	96.710	0.000	48370.000	48520.000	48710.000
2	03:49:56	69.731%	103.000	100.400	101.600	0.000	49890.000	49360.000	49360.000
3	03:50:39	69.805%	102.200	103.900	101.700	0.000	49780.000	49490.000	49520.000
x		70.295%	101.566%	101.103%	100.020%	0.000	98.693%	98.241%	98.390%
σ		0.912%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.298	1.773	2.483	2.868	0.000	1.708	1.072	0.876
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:49:13	488.800	5121.000	0.000	48720.000	48130.000	45410.000	67.570%	101.500
2	03:49:56	497.800	5109.000	0.000	49360.000	49080.000	46220.000	67.098%	102.100
3	03:50:39	495.000	5064.000	0.000	49490.000	48440.000	45690.000	66.514%	101.900
x		98.774%	101.954%	0.000	98.373%	97.104%	91.547%	67.061%	101.819%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.529%	n/a
%RSD		0.932	0.582	0.000	0.840	0.998	0.905	0.789	0.272
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:49:13	97.290	97.760	463.900	24610.000	23890.000	99.230	101.200	103.300
2	03:49:56	98.850	98.940	467.200	24690.000	24010.000	100.200	102.600	101.000
3	03:50:39	96.840	99.130	470.500	24800.000	24130.000	99.900	102.100	102.100
x		97.658%	98.611%	93.439%	98.808%	96.044%	99.784%	101.961%	102.139%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.078	0.752	0.704	0.391	0.514	0.511	0.732	1.134
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:49:13	102.200	98.520	97.690	102.000	102.300	99.640	0.000	96.630
2	03:49:56	102.100	99.230	98.930	100.900	102.100	100.400	0.000	96.970
3	03:50:39	101.500	100.500	100.200	101.200	102.200	101.400	0.000	96.760
x		101.959%	99.406%	98.932%	101.366%	102.234%	100.489%	0.000	96.788%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.379	0.994	1.256	0.575	0.109	0.884	0.000	0.178
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:49:13	67.163%	101.700	101.000	61.980%	98.650	100.600	98.720	96.940
2	03:49:56	67.870%	104.000	104.700	61.772%	100.100	100.900	98.940	99.710
3	03:50:39	67.845%	106.100	105.200	62.170%	99.560	100.100	97.960	97.680
x		67.626%	103.944%	103.622%	61.974%	99.429%	100.554%	98.540%	98.108%
σ		0.402%	n/a	n/a	0.199%	n/a	n/a	n/a	n/a
%RSD		0.594	2.146	2.238	0.321	0.722	0.429	0.521	1.463
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:49:13	67.061%	96.580	94.430	93.600	98.230	97.100	67.824%	68.002%
2	03:49:56	67.329%	99.180	96.140	96.500	98.810	98.690	68.803%	68.815%
3	03:50:39	68.408%	98.070	94.310	95.930	98.710	98.040	69.465%	69.903%
x		67.599%	97.944%	94.962%	95.345%	98.584%	97.943%	68.697%	68.907%
σ		0.713%	n/a	n/a	n/a	n/a	n/a	0.826%	0.954%
%RSD		1.055	1.329	1.077	1.611	0.313	0.820	1.202	1.384
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:49:13	96.270	96.450	96.000	95.300	95.980	59.754%		
2	03:49:56	96.810	97.400	97.590	97.210	97.200	62.614%		
3	03:50:39	96.310	97.480	97.810	97.180	97.250	63.700%		
x		96.466%	97.112%	97.135%	96.563%	96.812%	62.023%		
σ		n/a	n/a	n/a	n/a	n/a	2.038%		
%RSD		0.312	0.589	1.016	1.135	0.744	3.287		

CCB5 5/1/2013 3:56:45 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:28	99.404%	0.011	0.044	0.190	0.000	1.633	11.580	11.810
2	03:58:11	103.605%	-0.009	-0.262	-0.043	0.000	1.979	12.680	12.690
3	03:58:54	103.976%	0.022	-0.471	-0.209	0.000	2.463	13.350	13.630
x		102.328%	0.008	-0.230	-0.021	0.000	2.025	12.540	12.710
σ		2.539%	0.015	0.259	0.200	0.000	0.417	0.894	0.912
%RSD		2.482	198.000	113.000	958.200	0.000	20.590	7.135	7.178
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:28	4.312	8.805	0.000	18.490	12.510	10.980	101.204%	-0.225
2	03:58:11	5.254	-0.616	0.000	18.480	16.090	8.819	102.484%	-0.135
3	03:58:54	5.135	2.922	0.000	16.880	11.880	11.250	104.755%	-0.293
x		4.901	3.704	0.000	17.950	13.490	10.350	102.814%	-0.218
σ		0.513	4.759	0.000	0.923	2.271	1.333	1.798%	0.079
%RSD		10.470	128.500	0.000	5.141	16.830	12.880	1.749	36.350
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:28	0.022	0.063	0.682	10.040	14.540	0.032	0.030	0.018
2	03:58:11	0.028	0.093	0.659	11.180	15.220	0.037	0.004	0.018
3	03:58:54	0.021	0.056	0.689	11.330	16.290	0.039	-0.002	0.035
x		0.024	0.071	0.677	10.850	15.350	0.036	0.011	0.024
σ		0.003	0.020	0.016	0.707	0.881	0.004	0.017	0.010
%RSD		14.670	27.670	2.307	6.513	5.738	9.866	156.400	42.080
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:28	0.041	-0.120	-0.170	0.087	0.101	0.234	0.000	0.081
2	03:58:11	0.030	-0.086	-0.152	-0.212	-0.019	-0.765	0.000	0.091
3	03:58:54	0.011	-0.042	-0.174	-0.153	0.097	-0.308	0.000	0.084
x		0.027	-0.082	-0.165	-0.092	0.059	-0.280	0.000	0.085
σ		0.015	0.039	0.012	0.158	0.068	0.500	0.000	0.005
%RSD		55.820	47.600	7.125	170.900	114.700	178.800	0.000	5.801
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:28	81.889%	0.196	0.189	85.104%	0.003	0.007	0.055	0.055
2	03:58:11	83.276%	0.233	0.183	87.054%	0.017	0.004	-0.008	-0.003
3	03:58:54	84.680%	0.176	0.181	88.565%	0.013	0.006	0.057	0.033
x		83.282%	0.202	0.184	86.908%	0.011	0.006	0.035	0.028
σ		1.395%	0.029	0.004	1.735%	0.007	0.002	0.037	0.029
%RSD		1.676	14.420	2.225	1.996	68.310	30.960	105.500	103.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:28	86.402%	0.077	0.086	0.093	0.076	0.085	82.085%	82.322%
2	03:58:11	88.338%	0.047	0.052	0.047	0.083	0.099	84.013%	83.592%
3	03:58:54	89.713%	0.065	0.076	0.057	0.091	0.127	85.156%	84.465%
x		88.151%	0.063	0.071	0.066	0.083	0.104	83.751%	83.459%
σ		1.663%	0.015	0.017	0.024	0.007	0.021	1.552%	1.077%
%RSD		1.887	24.050	24.130	36.760	8.785	20.420	1.854	1.291
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:57:28	0.015	0.016	0.044	0.039	0.045	83.422%		
2	03:58:11	0.016	0.024	0.029	0.029	0.035	81.515%		
3	03:58:54	0.014	0.019	0.035	0.040	0.043	81.212%		
x		0.015	0.020	0.036	0.036	0.041	82.050%		
σ		0.001	0.004	0.008	0.006	0.005	1.198%		
%RSD		8.492	20.450	21.560	16.880	12.230	1.461		

CRI 793093 5/1/2013 4:05:01 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:05:44	81.363%	1.066	6.215	5.217	0.000	95.520	98.240	99.930
2	04:06:27	81.149%	1.022	5.706	5.381	0.000	96.050	99.630	99.210
3	04:07:10	80.668%	1.131	5.370	5.212	0.000	97.820	99.410	99.430
x		81.060%	107.287%	115.280%	105.398%	0.000	96.462%	99.098%	99.520%
σ		0.356%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.439	5.115	7.378	1.825	0.000	1.247	0.754	0.371

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:05:44	34.910	500.300	0.000	111.900	80.910	100.700	80.225%	4.556
2	04:06:27	34.710	503.900	0.000	110.100	145.900	97.280	79.494%	5.330
3	04:07:10	34.990	496.800	0.000	112.600	124.000	95.230	78.808%	4.859
x		116.228%	100.070%	0.000	111.532%	116.945%	97.733%	79.509%	98.299%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.709%	n/a
%RSD		0.416	0.702	0.000	1.132	28.290	2.818	0.891	7.934

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:05:44	0.899	1.953	5.691	55.700	59.590	0.545	0.925	2.121
2	04:06:27	0.947	2.010	5.523	55.990	55.670	0.478	1.014	2.208
3	04:07:10	0.916	1.968	5.495	56.570	54.110	0.518	1.106	2.255
x		92.062%	98.852%	1113.956%	112.171%	112.910%	102.746%	101.480%	109.735%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.618	1.503	1.899	0.785	5.000	6.573	8.905	3.093

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:05:44	2.099	5.490	5.142	1.134	5.296	4.917	0.000	4.558
2	04:06:27	2.342	5.340	4.758	1.354	5.533	5.701	0.000	4.695
3	04:07:10	2.298	5.252	5.668	1.073	5.196	5.860	0.000	4.615
x		112.322%	107.219%	103.783%	118.711%	106.834%	109.853%	0.000	92.455%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		5.759	2.242	8.803	12.420	3.246	9.186	0.000	1.491

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:05:44	78.698%	4.395	4.288	77.917%	0.954	0.987	1.071	1.111
2	04:06:27	78.244%	4.616	4.658	73.221%	1.010	1.059	0.945	0.945
3	04:07:10	79.006%	4.701	4.729	73.699%	1.025	1.035	1.082	1.020
x		78.649%	91.411%	91.167%	74.946%	99.606%	102.704%	103.241%	102.523%
σ		0.383%	n/a	n/a	2.584%	n/a	n/a	n/a	n/a
%RSD		0.488	3.460	5.190	3.448	3.755	3.596	7.369	8.141

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:05:44	75.988%	4.875	1.905	1.976	10.290	10.140	75.257%	75.402%
2	04:06:27	76.071%	5.201	2.057	1.964	9.315	10.080	76.021%	76.097%
3	04:07:10	76.487%	5.023	1.995	1.931	9.706	9.894	76.407%	76.274%
x		76.182%	100.656%	99.282%	97.861%	97.694%	100.376%	75.895%	75.924%
σ		0.267%	n/a	n/a	n/a	n/a	n/a	0.585%	0.461%
%RSD		0.351	3.241	3.864	1.183	5.000	1.275	0.771	0.607

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:05:44	0.872	0.888	0.951	0.930	0.928	76.275%
2	04:06:27	0.872	0.912	0.926	0.942	0.959	77.465%
3	04:07:10	0.937	0.907	0.902	0.961	0.941	76.663%
x		89.356%	90.241%	92.660%	94.445%	94.296%	76.801%
σ		n/a	n/a	n/a	n/a	n/a	0.607%
%RSD		4.182	1.450	2.638	1.610	1.660	0.790

CRI 793093 5/1/2013 4:13:14 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:13:58	77.561%	1.022	5.952	5.479	0.000	101.200	103.300	108.200
2	04:14:41	76.518%	0.936	5.457	5.440	0.000	103.000	100.100	101.200
3	04:15:24	77.179%	0.971	5.816	5.181	0.000	102.200	105.300	101.800
x		77.086%	97.608%	114.839%	107.332%	0.000	102.095%	102.923%	103.714%
σ		0.528%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.685	4.462	4.453	3.015	0.000	0.878	2.551	3.756

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:13:58	36.740	510.800	0.000	117.300	97.400	104.400	74.947%	5.127
2	04:14:41	35.410	506.700	0.000	117.300	97.640	100.400	74.813%	5.346
3	04:15:24	35.300	507.600	0.000	118.900	67.270	100.500	73.548%	4.992
x		119.396%	101.671%	0.000	117.834%	87.436%	101.747%	74.436%	103.103%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.772%	n/a
%RSD		2.229	0.425	0.000	0.772	19.970	2.217	1.037	3.462

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:13:58	0.921	1.986	5.795	57.330	54.450	0.532	1.051	2.180
2	04:14:41	1.034	1.942	5.638	57.260	55.820	0.508	1.102	2.191
3	04:15:24	0.896	1.906	5.787	57.230	55.310	0.532	1.042	2.147
x		95.017%	97.220%	1147.980%	114.546%	110.386%	104.747%	106.513%	108.634%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		7.725	2.065	1.538	0.086	1.255	2.672	3.040	1.061

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:13:58	2.146	5.471	5.164	0.981	5.342	5.469	0.000	4.561
2	04:14:41	2.123	5.328	5.363	1.436	5.706	6.023	0.000	4.656
3	04:15:24	2.069	5.125	5.685	1.056	5.801	5.473	0.000	4.503
x		105.628%	106.165%	108.077%	115.778%	112.320%	113.097%	0.000	91.466%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.872	3.277	4.870	21.070	4.315	5.640	0.000	1.692

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:13:58	76.926%	4.374	4.470	71.924%	1.042	1.048	1.153	1.078
2	04:14:41	76.862%	4.758	4.529	71.890%	1.022	1.096	1.285	1.046
3	04:15:24	77.964%	4.537	4.696	72.205%	0.961	0.993	1.067	1.052
x		77.251%	91.128%	91.304%	72.006%	100.829%	104.585%	116.842%	105.833%
σ		0.618%	n/a	n/a	0.173%	n/a	n/a	n/a	n/a
%RSD		0.801	4.237	2.567	0.240	4.172	4.927	9.381	1.608

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:13:58	74.041%	4.912	1.968	1.819	9.408	9.773	72.535%	72.184%
2	04:14:41	74.456%	4.952	1.917	1.905	9.658	9.561	73.634%	73.648%
3	04:15:24	76.179%	4.976	1.990	1.983	9.348	9.438	75.126%	75.461%
x		74.892%	98.931%	97.913%	95.116%	94.713%	95.908%	73.765%	73.764%
σ		1.133%	n/a	n/a	n/a	n/a	n/a	1.301%	1.641%
%RSD		1.513	0.656	1.921	4.321	1.737	1.764	1.763	2.225

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:13:58	0.886	0.895	0.885	0.922	0.909	70.679%
2	04:14:41	0.885	0.911	0.946	0.973	0.945	71.452%
3	04:15:24	0.929	0.905	0.947	0.971	0.940	73.890%
x		90.031%	90.367%	92.591%	95.501%	93.149%	72.007%
σ		n/a	n/a	n/a	n/a	n/a	1.676%
%RSD		2.809	0.906	3.855	3.023	2.118	2.327

CCV 801624 5/1/2013 4:21:28 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	04:22:11	75.209%	99.060	98.280	99.420	0.000	49130.000	48810.000	49230.000
2	04:22:54	72.601%	102.000	98.750	101.600	0.000	49680.000	49710.000	50070.000
3	04:23:37	72.263%	100.800	103.300	102.000	0.000	50170.000	49490.000	49830.000
x		73.358%	100.624%	100.115%	100.985%	0.000	99.316%	98.671%	99.415%
σ		1.612%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.197	1.476	2.775	1.359	0.000	1.048	0.952	0.866

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:22:11	497.300	5181.000	0.000	49450.000	48590.000	45580.000	73.915%	98.890
2	04:22:54	508.800	5224.000	0.000	49970.000	49310.000	46470.000	70.926%	101.000
3	04:23:37	505.700	5221.000	0.000	50040.000	49100.000	46070.000	70.004%	103.400
x		100.786%	104.173%	0.000	99.634%	98.002%	92.082%	71.615%	101.086%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.044%	n/a
%RSD		1.179	0.464	0.000	0.644	0.750	0.970	2.855	2.212

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:22:11	98.890	99.150	463.300	24460.000	23810.000	100.600	101.800	104.000
2	04:22:54	98.290	99.830	468.400	24810.000	24050.000	101.400	102.900	102.800
3	04:23:37	95.980	97.300	471.300	24850.000	24060.000	100.800	103.300	104.500
x		97.718%	98.760%	93.529%	98.823%	95.898%	100.952%	102.658%	103.734%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.574	1.329	0.859	0.873	0.581	0.421	0.775	0.849

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:22:11	103.200	99.930	98.590	100.900	102.800	100.800	0.000	96.280
2	04:22:54	102.000	100.200	98.530	102.500	103.700	100.300	0.000	96.620
3	04:23:37	103.800	100.000	98.700	102.900	104.900	104.100	0.000	97.040
x		103.029%	100.033%	98.606%	102.104%	103.799%	101.715%	0.000	96.645%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.909	0.123	0.084	1.020	1.045	2.020	0.000	0.396

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:22:11	72.614%	101.700	101.400	67.641%	99.520	99.460	97.100	97.410
2	04:22:54	71.059%	104.500	104.300	65.387%	99.380	100.300	98.690	97.560
3	04:23:37	69.520%	105.900	105.500	63.878%	100.500	100.600	98.710	98.280
x		71.065%	104.060%	103.709%	65.635%	99.783%	100.130%	98.166%	97.748%
σ		1.547%	n/a	n/a	1.894%	n/a	n/a	n/a	n/a
%RSD		2.177	2.077	2.002	2.886	0.586	0.606	0.943	0.474

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:22:11	71.590%	96.390	94.220	93.720	96.920	98.480	72.291%	72.475%
2	04:22:54	69.289%	98.770	95.160	95.650	100.400	98.980	70.379%	70.422%
3	04:23:37	68.176%	100.300	97.390	97.070	98.980	97.330	69.023%	69.263%
x		69.685%	98.492%	95.589%	95.481%	98.767%	98.266%	70.564%	70.720%
σ		1.741%	n/a	n/a	n/a	n/a	n/a	1.642%	1.627%
%RSD		2.498	2.003	1.705	1.762	1.774	0.862	2.327	2.300

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:22:11	94.120	94.600	94.020	94.440	93.650	68.743%
2	04:22:54	95.290	95.360	95.270	95.570	95.480	63.976%
3	04:23:37	96.670	96.720	96.110	95.170	95.880	60.114%
x		95.360%	95.559%	95.134%	95.061%	95.003%	64.278%
σ		n/a	n/a	n/a	n/a	n/a	4.323%
%RSD		1.336	1.122	1.107	0.598	1.250	6.725

CCB6 5/1/2013 4:29:43 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	04:30:26	103.905%	0.003	-0.305	-0.323	0.000	-1.319	10.270	9.581
2	04:31:09	105.882%	0.033	-0.282	-0.422	0.000	3.163	13.380	13.970
3	04:31:52	105.353%	0.021	-0.274	-0.533	0.000	4.967	13.830	14.610
x		105.047%	0.019	-0.287	-0.426	0.000	2.270	12.490	12.720
σ		1.023%	0.015	0.016	0.105	0.000	3.237	1.939	2.738
%RSD		0.974	77.970	5.570	24.650	0.000	142.600	15.530	21.520

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:26	3.373	-0.952	0.000	17.830	9.820	8.400	101.614%	-0.351
2	04:31:09	3.563	1.172	0.000	22.900	5.761	12.210	103.317%	-0.307
3	04:31:52	3.781	1.885	0.000	24.020	14.530	12.780	103.911%	-0.247
x		3.572	0.701	0.000	21.580	10.040	11.130	102.947%	-0.301
σ		0.204	1.476	0.000	3.302	4.388	2.380	1.192%	0.052
%RSD		5.720	210.400	0.000	15.300	43.720	21.390	1.158	17.240

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:26	0.009	0.060	0.579	7.355	9.638	0.030	0.047	0.028
2	04:31:09	0.026	0.073	0.662	9.278	10.260	0.044	0.026	0.024
3	04:31:52	0.028	0.067	0.717	10.400	13.430	0.024	0.049	0.033
x		0.021	0.067	0.653	9.010	11.110	0.033	0.041	0.028
σ		0.011	0.007	0.069	1.538	2.032	0.010	0.013	0.005
%RSD		51.260	10.030	10.620	17.080	18.300	31.640	31.580	16.080

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:26	0.002	-0.063	-0.157	-0.042	0.180	-0.005	0.000	0.081
2	04:31:09	0.027	-0.028	-0.170	-0.017	0.268	0.009	0.000	0.088
3	04:31:52	0.034	-0.092	-0.071	-0.095	0.139	-0.312	0.000	0.088
x		0.021	-0.061	-0.133	-0.051	0.196	-0.103	0.000	0.086
σ		0.017	0.032	0.054	0.040	0.066	0.181	0.000	0.004
%RSD		78.480	52.890	40.500	77.750	33.620	176.700	0.000	4.554

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:26	87.405%	0.274	0.228	85.687%	0.004	0.004	0.018	0.017
2	04:31:09	90.938%	0.210	0.265	88.313%	0.013	0.010	0.074	0.061
3	04:31:52	91.106%	0.245	0.225	88.342%	0.027	0.009	0.079	0.081
x		89.816%	0.243	0.239	87.447%	0.015	0.008	0.057	0.053
σ		2.090%	0.032	0.022	1.525%	0.012	0.003	0.034	0.033
%RSD		2.327	13.270	9.283	1.743	79.080	41.470	58.930	61.970

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:26	86.890%	0.070	0.064	0.075	0.093	0.075	85.585%	85.122%
2	04:31:09	89.907%	0.083	0.069	0.091	0.083	0.094	89.768%	89.224%
3	04:31:52	89.997%	0.072	0.079	0.087	0.069	0.079	89.551%	89.499%
x		88.931%	0.075	0.071	0.084	0.082	0.083	88.301%	87.948%
σ		1.769%	0.007	0.008	0.009	0.012	0.010	2.355%	2.452%
%RSD		1.989	9.230	10.870	10.410	14.300	12.540	2.667	2.788

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:26	0.009	0.012	0.032	0.040	0.037	85.712%
2	04:31:09	0.019	0.026	0.050	0.053	0.046	90.119%
3	04:31:52	0.026	0.024	0.051	0.053	0.056	91.558%
x		0.018	0.021	0.044	0.048	0.047	89.130%
σ		0.008	0.008	0.011	0.007	0.009	3.046%
%RSD		46.290	36.360	24.870	15.330	20.190	3.417

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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	04:38:41	66.414%	7.707	33.330	32.140	0.000	773.700	35920.000	36010.000
2	04:39:24	65.339%	6.714	33.290	31.680	0.000	742.800	34800.000	35000.000
3	04:40:07	62.673%	8.283	32.810	33.040	0.000	744.300	35460.000	35500.000
x		64.809%	7.568	33.140	32.290	0.000	753.600	35400.000	35510.000
σ		1.926%	0.794	0.289	0.695	0.000	17.420	562.000	504.700
%RSD		2.972	10.490	0.871	2.152	0.000	2.312	1.588	1.421

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:41	110800.000	19860.000	0.000	11650.000	12490.000	11930.000	69.050%	1336.000
2	04:39:24	107000.000	19070.000	0.000	11220.000	12360.000	11470.000	67.264%	1302.000
3	04:40:07	108200.000	19310.000	0.000	11460.000	12330.000	11820.000	64.770%	1325.000
x		108700.000	19410.000	0.000	11440.000	12390.000	11740.000	67.028%	1321.000
σ		1950.000	409.500	0.000	217.500	85.340	240.200	2.150%	17.390
%RSD		1.795	2.109	0.000	1.901	0.689	2.046	3.207	1.316

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:41	184.300	239.000	5501.000	298600.000	298500.000	150.500	385.900	210.700
2	04:39:24	176.200	230.400	5374.000	289900.000	289900.000	144.900	368.300	202.300
3	04:40:07	179.300	236.000	5491.000	294300.000	295300.000	145.400	368.500	204.400
x		179.900	235.100	5455.000	294300.000	294600.000	147.000	374.300	205.800
σ		4.078	4.363	70.730	4346.000	4347.000	3.112	10.100	4.330
%RSD		2.266	1.856	1.296	1.477	1.476	2.118	2.700	2.104

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:41	210.900	853.800	860.700	97.540	2.480	3.844	0.000	107.900
2	04:39:24	205.600	841.600	850.000	93.000	1.840	5.155	0.000	105.000
3	04:40:07	207.400	848.200	850.900	93.580	2.450	3.909	0.000	108.700
x		208.000	847.900	853.900	94.710	2.257	4.303	0.000	107.200
σ		2.701	6.145	5.948	2.470	0.361	0.739	0.000	1.934
%RSD		1.299	0.725	0.697	2.608	16.010	17.170	0.000	1.804

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:41	0.000	16.020	15.810	57.200%	0.390	0.299	2.511	2.001
2	04:39:24	0.000	14.860	15.600	56.018%	0.410	0.314	2.117	1.830
3	04:40:07	0.000	16.140	15.650	54.033%	0.406	0.323	2.491	1.975
x		0.000	15.670	15.690	55.750%	0.402	0.312	2.373	1.936
σ		0.000	0.706	0.113	1.600%	0.011	0.012	0.222	0.092
%RSD		0.000	4.503	0.721	2.871	2.647	3.775	9.350	4.756

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:41	62.598%	1.766	0.649	0.581	742.800	739.600	69.061%	66.691%
2	04:39:24	61.950%	1.733	0.605	0.604	720.300	711.500	68.851%	66.770%
3	04:40:07	61.089%	1.668	0.589	0.586	721.900	724.300	67.891%	66.211%
x		61.879%	1.722	0.614	0.590	728.300	725.100	68.601%	66.557%
σ		0.757%	0.050	0.031	0.012	12.590	14.050	0.624%	0.303%
%RSD		1.223	2.913	5.105	2.117	1.729	1.937	0.909	0.455

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:41	1.679	1.726	167.300	165.000	166.000	52.031%
2	04:39:24	1.715	1.680	161.300	159.800	161.100	52.527%
3	04:40:07	1.686	1.707	166.400	164.900	165.600	51.203%
x		1.693	1.704	165.000	163.300	164.200	51.920%
σ		0.019	0.023	3.218	2.981	2.713	0.669%
%RSD		1.137	1.338	1.950	1.826	1.652	1.288

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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	04:46:55	66.638%	5.457	24.190	24.310	0.000	398.100	22760.000	22690.000
2	04:47:38	64.822%	5.194	24.120	24.740	0.000	420.100	23870.000	23620.000
3	04:48:21	65.981%	5.532	23.270	23.220	0.000	396.100	22480.000	22560.000
x		65.814%	5.395	23.860	24.090	0.000	404.800	23040.000	22960.000
σ		0.920%	0.178	0.514	0.782	0.000	13.350	734.000	577.900
%RSD		1.397	3.298	2.153	3.248	0.000	3.297	3.186	2.518

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:46:55	76970.000	17110.000	0.000	8813.000	4898.000	4709.000	68.971%	1095.000
2	04:47:38	80170.000	17840.000	0.000	9214.000	5135.000	4914.000	66.527%	1141.000
3	04:48:21	75980.000	16920.000	0.000	8830.000	5012.000	4785.000	66.531%	1109.000
x		77710.000	17290.000	0.000	8952.000	5015.000	4803.000	67.343%	1115.000
σ		2192.000	482.200	0.000	226.600	118.600	103.300	1.410%	23.210
%RSD		2.821	2.789	0.000	2.531	2.365	2.151	2.093	2.082

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:46:55	140.200	178.400	5222.000	231600.000	230200.000	161.800	326.800	152.300
2	04:47:38	147.800	187.400	5514.000	245500.000	245200.000	171.500	346.200	160.700
3	04:48:21	141.600	178.700	5363.000	237900.000	236600.000	162.800	327.400	151.900
x		143.200	181.500	5366.000	238300.000	237300.000	165.400	333.500	155.000
σ		4.052	5.123	146.100	6974.000	7535.000	5.365	11.030	5.004
%RSD		2.830	2.822	2.722	2.926	3.175	3.244	3.306	3.229

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:46:55	152.100	344.700	350.900	59.440	1.829	2.499	0.000	57.080
2	04:47:38	160.500	365.200	370.500	62.980	2.021	4.495	0.000	60.810
3	04:48:21	151.200	350.900	355.800	60.330	2.127	2.619	0.000	58.620
x		154.600	353.600	359.000	60.920	1.992	3.205	0.000	58.840
σ		5.121	10.510	10.180	1.842	0.151	1.119	0.000	1.870
%RSD		3.312	2.971	2.835	3.023	7.590	34.930	0.000	3.179

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:46:55	0.000	9.045	9.269	59.869%	0.272	0.151	1.437	1.108
2	04:47:38	0.000	9.808	9.816	57.805%	0.292	0.182	1.594	1.171
3	04:48:21	0.000	9.465	9.249	58.349%	0.281	0.197	1.387	1.037
x		0.000	9.439	9.445	58.674%	0.282	0.176	1.473	1.105
σ		0.000	0.382	0.322	1.070%	0.010	0.023	0.108	0.067
%RSD		0.000	4.051	3.408	1.823	3.488	13.280	7.325	6.060

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:46:55	65.358%	2.083	0.510	0.506	492.100	495.100	71.407%	70.206%
2	04:47:38	62.901%	2.207	0.485	0.466	522.200	519.800	70.035%	68.962%
3	04:48:21	64.475%	2.048	0.453	0.512	500.700	500.200	70.304%	70.078%
x		64.245%	2.113	0.482	0.495	505.000	505.000	70.582%	69.749%
σ		1.245%	0.084	0.029	0.025	15.510	13.080	0.727%	0.684%
%RSD		1.938	3.954	5.911	5.021	3.071	2.590	1.030	0.981

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:46:55	1.230	1.247	114.500	112.800	113.300	60.959%
2	04:47:38	1.327	1.354	119.400	118.300	118.900	60.384%
3	04:48:21	1.283	1.283	117.300	115.200	116.100	60.254%
x		1.280	1.295	117.100	115.400	116.100	60.532%
σ		0.049	0.055	2.454	2.775	2.776	0.375%
%RSD		3.803	4.225	2.095	2.405	2.390	0.620

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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	04:55:09	65.089%	7.039	38.090	38.090	0.000	863.200	42340.000	42230.000
2	04:55:52	63.511%	7.247	35.770	37.280	0.000	853.400	42060.000	42070.000
3	04:56:35	61.896%	6.561	39.840	37.740	0.000	839.600	41710.000	41940.000
x		63.499%	6.949	37.900	37.700	0.000	852.100	42040.000	42080.000
σ		1.596%	0.352	2.043	0.406	0.000	11.810	317.000	148.100
%RSD		2.514	5.061	5.390	1.076	0.000	1.387	0.754	0.352

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:09	137200.000	19080.000	0.000	12730.000	19650.000	18260.000	67.367%	1363.000
2	04:55:52	134000.000	18610.000	0.000	12670.000	19450.000	18290.000	65.410%	1350.000
3	04:56:35	134400.000	18560.000	0.000	12750.000	19900.000	18250.000	63.039%	1350.000
x		135200.000	18750.000	0.000	12720.000	19670.000	18270.000	65.272%	1355.000
σ		1768.000	285.300	0.000	43.470	222.700	24.860	2.167%	7.404
%RSD		1.307	1.522	0.000	0.342	1.132	0.136	3.321	0.547

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:09	213.600	189.900	3856.000	310300.000	309500.000	145.900	321.300	237.900
2	04:55:52	212.600	189.200	3863.000	310700.000	310500.000	141.500	311.700	232.700
3	04:56:35	215.500	192.100	3899.000	311700.000	312700.000	144.900	311.900	234.900
x		213.900	190.400	3873.000	310900.000	310900.000	144.100	315.000	235.200
σ		1.495	1.470	23.320	721.400	1627.000	2.307	5.486	2.579
%RSD		0.699	0.772	0.602	0.232	0.523	1.601	1.742	1.097

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:09	236.700	659.700	664.900	142.600	2.196	4.309	0.000	120.100
2	04:55:52	233.900	661.400	663.900	140.500	1.822	4.367	0.000	121.100
3	04:56:35	237.400	665.800	678.100	142.500	2.051	4.085	0.000	122.500
x		236.000	662.300	669.000	141.900	2.023	4.253	0.000	121.200
σ		1.858	3.164	7.932	1.221	0.188	0.149	0.000	1.199
%RSD		0.787	0.478	1.186	0.860	9.311	3.506	0.000	0.989

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:09	0.000	11.300	11.450	56.727%	0.408	0.249	1.931	1.545
2	04:55:52	0.000	11.260	11.410	55.052%	0.343	0.275	1.957	1.435
3	04:56:35	0.000	11.680	11.650	53.855%	0.356	0.256	1.830	1.445
x		0.000	11.410	11.500	55.211%	0.369	0.260	1.906	1.475
σ		0.000	0.233	0.131	1.442%	0.034	0.013	0.067	0.061
%RSD		0.000	2.040	1.139	2.612	9.262	5.160	3.510	4.112

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:09	61.997%	2.362	0.435	0.429	854.600	852.900	68.233%	66.530%
2	04:55:52	61.391%	2.288	0.466	0.483	845.100	847.600	67.722%	66.561%
3	04:56:35	60.374%	2.274	0.406	0.475	847.600	846.300	67.393%	65.900%
x		61.254%	2.308	0.436	0.462	849.100	849.000	67.783%	66.330%
σ		0.820%	0.047	0.030	0.029	4.945	3.507	0.423%	0.373%
%RSD		1.339	2.057	6.826	6.301	0.582	0.413	0.625	0.563

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:09	1.854	1.809	165.500	162.300	164.100	52.506%
2	04:55:52	1.781	1.840	168.900	165.600	167.700	52.269%
3	04:56:35	1.892	1.885	170.200	167.400	168.300	52.978%
x		1.843	1.845	168.200	165.100	166.700	52.584%
σ		0.056	0.038	2.451	2.551	2.275	0.361%
%RSD		3.061	2.059	1.457	1.545	1.365	0.687

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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	05:03:24	66.674%	6.104	28.060	26.750	0.000	501.900	27180.000	27310.000
2	05:04:07	63.906%	5.677	26.410	28.620	0.000	514.800	28130.000	28100.000
3	05:04:50	63.551%	5.729	26.840	27.630	0.000	507.700	27470.000	27390.000
x		64.710%	5.836	27.100	27.670	0.000	508.100	27590.000	27600.000
σ		1.710%	0.233	0.855	0.937	0.000	6.451	489.200	435.700
%RSD		2.643	3.993	3.154	3.387	0.000	1.270	1.773	1.579

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:24	109600.000	17980.000	0.000	11180.000	5829.000	5430.000	68.573%	1185.000
2	05:04:07	112600.000	18250.000	0.000	11230.000	5881.000	5513.000	66.961%	1204.000
3	05:04:50	108200.000	17750.000	0.000	11050.000	5684.000	5507.000	64.989%	1180.000
x		110100.000	18000.000	0.000	11160.000	5798.000	5483.000	66.841%	1190.000
σ		2212.000	250.100	0.000	93.960	102.100	46.210	1.795%	12.440
%RSD		2.008	1.390	0.000	0.842	1.761	0.843	2.686	1.046

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:24	178.200	161.700	9331.000	315100.000	314100.000	208.800	223.100	204.800
2	05:04:07	182.100	163.400	9453.000	320100.000	320900.000	212.300	223.000	206.500
3	05:04:50	177.000	159.500	9451.000	316200.000	316600.000	208.100	213.800	199.400
x		179.100	161.500	9411.000	317200.000	317200.000	209.700	220.000	203.600
σ		2.685	1.947	70.080	2603.000	3456.000	2.272	5.345	3.679
%RSD		1.499	1.205	0.745	0.821	1.090	1.083	2.430	1.807

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:24	206.500	526.500	529.900	128.200	1.611	3.268	0.000	52.670
2	05:04:07	202.100	532.300	535.600	128.700	1.850	2.844	0.000	53.790
3	05:04:50	202.000	523.500	531.300	126.000	1.664	3.495	0.000	52.720
x		203.500	527.400	532.200	127.600	1.708	3.202	0.000	53.060
σ		2.604	4.453	2.959	1.410	0.126	0.331	0.000	0.632
%RSD		1.280	0.844	0.556	1.105	7.363	10.320	0.000	1.191

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:24	0.000	9.303	9.345	58.516%	0.186	0.117	1.054	0.770
2	05:04:07	0.000	9.876	9.812	56.999%	0.199	0.115	1.138	0.816
3	05:04:50	0.000	9.554	9.604	56.757%	0.186	0.131	1.063	0.727
x		0.000	9.578	9.587	57.424%	0.190	0.121	1.085	0.771
σ		0.000	0.287	0.234	0.953%	0.008	0.009	0.046	0.044
%RSD		0.000	3.001	2.443	1.660	4.105	7.169	4.273	5.723

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:24	63.988%	1.918	0.390	0.392	762.100	763.800	68.892%	67.922%
2	05:04:07	63.066%	2.102	0.426	0.390	775.900	774.500	68.504%	67.118%
3	05:04:50	63.099%	1.889	0.380	0.397	764.800	762.900	68.980%	67.921%
x		63.384%	1.970	0.399	0.393	767.600	767.100	68.792%	67.654%
σ		0.523%	0.116	0.025	0.003	7.315	6.485	0.253%	0.464%
%RSD		0.825	5.869	6.147	0.854	0.953	0.845	0.368	0.686

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:24	1.624	1.649	142.700	141.400	142.200	59.347%
2	05:04:07	1.710	1.757	147.900	145.800	146.700	58.500%
3	05:04:50	1.658	1.703	146.300	143.900	145.200	58.680%
x		1.664	1.703	145.700	143.700	144.700	58.842%
σ		0.044	0.054	2.678	2.227	2.306	0.447%
%RSD		2.624	3.179	1.839	1.549	1.594	0.759

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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	05:11:39	64.368%	6.433	25.470	27.180	0.000	500.300	26540.000	26660.000
2	05:12:22	62.819%	6.927	24.980	27.110	0.000	504.200	26950.000	26790.000
3	05:13:05	62.688%	7.034	27.610	26.600	0.000	499.700	26610.000	26730.000
x		63.292%	6.798	26.020	26.960	0.000	501.400	26700.000	26730.000
σ		0.934%	0.321	1.401	0.320	0.000	2.437	222.900	67.240
%RSD		1.476	4.719	5.385	1.186	0.000	0.486	0.835	0.252

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:11:39	93570.000	14980.000	0.000	10720.000	8068.000	7533.000	66.002%	1379.000
2	05:12:22	94690.000	15010.000	0.000	10790.000	8315.000	7745.000	64.162%	1374.000
3	05:13:05	92980.000	14910.000	0.000	10620.000	8224.000	7615.000	63.872%	1375.000
x		93740.000	14970.000	0.000	10710.000	8202.000	7631.000	64.679%	1376.000
σ		867.800	48.890	0.000	83.280	124.500	106.600	1.155%	2.696
%RSD		0.926	0.327	0.000	0.777	1.518	1.398	1.786	0.196

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:11:39	179.300	188.500	8612.000	257900.000	256400.000	158.500	323.200	161.700
2	05:12:22	180.800	192.000	8818.000	263400.000	262900.000	159.600	327.700	162.900
3	05:13:05	178.300	191.100	8731.000	259500.000	259800.000	157.300	322.800	162.700
x		179.500	190.600	8720.000	260200.000	259700.000	158.500	324.600	162.400
σ		1.278	1.803	103.300	2837.000	3247.000	1.172	2.670	0.631
%RSD		0.712	0.946	1.185	1.090	1.250	0.740	0.823	0.388

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:11:39	164.600	418.000	419.100	96.550	2.661	3.761	0.000	75.230
2	05:12:22	163.900	422.100	427.100	98.020	2.466	3.608	0.000	77.280
3	05:13:05	163.400	422.500	429.300	97.270	2.241	3.481	0.000	76.760
x		164.000	420.800	425.200	97.280	2.456	3.617	0.000	76.420
σ		0.632	2.501	5.356	0.734	0.211	0.140	0.000	1.066
%RSD		0.386	0.594	1.260	0.755	8.573	3.874	0.000	1.395

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:11:39	0.000	8.113	7.834	56.700%	0.430	0.303	1.670	1.310
2	05:12:22	0.000	8.484	8.373	55.121%	0.356	0.250	1.695	1.384
3	05:13:05	0.000	7.978	8.163	54.924%	0.347	0.280	1.673	1.276
x		0.000	8.192	8.123	55.582%	0.378	0.278	1.679	1.323
σ		0.000	0.262	0.272	0.973%	0.046	0.027	0.013	0.055
%RSD		0.000	3.200	3.346	1.751	12.100	9.714	0.791	4.156

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:11:39	62.176%	1.597	0.382	0.360	618.100	610.900	67.604%	66.611%
2	05:12:22	61.283%	1.702	0.408	0.376	637.500	631.300	67.370%	66.364%
3	05:13:05	60.203%	1.777	0.430	0.346	636.900	631.800	67.292%	65.913%
x		61.221%	1.692	0.407	0.361	630.800	624.600	67.422%	66.296%
σ		0.988%	0.090	0.024	0.015	11.060	11.930	0.162%	0.354%
%RSD		1.613	5.334	5.876	4.074	1.753	1.910	0.241	0.533

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	05:11:39	1.482	1.536	157.800	156.400	156.800	56.061%
2	05:12:22	1.495	1.541	162.200	159.200	161.800	56.355%
3	05:13:05	1.484	1.585	161.800	160.200	161.100	56.467%
x		1.487	1.554	160.600	158.600	159.900	56.294%
σ		0.007	0.027	2.448	1.935	2.717	0.210%
%RSD		0.474	1.747	1.524	1.220	1.699	0.372

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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	05:19:55	64.041%	6.932	24.830	23.800	0.000	449.100	28900.000	28660.000
2	05:20:38	63.404%	7.028	25.640	24.510	0.000	457.000	28830.000	29160.000
3	05:21:21	62.634%	6.987	26.670	25.360	0.000	465.800	29370.000	29180.000
x		63.359%	6.982	25.710	24.560	0.000	457.300	29030.000	29000.000
σ		0.705%	0.048	0.918	0.778	0.000	8.367	292.100	297.300
%RSD		1.112	0.689	3.569	3.168	0.000	1.830	1.006	1.025

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:55	158200.000	20340.000	0.000	10260.000	6395.000	6069.000	65.645%	1434.000
2	05:20:38	157900.000	20350.000	0.000	10490.000	6379.000	6017.000	65.481%	1438.000
3	05:21:21	158300.000	20380.000	0.000	10560.000	6611.000	6189.000	64.129%	1450.000
x		158100.000	20360.000	0.000	10440.000	6462.000	6092.000	65.085%	1441.000
σ		177.900	17.660	0.000	155.600	129.700	88.300	0.832%	8.477
%RSD		0.113	0.087	0.000	1.491	2.007	1.449	1.278	0.588

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:55	249.700	195.900	2527.000	296000.000	296300.000	131.300	249.500	210.500
2	05:20:38	252.300	197.000	2550.000	297800.000	297100.000	131.600	249.000	208.400
3	05:21:21	248.800	197.600	2567.000	299900.000	298400.000	131.200	248.100	206.700
x		250.300	196.800	2548.000	297900.000	297300.000	131.400	248.800	208.600
σ		1.820	0.859	19.700	1945.000	1047.000	0.231	0.698	1.901
%RSD		0.727	0.437	0.773	0.653	0.352	0.176	0.280	0.911

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:55	211.700	891.200	898.700	98.250	2.942	4.920	0.000	66.700
2	05:20:38	207.100	893.500	902.000	94.730	3.030	6.001	0.000	66.960
3	05:21:21	209.100	900.300	911.300	96.400	2.899	4.354	0.000	68.180
x		209.300	895.000	904.000	96.460	2.957	5.092	0.000	67.280
σ		2.275	4.728	6.543	1.760	0.067	0.837	0.000	0.790
%RSD		1.087	0.528	0.724	1.825	2.263	16.440	0.000	1.174

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:55	0.000	11.090	10.760	57.099%	0.341	0.217	2.198	1.812
2	05:20:38	0.000	11.770	11.250	55.532%	0.336	0.281	2.236	1.887
3	05:21:21	0.000	10.890	11.360	54.925%	0.332	0.234	2.173	1.780
x		0.000	11.250	11.120	55.852%	0.336	0.244	2.202	1.826
σ		0.000	0.460	0.317	1.122%	0.004	0.033	0.032	0.055
%RSD		0.000	4.086	2.852	2.008	1.267	13.670	1.443	3.025

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:55	62.677%	1.420	0.317	0.317	999.800	993.700	66.497%	64.563%
2	05:20:38	61.206%	1.427	0.329	0.293	1012.000	1011.000	66.052%	64.540%
3	05:21:21	61.225%	1.441	0.274	0.359	1024.000	1020.000	65.768%	64.585%
x		61.702%	1.429	0.306	0.323	1012.000	1008.000	66.106%	64.563%
σ		0.844%	0.011	0.029	0.034	11.980	13.280	0.367%	0.023%
%RSD		1.368	0.751	9.353	10.430	1.184	1.317	0.556	0.035

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:55	1.957	1.922	161.300	157.600	159.100	51.551%
2	05:20:38	1.970	1.979	161.900	159.400	161.500	51.357%
3	05:21:21	2.023	2.002	165.600	163.000	164.500	51.129%
x		1.983	1.968	162.900	160.000	161.700	51.346%
σ		0.035	0.041	2.306	2.718	2.683	0.211%
%RSD		1.748	2.094	1.416	1.699	1.660	0.412

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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	05:28:10	60.511%	7.735	32.830	32.270	0.000	779.100	36120.000	36110.000
2	05:28:53	60.172%	7.186	32.490	32.520	0.000	756.300	35370.000	35470.000
3	05:29:36	59.235%	6.927	32.110	33.270	0.000	775.800	35550.000	35530.000
x		59.973%	7.283	32.480	32.690	0.000	770.400	35680.000	35710.000
σ		0.661%	0.412	0.357	0.519	0.000	12.300	390.300	355.300
%RSD		1.102	5.662	1.100	1.588	0.000	1.596	1.094	0.995

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:28:10	100100.000	14050.000	0.000	12020.000	11350.000	10720.000	63.246%	1252.000
2	05:28:53	98370.000	13700.000	0.000	12120.000	11900.000	10870.000	60.823%	1245.000
3	05:29:36	98690.000	13500.000	0.000	11920.000	11460.000	10600.000	59.610%	1249.000
x		99070.000	13750.000	0.000	12020.000	11570.000	10730.000	61.226%	1249.000
σ		945.600	278.700	0.000	103.300	293.900	133.900	1.851%	3.787
%RSD		0.955	2.027	0.000	0.860	2.540	1.248	3.024	0.303

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:28:10	171.800	221.300	6004.000	312400.000	313000.000	149.100	400.400	205.200
2	05:28:53	169.800	223.800	5968.000	311600.000	312600.000	147.000	399.800	202.000
3	05:29:36	169.100	217.800	5945.000	309900.000	308100.000	144.800	391.800	198.800
x		170.200	221.000	5972.000	311300.000	311200.000	147.000	397.400	202.000
σ		1.405	3.008	29.620	1260.000	2730.000	2.165	4.829	3.197
%RSD		0.825	1.361	0.496	0.405	0.877	1.474	1.215	1.583

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:28:10	203.900	798.200	800.200	113.000	2.036	3.792	0.000	100.100
2	05:28:53	202.200	793.200	805.000	114.300	1.849	4.611	0.000	101.800
3	05:29:36	202.400	808.400	821.500	113.800	1.867	4.729	0.000	102.000
x		202.800	799.900	808.900	113.700	1.917	4.377	0.000	101.300
σ		0.940	7.745	11.160	0.629	0.103	0.510	0.000	1.004
%RSD		0.463	0.968	1.380	0.553	5.376	11.660	0.000	0.991

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:28:10	0.000	9.902	9.813	53.498%	0.397	0.221	2.095	1.651
2	05:28:53	0.000	9.883	9.592	52.387%	0.388	0.218	2.232	1.819
3	05:29:36	0.000	10.070	9.708	51.710%	0.381	0.225	2.058	1.768
x		0.000	9.951	9.704	52.532%	0.389	0.222	2.128	1.746
σ		0.000	0.101	0.110	0.903%	0.008	0.004	0.091	0.086
%RSD		0.000	1.019	1.137	1.719	2.121	1.641	4.295	4.939

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:28:10	58.959%	1.843	0.459	0.464	830.900	825.800	66.657%	64.878%
2	05:28:53	58.298%	1.837	0.445	0.391	828.400	826.500	67.095%	65.385%
3	05:29:36	57.670%	1.849	0.444	0.423	832.800	826.100	66.382%	64.982%
x		58.309%	1.843	0.449	0.426	830.700	826.100	66.712%	65.081%
σ		0.645%	0.006	0.008	0.036	2.196	0.318	0.360%	0.268%
%RSD		1.106	0.324	1.875	8.535	0.264	0.039	0.539	0.412

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	05:28:10	1.580	1.597	153.000	151.500	152.100	55.109%
2	05:28:53	1.603	1.656	156.100	152.200	154.100	55.181%
3	05:29:36	1.549	1.664	154.200	151.900	153.000	55.253%
x		1.578	1.639	154.400	151.900	153.100	55.181%
σ		0.027	0.037	1.558	0.378	0.993	0.072%
%RSD		1.711	2.235	1.009	0.249	0.649	0.130

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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	05:36:24	82.871%	-0.013	-0.487	-0.924	0.000	-4.071	6.744	7.983
2	05:37:07	81.747%	-0.006	-1.025	-0.805	0.000	-2.976	8.287	7.961
3	05:37:51	81.593%	-0.021	-0.641	-1.026	0.000	-1.861	8.662	9.041
x		82.070%	-0.013	-0.718	-0.918	0.000	-2.969	7.898	8.328
σ		0.698%	0.008	0.277	0.111	0.000	1.105	1.016	0.617
%RSD		0.850	57.900	38.640	12.060	0.000	37.220	12.870	7.412
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:24	12.440	6.537	0.000	13.640	9.084	14.320	79.966%	1.277
2	05:37:07	16.200	5.889	0.000	13.960	10.500	15.570	81.179%	1.116
3	05:37:51	17.940	5.826	0.000	14.210	10.660	13.280	80.349%	0.679
x		15.530	6.084	0.000	13.940	10.080	14.390	80.498%	1.024
σ		2.814	0.393	0.000	0.286	0.867	1.144	0.620%	0.309
%RSD		18.130	6.464	0.000	2.053	8.601	7.950	0.770	30.230
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:24	-0.018	0.021	0.820	70.610	74.900	0.015	0.068	0.094
2	05:37:07	0.011	0.021	0.987	76.320	83.560	0.032	0.110	0.077
3	05:37:51	-0.012	0.018	1.138	81.350	86.910	0.033	0.018	0.065
x		-0.006	0.020	0.982	76.090	81.790	0.027	0.065	0.079
σ		0.015	0.002	0.159	5.374	6.197	0.010	0.046	0.015
%RSD		250.300	10.020	16.200	7.062	7.577	36.570	70.700	18.880
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:24	0.083	0.003	-0.074	-0.144	0.047	-0.597	0.000	0.043
2	05:37:07	0.061	-0.041	0.105	-0.078	0.005	-0.389	0.000	0.053
3	05:37:51	0.055	0.092	0.096	0.205	-0.057	0.602	0.000	0.047
x		0.066	0.018	0.042	-0.006	-0.002	-0.128	0.000	0.048
σ		0.015	0.068	0.101	0.186	0.053	0.640	0.000	0.005
%RSD		22.470	374.100	239.500	3320.000	2984.000	500.500	0.000	9.834
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:24	67.470%	0.025	0.046	65.878%	-0.005	-0.012	0.015	0.012
2	05:37:07	67.652%	0.029	0.033	66.393%	-0.013	-0.021	0.021	0.021
3	05:37:51	68.670%	0.009	0.035	66.577%	-0.008	-0.010	-0.001	-0.001
x		67.931%	0.021	0.038	66.283%	-0.009	-0.014	0.012	0.011
σ		0.647%	0.011	0.007	0.362%	0.004	0.005	0.011	0.011
%RSD		0.952	51.180	17.470	0.546	47.230	37.940	93.480	101.900
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:24	68.787%	0.685	-0.010	0.001	0.137	0.194	68.818%	68.315%
2	05:37:07	68.949%	0.676	-0.010	-0.005	0.189	0.259	70.204%	70.312%
3	05:37:51	69.474%	0.650	-0.006	-0.010	0.223	0.231	70.149%	70.867%
x		69.070%	0.670	-0.008	-0.005	0.183	0.228	69.724%	69.831%
σ		0.359%	0.018	0.002	0.005	0.043	0.033	0.785%	1.342%
%RSD		0.519	2.697	26.160	111.400	23.580	14.280	1.126	1.922
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:36:24	-0.004	-0.003	0.020	0.009	0.018	64.461%		
2	05:37:07	-0.005	-0.001	0.016	0.029	0.026	66.824%		
3	05:37:51	-0.005	-0.001	0.026	0.032	0.029	67.536%		
x		-0.005	-0.002	0.021	0.023	0.024	66.273%		
σ		0.001	0.001	0.005	0.012	0.005	1.610%		
%RSD		15.430	57.320	24.390	51.890	22.020	2.429		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:44:37	59.732%	43.030	871.500	866.700	0.000	48550.000	48050.000	47940.000
2	05:45:20	60.296%	42.790	872.500	871.100	0.000	48410.000	47630.000	47470.000
3	05:46:03	58.486%	42.020	891.600	884.100	0.000	48310.000	47350.000	47800.000
x		59.505%	42.610	878.500	873.900	0.000	48420.000	47680.000	47730.000
σ		0.927%	0.529	11.320	9.043	0.000	118.500	351.000	244.300
%RSD		1.557	1.242	1.289	1.035	0.000	0.245	0.736	0.512

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:44:37	1877.000	9148.000	0.000	48860.000	48930.000	46220.000	54.907%	1013.000
2	05:45:20	1894.000	8926.000	0.000	48590.000	49470.000	46600.000	53.702%	1014.000
3	05:46:03	1858.000	8961.000	0.000	49090.000	49530.000	46580.000	54.372%	1003.000
x		1876.000	9012.000	0.000	48850.000	49310.000	46470.000	54.327%	1010.000
σ		17.940	119.500	0.000	248.500	329.200	214.200	0.604%	5.678
%RSD		0.956	1.326	0.000	0.509	0.668	0.461	1.112	0.562

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:44:37	498.000	195.500	461.900	1118.000	1241.000	496.800	497.400	251.900
2	05:45:20	498.700	196.700	473.000	1147.000	1249.000	500.900	504.200	255.200
3	05:46:03	499.100	197.600	464.300	1125.000	1246.000	486.200	492.600	248.300
x		498.600	196.600	466.400	1130.000	1245.000	494.600	498.100	251.800
σ		0.581	1.070	5.853	15.000	4.434	7.599	5.838	3.419
%RSD		0.117	0.544	1.255	1.327	0.356	1.536	1.172	1.358

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:44:37	250.000	402.100	411.200	33.300	7.280	8.634	0.000	964.800
2	05:45:20	255.300	423.900	420.700	34.920	8.087	10.510	0.000	981.400
3	05:46:03	248.800	410.900	411.300	33.860	7.987	10.350	0.000	995.300
x		251.400	412.300	414.400	34.030	7.784	9.832	0.000	980.500
σ		3.494	10.980	5.445	0.823	0.440	1.040	0.000	15.270
%RSD		1.390	2.663	1.314	2.419	5.650	10.580	0.000	1.557

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:44:37	52.379%	1019.000	1015.000	51.455%	45.890	47.060	42.210	36.640
2	05:45:20	51.232%	1055.000	1051.000	49.577%	47.320	48.240	43.910	38.060
3	05:46:03	52.406%	1045.000	1043.000	50.832%	46.150	46.880	42.260	36.700
x		52.006%	1040.000	1036.000	50.621%	46.450	47.390	42.790	37.130
σ		0.670%	18.630	18.980	0.956%	0.764	0.738	0.968	0.802
%RSD		1.289	1.792	1.831	1.890	1.646	1.557	2.262	2.159

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:44:37	55.443%	1902.000	416.200	415.600	1893.000	1871.000	57.090%	60.306%
2	05:45:20	55.302%	1952.000	431.900	433.700	1909.000	1895.000	57.705%	60.844%
3	05:46:03	55.197%	1928.000	419.400	415.900	1876.000	1889.000	58.742%	62.682%
x		55.314%	1927.000	422.500	421.800	1893.000	1885.000	57.846%	61.278%
σ		0.123%	24.550	8.270	10.360	16.800	12.980	0.835%	1.246%
%RSD		0.223	1.274	1.957	2.457	0.887	0.689	1.443	2.033

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	05:44:37	46.390	47.100	17.760	19.970	18.910	52.004%
2	05:45:20	47.110	47.780	18.330	19.730	19.010	52.432%
3	05:46:03	46.360	47.250	18.490	19.770	19.070	53.857%
x		46.620	47.380	18.190	19.820	19.000	52.765%
σ		0.425	0.355	0.382	0.131	0.084	0.970%
%RSD		0.911	0.750	2.100	0.661	0.443	1.839

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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	05:52:49	63.152%	6.907	88.170	86.660	0.000	963.400	30540.000	30340.000
2	05:53:32	62.601%	7.474	88.340	84.690	0.000	948.800	30430.000	30530.000
3	05:54:15	60.803%	7.521	86.780	83.680	0.000	956.400	30080.000	30060.000
x		62.185%	7.301	87.760	85.010	0.000	956.200	30350.000	30310.000
σ		1.228%	0.342	0.857	1.518	0.000	7.293	239.800	240.900
%RSD		1.975	4.684	0.976	1.785	0.000	0.763	0.790	0.795
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:52:49	76170.000	23370.000	0.000	5759.000	167000.000	167700.000	62.591%	1260.000
2	05:53:32	76200.000	23290.000	0.000	5726.000	166900.000	168000.000	61.119%	1257.000
3	05:54:15	75610.000	23080.000	0.000	5734.000	168500.000	167400.000	60.089%	1257.000
x		75990.000	23250.000	0.000	5740.000	167500.000	167700.000	61.266%	1258.000
σ		334.700	149.300	0.000	17.310	879.100	337.500	1.257%	2.095
%RSD		0.440	0.642	0.000	0.302	0.525	0.201	2.052	0.167
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:52:49	97.650	84.870	8789.000	130600.000	129700.000	53.210	120.000	83.900
2	05:53:32	97.780	83.530	8825.000	130100.000	130500.000	52.650	119.700	82.470
3	05:54:15	97.320	82.760	8840.000	129800.000	130000.000	51.890	116.900	81.490
x		97.580	83.720	8818.000	130200.000	130100.000	52.580	118.900	82.620
σ		0.242	1.064	26.350	424.600	394.100	0.658	1.716	1.210
%RSD		0.248	1.270	0.299	0.326	0.303	1.252	1.443	1.464
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:52:49	83.760	308.100	309.800	64.340	2.853	5.451	0.000	474.600
2	05:53:32	85.230	313.800	319.400	65.430	2.978	6.281	0.000	482.400
3	05:54:15	83.010	316.900	312.100	64.940	2.729	5.841	0.000	480.400
x		84.000	312.900	313.800	64.900	2.853	5.857	0.000	479.100
σ		1.128	4.491	5.003	0.544	0.125	0.415	0.000	4.029
%RSD		1.343	1.435	1.594	0.838	4.372	7.090	0.000	0.841
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:52:49	0.000	6.541	6.447	54.683%	0.315	0.228	1.802	1.667
2	05:53:32	0.000	6.665	6.592	53.850%	0.280	0.193	2.171	1.867
3	05:54:15	0.000	6.664	6.736	53.757%	0.320	0.203	2.118	1.614
x		0.000	6.624	6.592	54.097%	0.305	0.208	2.030	1.716
σ		0.000	0.071	0.145	0.510%	0.022	0.018	0.200	0.134
%RSD		0.000	1.073	2.196	0.943	7.196	8.640	9.830	7.780
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:52:49	59.047%	3.586	0.310	0.307	677.100	671.400	62.893%	61.573%
2	05:53:32	59.357%	3.276	0.311	0.297	678.200	674.300	63.930%	62.992%
3	05:54:15	58.731%	3.117	0.311	0.300	672.800	674.700	63.944%	63.600%
x		59.045%	3.326	0.311	0.301	676.000	673.400	63.589%	62.721%
σ		0.313%	0.238	0.000	0.005	2.812	1.817	0.603%	1.040%
%RSD		0.531	7.169	0.156	1.705	0.416	0.270	0.948	1.658
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:52:49	0.823	0.785	86.960	86.070	86.230	50.415%		
2	05:53:32	0.780	0.798	88.060	87.430	88.020	51.542%		
3	05:54:15	0.781	0.808	88.090	87.290	87.520	53.458%		
x		0.794	0.797	87.700	86.930	87.260	51.805%		
σ		0.024	0.011	0.641	0.751	0.923	1.539%		
%RSD		3.053	1.436	0.731	0.863	1.058	2.970		

CCV 801624 5/1/2013 6:00:19 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	06:01:02	65.577%	100.100	102.900	100.100	0.000	50020.000	49410.000	49930.000
2	06:01:45	63.203%	98.870	102.300	99.260	0.000	49760.000	49160.000	49510.000
3	06:02:28	62.559%	96.760	99.880	98.250	0.000	48460.000	48800.000	49420.000
x		63.780%	98.571%	101.690%	99.222%	0.000	98.835%	98.249%	99.241%
σ		1.590%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.493	1.710	1.570	0.956	0.000	1.691	0.618	0.547

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:02	511.700	5128.000	0.000	50250.000	49260.000	46250.000	62.882%	103.000
2	06:01:45	510.600	5054.000	0.000	49810.000	49700.000	45850.000	60.820%	102.700
3	06:02:28	508.300	5036.000	0.000	49810.000	50800.000	46210.000	58.901%	105.100
x		102.036%	101.457%	0.000	99.913%	99.843%	92.209%	60.868%	103.575%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.991%	n/a
%RSD		0.339	0.963	0.000	0.511	1.593	0.479	3.271	1.277

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:02	100.400	99.980	471.400	24810.000	24110.000	100.700	101.100	103.200
2	06:01:45	100.200	98.190	473.400	24850.000	24200.000	100.400	100.900	101.200
3	06:02:28	98.900	98.980	475.600	24750.000	24210.000	98.760	98.680	100.200
x		99.838%	99.050%	94.692%	99.227%	96.688%	99.947%	100.218%	101.536%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.817	0.903	0.445	0.201	0.228	1.037	1.333	1.497

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:02	101.800	92.950	93.950	95.910	90.540	92.910	0.000	100.100
2	06:01:45	100.100	95.850	94.680	98.050	91.520	92.150	0.000	101.400
3	06:02:28	99.460	94.230	93.050	98.000	91.880	93.600	0.000	102.500
x		100.456%	94.342%	93.893%	97.321%	91.314%	92.887%	0.000	101.334%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.230	1.536	0.871	1.253	0.757	0.784	0.000	1.208

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:02	61.833%	105.900	105.800	58.101%	101.400	102.900	96.610	98.320
2	06:01:45	59.501%	109.200	106.900	55.722%	101.300	101.600	97.070	96.210
3	06:02:28	57.962%	109.900	108.900	54.382%	101.800	101.900	97.210	97.560
x		59.765%	108.350%	107.182%	56.068%	101.485%	102.112%	96.965%	97.364%
σ		1.949%	n/a	n/a	1.884%	n/a	n/a	n/a	n/a
%RSD		3.261	1.991	1.489	3.359	0.262	0.657	0.325	1.097

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:02	62.202%	101.800	96.930	96.480	100.300	99.590	64.743%	64.634%
2	06:01:45	60.917%	100.800	96.290	95.080	100.200	99.740	64.054%	64.381%
3	06:02:28	59.411%	102.600	96.500	96.650	100.200	100.300	62.449%	62.202%
x		60.843%	101.718%	96.577%	96.071%	100.223%	99.880%	63.749%	63.739%
σ		1.397%	n/a	n/a	n/a	n/a	n/a	1.177%	1.337%
%RSD		2.296	0.890	0.337	0.898	0.064	0.379	1.847	2.098

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:02	96.820	98.370	98.430	98.080	97.730	61.268%
2	06:01:45	98.310	99.300	100.000	99.170	99.250	59.343%
3	06:02:28	98.750	99.750	99.730	99.460	99.870	55.959%
x		97.963%	99.139%	99.404%	98.902%	98.947%	58.857%
σ		n/a	n/a	n/a	n/a	n/a	2.688%
%RSD		1.032	0.714	0.862	0.733	1.110	4.566

CCB7 5/1/2013 6:08:36 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:09:19	96.474%	-0.001	0.261	0.384	0.000	2.790	13.250	12.700
2	06:10:02	94.186%	-0.014	0.755	0.573	0.000	10.100	21.450	20.300
3	06:10:45	95.950%	0.012	0.314	0.337	0.000	5.815	17.130	16.980
x		95.537%	-0.001	0.443	0.431	0.000	6.235	17.280	16.660
σ		1.199%	0.013	0.271	0.125	0.000	3.674	4.103	3.812
%RSD		1.255	962.100	61.190	28.930	0.000	58.920	23.750	22.880

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:09:19	4.907	3.060	0.000	17.180	12.850	12.660	99.409%	-0.301
2	06:10:02	7.175	3.502	0.000	27.650	19.700	23.690	98.516%	-0.220
3	06:10:45	6.416	3.003	0.000	21.890	19.300	22.180	100.065%	-0.381
x		6.166	3.188	0.000	22.240	17.280	19.510	99.330%	-0.300
σ		1.154	0.274	0.000	5.243	3.847	5.981	0.778%	0.080
%RSD		18.720	8.578	0.000	23.570	22.260	30.660	0.783	26.740

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:09:19	0.027	0.017	0.744	8.581	12.480	0.035	0.062	0.042
2	06:10:02	0.042	0.056	1.114	13.740	18.210	0.073	0.058	0.041
3	06:10:45	0.000	0.031	0.990	11.760	17.230	0.064	0.071	0.070
x		0.023	0.034	0.949	11.360	15.970	0.057	0.064	0.051
σ		0.021	0.020	0.188	2.603	3.065	0.020	0.007	0.017
%RSD		91.800	57.700	19.800	22.910	19.190	34.770	10.640	33.100

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:09:19	0.011	-0.252	-0.076	-0.030	0.066	-0.054	0.000	0.089
2	06:10:02	0.036	-0.196	-0.100	0.324	-0.133	1.094	0.000	0.139
3	06:10:45	-0.006	-0.333	-0.211	-0.210	0.016	-0.643	0.000	0.113
x		0.014	-0.260	-0.129	0.028	-0.017	0.132	0.000	0.114
σ		0.021	0.069	0.072	0.272	0.103	0.884	0.000	0.025
%RSD		156.700	26.460	55.840	980.300	618.100	667.900	0.000	21.700

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:09:19	89.250%	0.206	0.121	85.436%	0.001	0.001	-0.031	-0.016
2	06:10:02	89.229%	0.136	0.187	84.913%	0.023	0.025	-0.059	-0.019
3	06:10:45	89.611%	0.208	0.192	86.133%	0.021	0.019	-0.004	0.005
x		89.364%	0.184	0.166	85.494%	0.015	0.015	-0.031	-0.010
σ		0.215%	0.041	0.040	0.612%	0.012	0.012	0.027	0.013
%RSD		0.240	22.320	23.760	0.716	83.320	81.600	87.470	130.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:09:19	87.749%	0.119	0.055	0.068	0.087	0.077	85.978%	85.166%
2	06:10:02	88.116%	0.124	0.082	0.084	0.233	0.224	86.107%	86.775%
3	06:10:45	89.506%	0.146	0.058	0.046	0.125	0.162	89.864%	89.020%
x		88.457%	0.130	0.065	0.066	0.148	0.154	87.317%	86.987%
σ		0.927%	0.014	0.015	0.019	0.076	0.074	2.207%	1.936%
%RSD		1.048	10.790	23.290	28.930	51.020	47.950	2.528	2.225

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	06:09:19	0.016	0.018	0.043	0.038	0.038	85.632%
2	06:10:02	0.033	0.028	0.048	0.070	0.053	90.008%
3	06:10:45	0.020	0.023	0.038	0.070	0.054	92.321%
x		0.023	0.023	0.043	0.059	0.048	89.320%
σ		0.009	0.005	0.005	0.018	0.009	3.397%
%RSD		38.940	23.300	12.040	30.830	18.550	3.803

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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	06:17:35	63.027%	4.761	27.300	26.120	0.000	416.100	34530.000	34420.000
2	06:18:18	61.429%	4.665	30.030	26.780	0.000	429.100	34940.000	34890.000
3	06:19:01	62.549%	4.262	27.060	26.060	0.000	417.300	34220.000	34290.000
x		62.335%	4.563	28.130	26.320	0.000	420.800	34560.000	34530.000
σ		0.820%	0.265	1.651	0.400	0.000	7.174	363.500	317.900
%RSD		1.316	5.807	5.870	1.520	0.000	1.705	1.052	0.921

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:35	75360.000	11120.000	0.000	7751.000	70870.000	70480.000	62.482%	874.300
2	06:18:18	75690.000	11200.000	0.000	7863.000	71690.000	71980.000	61.393%	905.600
3	06:19:01	74210.000	11000.000	0.000	7653.000	72150.000	71700.000	61.442%	903.100
x		75090.000	11110.000	0.000	7756.000	71570.000	71390.000	61.772%	894.400
σ		777.500	98.880	0.000	104.600	646.400	796.500	0.615%	17.380
%RSD		1.035	0.890	0.000	1.349	0.903	1.116	0.995	1.944

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:35	136.000	113.000	7109.000	207300.000	205400.000	89.070	207.500	178.800
2	06:18:18	137.700	115.200	7215.000	209200.000	210000.000	89.270	210.800	181.900
3	06:19:01	134.800	112.700	7140.000	206600.000	203800.000	86.820	207.000	175.300
x		136.200	113.600	7155.000	207700.000	206400.000	88.390	208.400	178.700
σ		1.443	1.360	54.370	1343.000	3182.000	1.361	2.054	3.332
%RSD		1.060	1.197	0.760	0.647	1.542	1.540	0.985	1.865

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:35	182.400	514.900	512.700	84.650	1.925	6.116	0.000	157.300
2	06:18:18	181.100	518.000	516.800	86.910	2.341	5.071	0.000	160.400
3	06:19:01	176.000	498.800	520.000	85.240	1.959	5.399	0.000	161.400
x		179.800	510.500	516.500	85.600	2.075	5.529	0.000	159.700
σ		3.382	10.320	3.654	1.174	0.231	0.535	0.000	2.126
%RSD		1.880	2.020	0.707	1.372	11.150	9.670	0.000	1.331

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:35	0.000	9.761	9.666	55.052%	0.399	0.298	2.596	2.177
2	06:18:18	0.000	9.797	9.701	53.359%	0.467	0.311	2.024	1.947
3	06:19:01	0.000	9.697	10.020	54.101%	0.389	0.305	2.426	2.069
x		0.000	9.752	9.797	54.171%	0.418	0.305	2.349	2.065
σ		0.000	0.050	0.198	0.849%	0.043	0.007	0.294	0.115
%RSD		0.000	0.518	2.016	1.567	10.200	2.224	12.520	5.567

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:35	59.982%	1.815	0.446	0.467	884.000	882.600	63.130%	62.164%
2	06:18:18	58.467%	1.884	0.464	0.461	900.200	894.700	63.601%	62.828%
3	06:19:01	59.477%	1.641	0.477	0.451	885.200	882.100	64.459%	63.408%
x		59.309%	1.780	0.462	0.460	889.800	886.500	63.730%	62.800%
σ		0.771%	0.125	0.016	0.008	9.051	7.142	0.674%	0.622%
%RSD		1.301	7.040	3.372	1.695	1.017	0.806	1.057	0.991

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:35	1.227	1.263	124.500	124.000	124.400	49.667%
2	06:18:18	1.261	1.251	127.600	125.000	126.200	49.017%
3	06:19:01	1.221	1.200	124.800	122.500	123.800	51.098%
x		1.236	1.238	125.600	123.800	124.800	49.927%
σ		0.021	0.033	1.745	1.278	1.279	1.064%
%RSD		1.740	2.690	1.389	1.032	1.025	2.132

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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	06:25:49	59.651%	10.150	65.950	64.930	0.000	1611.000	38980.000	38960.000
2	06:26:32	59.623%	9.845	68.850	65.480	0.000	1620.000	39200.000	39050.000
3	06:27:15	59.504%	9.384	68.810	66.150	0.000	1605.000	38640.000	38930.000
x		59.593%	9.793	67.870	65.520	0.000	1612.000	38940.000	38980.000
σ		0.078%	0.386	1.665	0.615	0.000	7.744	281.400	61.130
%RSD		0.131	3.941	2.454	0.938	0.000	0.480	0.723	0.157
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:25:49	85500.000	19960.000	0.000	7334.000	238000.000	238100.000	59.844%	1846.000
2	06:26:32	85820.000	19670.000	0.000	7375.000	241500.000	240000.000	59.067%	1875.000
3	06:27:15	85730.000	19690.000	0.000	7276.000	240100.000	242100.000	58.951%	1850.000
x		85690.000	19770.000	0.000	7328.000	239800.000	240100.000	59.287%	1857.000
σ		164.900	163.700	0.000	49.690	1781.000	2023.000	0.486%	16.090
%RSD		0.192	0.828	0.000	0.678	0.742	0.843	0.819	0.867
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:25:49	88.100	72.820	8423.000	101300.000	101200.000	52.280	112.400	90.300
2	06:26:32	88.570	73.760	8452.000	101400.000	100900.000	51.220	110.900	89.710
3	06:27:15	87.380	72.780	8448.000	101200.000	101900.000	52.200	111.400	90.870
x		88.020	73.120	8441.000	101300.000	101400.000	51.900	111.600	90.290
σ		0.602	0.552	15.690	100.600	517.900	0.589	0.757	0.580
%RSD		0.684	0.755	0.186	0.099	0.511	1.134	0.679	0.642
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:25:49	92.060	280.000	278.900	41.690	3.196	6.683	0.000	700.800
2	06:26:32	90.890	282.800	280.100	39.860	2.982	5.849	0.000	701.700
3	06:27:15	91.170	277.400	281.500	41.700	3.185	6.182	0.000	711.900
x		91.370	280.100	280.200	41.080	3.121	6.238	0.000	704.800
σ		0.607	2.746	1.300	1.056	0.120	0.420	0.000	6.147
%RSD		0.665	0.980	0.464	2.572	3.855	6.730	0.000	0.872
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:25:49	0.000	4.608	4.396	52.894%	0.369	0.268	2.627	2.240
2	06:26:32	0.000	4.726	4.458	52.579%	0.361	0.219	2.345	2.104
3	06:27:15	0.000	4.675	4.387	51.829%	0.328	0.234	2.532	2.048
x		0.000	4.670	4.414	52.434%	0.353	0.240	2.501	2.131
σ		0.000	0.059	0.039	0.547%	0.021	0.025	0.144	0.099
%RSD		0.000	1.261	0.881	1.044	6.066	10.400	5.744	4.630
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:25:49	58.981%	1.910	0.352	0.338	809.000	802.800	60.821%	60.467%
2	06:26:32	58.337%	1.858	0.343	0.301	816.700	812.300	62.297%	60.974%
3	06:27:15	57.607%	1.852	0.344	0.363	808.000	805.500	62.813%	62.871%
x		58.308%	1.874	0.346	0.334	811.200	806.900	61.977%	61.437%
σ		0.688%	0.032	0.005	0.031	4.775	4.890	1.034%	1.267%
%RSD		1.179	1.709	1.360	9.286	0.589	0.606	1.669	2.063
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:25:49	0.728	0.765	94.860	92.970	93.550	52.843%		
2	06:26:32	0.782	0.780	95.480	92.730	94.370	53.959%		
3	06:27:15	0.730	0.794	97.060	95.740	95.680	52.946%		
x		0.747	0.780	95.800	93.810	94.530	53.249%		
σ		0.031	0.015	1.135	1.671	1.079	0.617%		
%RSD		4.106	1.873	1.184	1.781	1.141	1.158		

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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	06:34:03	60.595%	8.858	57.930	55.380	0.000	1135.000	34680.000	34400.000
2	06:34:46	58.513%	9.136	59.810	56.390	0.000	1135.000	34690.000	34920.000
3	06:35:29	57.387%	8.313	56.140	56.800	0.000	1123.000	35050.000	35460.000
x		58.832%	8.769	57.960	56.190	0.000	1131.000	34800.000	34930.000
σ		1.627%	0.418	1.835	0.727	0.000	6.869	208.600	527.200
%RSD		2.766	4.773	3.165	1.294	0.000	0.607	0.599	1.510
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:03	85770.000	20320.000	0.000	7128.000	213000.000	213700.000	60.008%	1396.000
2	06:34:46	85220.000	20250.000	0.000	7244.000	219100.000	217400.000	58.366%	1398.000
3	06:35:29	87430.000	20450.000	0.000	7266.000	216600.000	216200.000	57.743%	1415.000
x		86140.000	20340.000	0.000	7213.000	216200.000	215800.000	58.705%	1403.000
σ		1149.000	102.200	0.000	73.880	3056.000	1862.000	1.170%	10.180
%RSD		1.334	0.502	0.000	1.024	1.413	0.863	1.993	0.726
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:03	102.900	87.250	8075.000	124700.000	124400.000	62.840	134.300	114.800
2	06:34:46	103.100	88.110	8132.000	125900.000	126500.000	63.530	132.300	113.600
3	06:35:29	103.200	87.580	8234.000	127100.000	126000.000	63.230	132.000	113.600
x		103.100	87.650	8147.000	125900.000	125600.000	63.200	132.900	114.000
σ		0.189	0.435	80.460	1227.000	1103.000	0.346	1.247	0.707
%RSD		0.184	0.496	0.988	0.975	0.878	0.547	0.938	0.620
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:03	116.100	340.500	346.900	54.940	3.330	7.373	0.000	627.800
2	06:34:46	115.200	343.700	351.600	55.140	3.658	6.535	0.000	632.300
3	06:35:29	115.900	338.400	343.700	54.800	3.101	7.574	0.000	633.700
x		115.700	340.900	347.400	54.960	3.363	7.161	0.000	631.300
σ		0.493	2.673	3.986	0.173	0.280	0.551	0.000	3.080
%RSD		0.426	0.784	1.147	0.315	8.334	7.700	0.000	0.488
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:03	0.000	5.619	5.183	51.803%	0.406	0.280	2.792	2.168
2	06:34:46	0.000	5.304	5.367	51.537%	0.402	0.301	2.406	2.077
3	06:35:29	0.000	5.459	5.334	51.613%	0.369	0.309	2.519	2.262
x		0.000	5.461	5.295	51.651%	0.393	0.296	2.572	2.169
σ		0.000	0.157	0.098	0.137%	0.020	0.015	0.199	0.093
%RSD		0.000	2.878	1.852	0.266	5.218	5.078	7.718	4.266
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:03	57.812%	1.774	0.270	0.297	769.200	769.200	61.231%	59.742%
2	06:34:46	57.125%	1.793	0.330	0.299	769.700	758.200	61.626%	60.823%
3	06:35:29	57.431%	1.789	0.306	0.326	773.000	770.500	61.705%	61.518%
x		57.456%	1.786	0.302	0.307	770.600	766.000	61.520%	60.694%
σ		0.344%	0.010	0.030	0.016	2.043	6.772	0.254%	0.895%
%RSD		0.599	0.548	9.953	5.177	0.265	0.884	0.412	1.474
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:34:03	0.942	0.899	113.400	111.200	111.500	49.083%		
2	06:34:46	0.891	0.911	112.900	110.800	111.100	51.082%		
3	06:35:29	0.919	0.873	114.800	112.000	113.400	51.677%		
x		0.917	0.894	113.700	111.300	112.000	50.614%		
σ		0.025	0.020	0.956	0.604	1.238	1.359%		
%RSD		2.773	2.182	0.841	0.542	1.106	2.685		

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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	06:42:18	60.322%	4.474	21.580	21.340	0.000	459.100	29820.000	29570.000
2	06:43:01	60.421%	4.447	20.630	22.350	0.000	459.300	29120.000	29540.000
3	06:43:44	59.966%	4.734	21.350	21.830	0.000	464.800	29090.000	29250.000
x		60.236%	4.552	21.180	21.840	0.000	461.100	29340.000	29450.000
σ		0.239%	0.158	0.495	0.509	0.000	3.261	410.700	179.300
%RSD		0.397	3.480	2.337	2.333	0.000	0.707	1.400	0.609

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:42:18	70280.000	11260.000	0.000	8368.000	50170.000	47270.000	60.878%	792.500
2	06:43:01	69940.000	11110.000	0.000	8369.000	50460.000	47140.000	60.643%	793.200
3	06:43:44	68860.000	11060.000	0.000	8318.000	51180.000	47410.000	58.719%	797.500
x		69690.000	11140.000	0.000	8352.000	50610.000	47270.000	60.080%	794.400
σ		745.500	102.400	0.000	29.510	519.900	137.500	1.184%	2.706
%RSD		1.070	0.919	0.000	0.353	1.027	0.291	1.972	0.341

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:42:18	133.900	109.000	7654.000	201900.000	202200.000	90.210	214.100	194.000
2	06:43:01	133.800	107.200	7597.000	200700.000	199400.000	87.390	205.500	186.400
3	06:43:44	134.000	108.100	7701.000	203000.000	202100.000	87.630	209.700	188.100
x		133.900	108.100	7651.000	201900.000	201200.000	88.410	209.800	189.500
σ		0.083	0.872	51.700	1112.000	1575.000	1.565	4.326	4.007
%RSD		0.062	0.807	0.676	0.551	0.783	1.770	2.062	2.114

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:42:18	195.000	531.600	545.500	81.800	1.685	4.806	0.000	122.400
2	06:43:01	191.400	537.100	549.800	79.620	1.818	4.073	0.000	121.300
3	06:43:44	187.800	533.800	538.500	79.080	1.748	5.018	0.000	121.300
x		191.400	534.200	544.600	80.160	1.750	4.632	0.000	121.700
σ		3.577	2.788	5.674	1.439	0.067	0.496	0.000	0.614
%RSD		1.869	0.522	1.042	1.795	3.813	10.700	0.000	0.504

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:42:18	0.000	9.171	9.387	54.224%	0.386	0.314	2.761	2.378
2	06:43:01	0.000	8.994	9.267	53.294%	0.386	0.344	2.401	2.257
3	06:43:44	0.000	9.633	9.689	52.825%	0.419	0.321	2.494	2.165
x		0.000	9.266	9.448	53.448%	0.397	0.327	2.552	2.267
σ		0.000	0.330	0.218	0.712%	0.019	0.016	0.187	0.107
%RSD		0.000	3.558	2.304	1.333	4.735	4.846	7.320	4.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:42:18	57.902%	1.392	0.495	0.462	772.900	762.200	64.766%	63.499%
2	06:43:01	58.784%	1.341	0.435	0.497	752.300	746.000	64.092%	62.701%
3	06:43:44	57.680%	1.446	0.485	0.420	751.600	749.200	63.632%	62.119%
x		58.122%	1.393	0.471	0.459	758.900	752.500	64.163%	62.773%
σ		0.584%	0.053	0.032	0.038	12.060	8.587	0.570%	0.693%
%RSD		1.005	3.770	6.820	8.371	1.590	1.141	0.888	1.104

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	06:42:18	1.343	1.309	130.700	128.400	130.400	54.316%
2	06:43:01	1.342	1.341	132.400	132.300	132.800	51.074%
3	06:43:44	1.369	1.310	133.900	133.800	132.800	47.682%
x		1.351	1.320	132.400	131.500	132.000	51.024%
σ		0.015	0.018	1.608	2.828	1.397	3.317%
%RSD		1.114	1.358	1.215	2.151	1.058	6.501

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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	06:50:33	60.928%	3.362	18.440	17.560	0.000	345.400	23610.000	23560.000
2	06:51:16	62.105%	3.056	19.920	17.180	0.000	349.100	23380.000	23730.000
3	06:51:59	59.813%	2.941	17.570	17.390	0.000	350.400	23320.000	23650.000
x		60.949%	3.120	18.640	17.380	0.000	348.300	23440.000	23650.000
σ		1.146%	0.217	1.193	0.190	0.000	2.577	150.900	82.390
%RSD		1.880	6.967	6.397	1.093	0.000	0.740	0.644	0.348
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:50:33	50400.000	10660.000	0.000	7396.000	31550.000	29680.000	60.128%	620.300
2	06:51:16	51400.000	10540.000	0.000	7436.000	31820.000	29920.000	60.160%	624.400
3	06:51:59	50970.000	10590.000	0.000	7455.000	32000.000	29780.000	60.343%	629.300
x		50920.000	10600.000	0.000	7429.000	31790.000	29790.000	60.210%	624.700
σ		502.300	62.140	0.000	30.020	225.900	121.600	0.116%	4.483
%RSD		0.986	0.586	0.000	0.404	0.711	0.408	0.192	0.718
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:50:33	86.830	80.240	11450.000	150400.000	149200.000	71.600	157.400	119.800
2	06:51:16	86.020	79.860	11450.000	148700.000	149100.000	71.150	154.500	118.100
3	06:51:59	86.710	80.830	11560.000	151700.000	149600.000	70.930	157.600	119.400
x		86.520	80.310	11490.000	150200.000	149300.000	71.230	156.500	119.100
σ		0.438	0.487	62.890	1511.000	290.900	0.341	1.759	0.921
%RSD		0.507	0.606	0.547	1.006	0.195	0.479	1.124	0.773
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:50:33	122.800	429.200	439.600	74.150	1.292	5.554	0.000	79.730
2	06:51:16	118.600	421.600	428.000	71.570	0.861	4.967	0.000	81.220
3	06:51:59	119.300	435.900	428.900	71.450	0.984	4.300	0.000	80.480
x		120.200	428.900	432.200	72.390	1.045	4.941	0.000	80.470
σ		2.230	7.149	6.443	1.526	0.222	0.627	0.000	0.747
%RSD		1.855	1.667	1.491	2.108	21.220	12.700	0.000	0.928
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:50:33	0.000	9.185	8.478	54.129%	0.202	0.214	1.290	1.112
2	06:51:16	0.000	8.519	8.628	53.804%	0.202	0.174	1.299	1.060
3	06:51:59	0.000	9.230	8.722	53.641%	0.221	0.178	1.341	1.159
x		0.000	8.978	8.609	53.858%	0.209	0.189	1.310	1.110
σ		0.000	0.398	0.123	0.249%	0.011	0.022	0.027	0.049
%RSD		0.000	4.432	1.431	0.462	5.276	11.610	2.045	4.448
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:50:33	58.306%	1.702	0.299	0.333	1245.000	1239.000	63.237%	62.966%
2	06:51:16	60.022%	1.813	0.335	0.298	1226.000	1225.000	65.269%	65.220%
3	06:51:59	59.253%	1.724	0.329	0.319	1242.000	1230.000	65.406%	64.991%
x		59.194%	1.746	0.321	0.317	1238.000	1232.000	64.638%	64.392%
σ		0.860%	0.059	0.019	0.017	10.000	7.145	1.215%	1.241%
%RSD		1.452	3.365	5.912	5.516	0.808	0.580	1.879	1.927
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:50:33	0.926	0.988	83.830	82.910	83.550	56.112%		
2	06:51:16	0.991	0.975	83.970	83.500	84.100	57.166%		
3	06:51:59	1.013	0.983	85.390	84.460	85.300	57.022%		
x		0.977	0.982	84.400	83.620	84.320	56.767%		
σ		0.045	0.007	0.862	0.783	0.897	0.571%		
%RSD		4.632	0.672	1.021	0.937	1.063	1.006		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:49	59.484%	4.533	26.200	26.420	0.000	402.200	26780.000	26850.000
2	06:59:31	60.007%	4.451	27.470	25.960	0.000	398.200	26670.000	26870.000
3	07:00:14	59.461%	4.431	28.060	27.070	0.000	397.700	26850.000	26960.000
x		59.651%	4.472	27.250	26.480	0.000	399.400	26760.000	26890.000
σ		0.309%	0.054	0.950	0.559	0.000	2.469	90.540	57.710
%RSD		0.517	1.200	3.485	2.110	0.000	0.618	0.338	0.215

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:49	74680.000	10560.000	0.000	6507.000	48690.000	45580.000	59.025%	794.500
2	06:59:31	74520.000	10350.000	0.000	6448.000	48310.000	45260.000	57.720%	771.700
3	07:00:14	74500.000	10520.000	0.000	6477.000	49070.000	45680.000	58.308%	785.700
x		74560.000	10480.000	0.000	6477.000	48690.000	45510.000	58.351%	784.000
σ		99.210	109.900	0.000	29.870	379.000	215.800	0.653%	11.490
%RSD		0.133	1.049	0.000	0.461	0.778	0.474	1.120	1.465

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:49	122.200	100.700	3383.000	191300.000	190800.000	81.450	176.700	149.200
2	06:59:31	117.900	99.540	3366.000	189900.000	189400.000	81.250	172.700	147.500
3	07:00:14	121.900	98.840	3397.000	190600.000	189900.000	79.270	170.700	145.500
x		120.700	99.680	3382.000	190600.000	190000.000	80.660	173.300	147.400
σ		2.386	0.918	15.690	701.000	746.600	1.202	3.052	1.824
%RSD		1.977	0.921	0.464	0.368	0.393	1.490	1.761	1.237

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:49	148.600	421.400	431.100	68.270	1.633	5.560	0.000	132.700
2	06:59:31	149.000	420.700	424.200	65.450	1.675	6.145	0.000	132.600
3	07:00:14	147.600	422.200	416.800	64.550	1.878	5.485	0.000	133.700
x		148.400	421.500	424.000	66.090	1.729	5.730	0.000	133.000
σ		0.698	0.745	7.142	1.940	0.131	0.361	0.000	0.590
%RSD		0.470	0.177	1.684	2.936	7.598	6.303	0.000	0.444

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:49	0.000	8.178	7.908	52.153%	0.350	0.270	1.414	1.391
2	06:59:31	0.000	8.510	8.007	52.024%	0.337	0.284	1.550	1.301
3	07:00:14	0.000	8.015	8.215	51.272%	0.362	0.283	1.685	1.351
x		0.000	8.234	8.043	51.816%	0.350	0.279	1.550	1.347
σ		0.000	0.252	0.157	0.476%	0.013	0.007	0.135	0.045
%RSD		0.000	3.059	1.948	0.918	3.624	2.686	8.723	3.331

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:49	56.402%	1.640	0.288	0.308	518.100	511.900	60.707%	59.158%
2	06:59:31	56.536%	1.711	0.309	0.310	521.500	517.200	61.607%	61.078%
3	07:00:14	56.974%	1.533	0.244	0.268	516.400	508.900	61.809%	60.954%
x		56.637%	1.628	0.281	0.295	518.700	512.700	61.374%	60.396%
σ		0.299%	0.090	0.034	0.024	2.623	4.245	0.587%	1.075%
%RSD		0.529	5.499	11.970	7.952	0.506	0.828	0.956	1.779

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:49	1.139	1.166	110.000	109.600	109.800	47.992%
2	06:59:31	1.158	1.168	109.900	109.200	110.000	48.191%
3	07:00:14	1.237	1.191	114.600	112.600	113.100	48.202%
x		1.178	1.175	111.500	110.500	111.000	48.128%
σ		0.052	0.014	2.680	1.840	1.837	0.118%
%RSD		4.433	1.201	2.403	1.665	1.655	0.246

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:07:05	60.047%	6.926	72.080	73.890	0.000	842.300	31820.000	31450.000
2	07:07:47	59.956%	6.662	74.170	73.090	0.000	821.300	30720.000	31080.000
3	07:08:30	59.781%	6.759	76.280	72.350	0.000	833.600	31090.000	31380.000
x		59.928%	6.782	74.180	73.110	0.000	832.400	31210.000	31310.000
σ		0.135%	0.133	2.099	0.771	0.000	10.560	558.300	197.000
%RSD		0.226	1.963	2.829	1.055	0.000	1.268	1.789	0.629

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:07:05	74220.000	20970.000	0.000	5882.000	143300.000	143000.000	60.769%	1268.000
2	07:07:47	72610.000	20530.000	0.000	5859.000	142900.000	142300.000	59.261%	1262.000
3	07:08:30	73290.000	20630.000	0.000	5911.000	143600.000	143300.000	58.759%	1260.000
x		73380.000	20710.000	0.000	5884.000	143300.000	142900.000	59.596%	1263.000
σ		807.900	231.200	0.000	26.270	370.100	530.000	1.046%	3.723
%RSD		1.101	1.116	0.000	0.447	0.258	0.371	1.755	0.295

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:07:05	97.650	82.660	4586.000	143400.000	141900.000	64.200	141.300	111.700
2	07:07:47	96.320	81.740	4582.000	143500.000	141800.000	63.570	141.000	109.200
3	07:08:30	97.340	82.100	4641.000	143400.000	142800.000	64.230	140.800	110.100
x		97.100	82.170	4603.000	143500.000	142100.000	64.000	141.000	110.300
σ		0.698	0.464	32.970	67.940	561.100	0.372	0.258	1.257
%RSD		0.719	0.565	0.716	0.047	0.395	0.582	0.183	1.140

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:07:05	110.200	321.400	329.000	62.180	3.008	7.142	0.000	458.400
2	07:07:47	108.400	323.800	318.700	59.920	2.456	7.588	0.000	462.600
3	07:08:30	109.900	326.200	324.400	60.680	2.918	6.946	0.000	464.500
x		109.500	323.800	324.000	60.930	2.794	7.225	0.000	461.800
σ		0.955	2.391	5.134	1.147	0.296	0.329	0.000	3.083
%RSD		0.872	0.738	1.584	1.883	10.600	4.549	0.000	0.668

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:07:05	0.000	8.225	7.986	53.972%	0.358	0.229	1.982	1.635
2	07:07:47	0.000	8.414	8.013	53.397%	0.258	0.242	2.084	1.732
3	07:08:30	0.000	8.367	8.354	52.646%	0.342	0.244	1.885	1.618
x		0.000	8.336	8.117	53.338%	0.319	0.238	1.984	1.662
σ		0.000	0.098	0.205	0.665%	0.054	0.008	0.100	0.061
%RSD		0.000	1.177	2.526	1.247	16.910	3.501	5.020	3.688

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:07:05	58.875%	1.573	0.356	0.368	668.700	664.300	61.800%	61.761%
2	07:07:47	59.006%	1.763	0.298	0.374	664.500	655.800	62.940%	62.457%
3	07:08:30	59.353%	1.622	0.317	0.383	642.100	647.100	63.722%	63.032%
x		59.078%	1.653	0.324	0.375	658.400	655.800	62.821%	62.417%
σ		0.247%	0.098	0.030	0.007	14.300	8.593	0.967%	0.636%
%RSD		0.418	5.960	9.188	1.926	2.172	1.310	1.539	1.020

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	07:07:05	0.775	0.811	97.420	95.580	96.770	54.865%
2	07:07:47	0.776	0.801	98.300	97.340	97.240	53.928%
3	07:08:30	0.789	0.799	96.890	95.370	95.780	55.247%
x		0.780	0.804	97.540	96.090	96.600	54.680%
σ		0.008	0.007	0.714	1.080	0.743	0.678%
%RSD		0.982	0.809	0.732	1.124	0.769	1.241

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:20	60.971%	2.192	16.800	16.200	0.000	395.500	26610.000	27000.000
2	07:16:03	60.007%	2.002	16.980	16.360	0.000	399.600	26560.000	26710.000
3	07:16:46	59.158%	2.279	16.070	16.720	0.000	397.800	26660.000	26560.000
x		60.045%	2.157	16.620	16.430	0.000	397.600	26610.000	26760.000
σ		0.907%	0.141	0.483	0.263	0.000	2.052	52.500	223.500
%RSD		1.510	6.552	2.908	1.604	0.000	0.516	0.197	0.835

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:20	41270.000	8466.000	0.000	6851.000	35370.000	33170.000	59.866%	441.000
2	07:16:03	40380.000	8367.000	0.000	6833.000	35430.000	32880.000	59.716%	439.200
3	07:16:46	40260.000	8276.000	0.000	6832.000	34660.000	33100.000	58.755%	439.100
x		40640.000	8370.000	0.000	6839.000	35150.000	33050.000	59.445%	439.800
σ		551.600	94.930	0.000	10.630	427.700	153.300	0.603%	1.034
%RSD		1.357	1.134	0.000	0.155	1.217	0.464	1.014	0.235

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:20	64.110	62.140	1443.000	138300.000	137400.000	59.570	134.300	153.800
2	07:16:03	64.780	62.060	1456.000	139200.000	137900.000	60.130	133.800	153.800
3	07:16:46	65.170	62.230	1466.000	139500.000	137700.000	59.160	131.200	154.500
x		64.680	62.140	1455.000	139000.000	137700.000	59.620	133.100	154.000
σ		0.538	0.083	11.590	654.300	271.000	0.485	1.648	0.387
%RSD		0.832	0.134	0.797	0.471	0.197	0.813	1.239	0.251

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:20	154.300	358.900	365.000	67.050	1.170	4.593	0.000	61.510
2	07:16:03	155.300	355.700	360.800	67.460	1.712	5.401	0.000	62.470
3	07:16:46	152.300	355.500	359.300	68.310	1.243	4.584	0.000	61.680
x		154.000	356.700	361.700	67.610	1.375	4.859	0.000	61.890
σ		1.555	1.910	2.983	0.646	0.294	0.469	0.000	0.511
%RSD		1.010	0.535	0.825	0.955	21.390	9.648	0.000	0.825

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:20	0.000	3.883	3.914	54.915%	0.220	0.196	0.876	0.734
2	07:16:03	0.000	4.223	3.896	54.405%	0.203	0.158	0.753	0.620
3	07:16:46	0.000	4.091	3.858	54.616%	0.202	0.189	0.641	0.588
x		0.000	4.066	3.890	54.645%	0.208	0.181	0.757	0.647
σ		0.000	0.172	0.029	0.257%	0.010	0.020	0.117	0.077
%RSD		0.000	4.225	0.737	0.469	4.842	11.080	15.510	11.860

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:20	59.703%	2.121	0.405	0.404	210.900	210.800	61.761%	61.940%
2	07:16:03	60.629%	2.144	0.419	0.446	211.100	210.400	64.145%	63.150%
3	07:16:46	59.877%	2.091	0.412	0.429	213.200	212.300	63.163%	63.019%
x		60.070%	2.119	0.412	0.426	211.700	211.200	63.023%	62.703%
σ		0.492%	0.026	0.007	0.021	1.258	0.975	1.198%	0.664%
%RSD		0.819	1.235	1.772	4.988	0.594	0.462	1.901	1.059

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:20	0.618	0.631	71.070	70.770	71.270	52.708%
2	07:16:03	0.638	0.614	69.930	69.590	69.650	55.564%
3	07:16:46	0.581	0.628	70.110	68.850	69.890	56.147%
x		0.613	0.624	70.370	69.730	70.270	54.806%
σ		0.029	0.010	0.610	0.965	0.873	1.840%
%RSD		4.776	1.523	0.866	1.384	1.242	3.357

240-22562-B-11-A 5/1/2013 7:22:54 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:23:37	59.994%	2.074	13.300	12.190	0.000	254.600	9876.000	9958.000
2	07:24:20	58.617%	2.223	12.500	12.140	0.000	255.900	9960.000	10010.000
3	07:25:03	56.882%	2.139	12.260	12.280	0.000	258.200	9819.000	9917.000
x		58.498%	2.145	12.690	12.200	0.000	256.200	9885.000	9961.000
σ		1.560%	0.075	0.541	0.075	0.000	1.854	70.960	45.480
%RSD		2.666	3.476	4.262	0.616	0.000	0.724	0.718	0.457

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:23:37	37130.000	7181.000	0.000	3494.000	10530.000	9834.000	56.936%	412.700
2	07:24:20	37020.000	7131.000	0.000	3564.000	10670.000	9948.000	55.164%	411.500
3	07:25:03	36940.000	7009.000	0.000	3528.000	10550.000	10030.000	52.130%	409.300
x		37030.000	7107.000	0.000	3529.000	10580.000	9939.000	54.743%	411.100
σ		94.670	88.820	0.000	35.240	76.700	100.300	2.430%	1.747
%RSD		0.256	1.250	0.000	0.999	0.725	1.009	4.440	0.425

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:23:37	64.980	54.480	5183.000	140700.000	139700.000	46.410	89.870	73.400
2	07:24:20	65.110	54.790	5175.000	141400.000	140200.000	46.800	87.330	73.220
3	07:25:03	64.850	54.520	5267.000	143300.000	142400.000	46.850	85.770	72.310
x		64.980	54.600	5208.000	141800.000	140800.000	46.690	87.660	72.970
σ		0.133	0.165	51.310	1333.000	1418.000	0.238	2.069	0.585
%RSD		0.205	0.303	0.985	0.940	1.008	0.510	2.361	0.801

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:23:37	73.980	369.700	369.400	73.570	2.071	6.610	0.000	46.480
2	07:24:20	74.530	373.100	370.700	71.990	2.036	5.298	0.000	46.380
3	07:25:03	74.420	372.900	374.900	72.730	1.855	4.965	0.000	46.990
x		74.310	371.900	371.700	72.760	1.987	5.624	0.000	46.620
σ		0.289	1.929	2.890	0.789	0.116	0.870	0.000	0.325
%RSD		0.389	0.519	0.777	1.085	5.841	15.460	0.000	0.697

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:23:37	0.000	4.242	4.578	51.361%	0.739	0.705	1.590	1.392
2	07:24:20	0.000	4.467	4.382	50.206%	0.681	0.675	1.551	1.389
3	07:25:03	0.000	4.730	4.762	48.005%	0.761	0.622	1.865	1.419
x		0.000	4.480	4.574	49.857%	0.727	0.667	1.669	1.400
σ		0.000	0.244	0.190	1.705%	0.041	0.042	0.171	0.017
%RSD		0.000	5.449	4.147	3.421	5.654	6.252	10.230	1.198

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:23:37	54.942%	1.789	0.405	0.364	334.600	333.600	59.018%	58.207%
2	07:24:20	55.388%	1.735	0.385	0.382	328.800	328.400	58.521%	58.300%
3	07:25:03	53.523%	1.809	0.353	0.341	331.400	330.600	57.518%	57.482%
x		54.618%	1.778	0.381	0.362	331.600	330.900	58.352%	57.996%
σ		0.974%	0.038	0.027	0.021	2.917	2.635	0.764%	0.448%
%RSD		1.783	2.165	6.980	5.796	0.880	0.796	1.309	0.772

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	07:23:37	0.592	0.579	75.850	74.840	75.780	48.211%
2	07:24:20	0.597	0.619	77.220	75.830	76.260	47.926%
3	07:25:03	0.692	0.621	78.130	76.100	76.970	46.929%
x		0.627	0.606	77.070	75.590	76.340	47.689%
σ		0.056	0.024	1.145	0.664	0.603	0.673%
%RSD		9.003	3.956	1.486	0.878	0.789	1.411

240-22562-B-12-A 5/1/2013 7:31:10 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:53	59.301%	1.741	12.220	14.350	0.000	261.700	10730.000	10780.000
2	07:32:36	59.694%	1.680	13.680	12.910	0.000	261.000	10460.000	10460.000
3	07:33:19	58.054%	1.814	13.060	14.330	0.000	258.800	10300.000	10350.000
x		59.017%	1.745	12.990	13.860	0.000	260.500	10500.000	10530.000
σ		0.856%	0.067	0.731	0.824	0.000	1.525	217.200	222.100
%RSD		1.451	3.834	5.629	5.945	0.000	0.585	2.069	2.109

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:53	29350.000	7703.000	0.000	3506.000	14370.000	13450.000	57.339%	448.400
2	07:32:36	28370.000	7394.000	0.000	3452.000	14490.000	13330.000	55.862%	435.500
3	07:33:19	28130.000	7330.000	0.000	3437.000	14400.000	13310.000	55.239%	437.700
x		28620.000	7476.000	0.000	3465.000	14420.000	13360.000	56.147%	440.600
σ		650.200	199.200	0.000	36.390	62.440	77.550	1.079%	6.907
%RSD		2.272	2.665	0.000	1.050	0.433	0.580	1.921	1.568

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:53	52.540	46.060	4857.000	97920.000	97100.000	42.040	88.510	79.660
2	07:32:36	51.680	44.890	4792.000	95950.000	94810.000	40.570	83.900	76.070
3	07:33:19	51.930	44.830	4783.000	96100.000	95400.000	40.260	84.970	77.480
x		52.050	45.260	4811.000	96660.000	95770.000	40.960	85.800	77.740
σ		0.443	0.696	40.480	1095.000	1185.000	0.952	2.414	1.810
%RSD		0.852	1.537	0.842	1.133	1.237	2.323	2.814	2.328

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:53	79.380	307.100	309.900	61.740	1.349	5.793	0.000	47.140
2	07:32:36	76.470	303.400	308.800	59.930	1.660	3.910	0.000	47.240
3	07:33:19	78.620	308.300	308.000	60.880	1.545	3.896	0.000	47.240
x		78.160	306.200	308.900	60.850	1.518	4.533	0.000	47.200
σ		1.508	2.523	0.958	0.905	0.158	1.091	0.000	0.060
%RSD		1.930	0.824	0.310	1.488	10.380	24.070	0.000	0.126

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:53	0.000	3.783	3.701	52.663%	7.741	7.751	1.470	1.352
2	07:32:36	0.000	3.621	3.751	52.623%	7.656	7.643	1.366	1.417
3	07:33:19	0.000	3.635	3.673	51.389%	7.494	7.600	1.642	1.523
x		0.000	3.680	3.708	52.225%	7.630	7.665	1.493	1.430
σ		0.000	0.090	0.040	0.725%	0.125	0.077	0.139	0.087
%RSD		0.000	2.436	1.067	1.388	1.644	1.010	9.325	6.060

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:53	56.938%	2.152	0.393	0.365	286.900	286.000	59.992%	60.116%
2	07:32:36	57.608%	2.095	0.382	0.357	282.500	278.800	60.265%	60.375%
3	07:33:19	56.003%	2.168	0.336	0.431	284.500	280.300	60.213%	59.932%
x		56.850%	2.139	0.370	0.385	284.600	281.700	60.157%	60.141%
σ		0.806%	0.038	0.030	0.040	2.189	3.791	0.145%	0.223%
%RSD		1.418	1.792	8.185	10.490	0.769	1.346	0.241	0.370

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:53	0.514	0.522	62.760	62.110	62.410	54.799%
2	07:32:36	0.517	0.503	64.190	63.010	63.000	54.211%
3	07:33:19	0.498	0.512	63.480	62.270	62.340	54.679%
x		0.510	0.512	63.480	62.460	62.580	54.563%
σ		0.011	0.010	0.717	0.477	0.360	0.311%
%RSD		2.080	1.910	1.129	0.763	0.576	0.570

CCV 801624 5/1/2013 7:39:24 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:40:07	60.870%	94.240	96.000	94.890	0.000	50010.000	50050.000	50070.000
2	07:40:50	56.674%	97.830	95.860	94.210	0.000	50030.000	49360.000	50050.000
3	07:41:32	57.354%	97.390	96.780	94.480	0.000	48990.000	49030.000	49420.000
x		58.299%	96.490%	96.215%	94.529%	0.000	99.354%	98.955%	99.690%
σ		2.252%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.863	2.031	0.510	0.361	0.000	1.197	1.047	0.739

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:40:07	513.900	5070.000	0.000	50100.000	50020.000	46930.000	55.506%	101.600
2	07:40:50	513.600	5029.000	0.000	50440.000	50200.000	47460.000	54.410%	100.600
3	07:41:32	520.100	5000.000	0.000	50740.000	50230.000	47080.000	54.458%	100.400
x		103.166%	100.658%	0.000	100.849%	100.301%	94.320%	54.791%	100.893%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.619%	n/a
%RSD		0.713	0.707	0.000	0.637	0.228	0.583	1.130	0.616

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:40:07	99.500	99.530	477.900	25160.000	24570.000	103.700	102.200	103.900
2	07:40:50	100.000	102.200	488.300	25390.000	24930.000	102.700	101.600	103.400
3	07:41:32	99.340	99.250	482.100	25130.000	24630.000	100.400	101.400	101.800
x		99.623%	100.315%	96.549%	100.917%	98.843%	102.284%	101.754%	103.039%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.360	1.601	1.083	0.568	0.779	1.636	0.412	1.035

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:40:07	102.900	92.660	92.040	96.590	88.600	94.210	0.000	107.000
2	07:40:50	104.300	92.440	93.200	96.600	87.410	91.860	0.000	108.200
3	07:41:32	101.600	91.200	91.530	97.770	87.190	89.130	0.000	106.100
x		102.963%	92.101%	92.254%	96.985%	87.733%	91.732%	0.000	107.094%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.310	0.854	0.926	0.699	0.862	2.766	0.000	0.999

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:40:07	51.386%	108.100	106.700	51.633%	100.100	100.600	93.480	95.380
2	07:40:50	51.741%	110.900	108.800	51.755%	101.200	102.300	94.830	95.550
3	07:41:32	52.066%	110.100	109.000	51.780%	97.610	99.300	92.930	94.870
x		51.731%	109.716%	108.190%	51.723%	99.634%	100.729%	93.746%	95.267%
σ		0.340%	n/a	n/a	0.079%	n/a	n/a	n/a	n/a
%RSD		0.657	1.298	1.163	0.153	1.833	1.481	1.045	0.374

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:40:07	55.227%	102.100	95.980	96.900	101.900	101.800	57.484%	57.910%
2	07:40:50	54.594%	102.500	95.190	94.070	104.100	101.900	57.235%	57.545%
3	07:41:32	54.643%	100.000	93.200	92.920	99.740	99.260	59.426%	59.377%
x		54.821%	101.537%	94.792%	94.630%	101.905%	100.988%	58.048%	58.277%
σ		0.352%	n/a	n/a	n/a	n/a	n/a	1.200%	0.970%
%RSD		0.642	1.302	1.511	2.161	2.136	1.480	2.067	1.664

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	07:40:07	101.900	103.200	101.800	101.000	101.100	49.843%
2	07:40:50	98.730	98.750	99.370	99.180	99.350	52.224%
3	07:41:32	99.450	99.780	99.550	99.290	99.110	52.612%
x		100.035%	100.587%	100.243%	99.822%	99.845%	51.560%
σ		n/a	n/a	n/a	n/a	n/a	1.499%
%RSD		1.678	2.332	1.359	1.023	1.073	2.908

CCB8 5/1/2013 7:47:40 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:48:23	88.373%	-0.007	-0.661	-0.679	0.000	-2.910	6.035	5.290
2	07:49:06	88.917%	0.000	-0.813	-0.842	0.000	-4.595	6.141	6.438
3	07:49:49	86.956%	0.016	-0.470	-0.887	0.000	-2.289	7.560	7.508
x		88.082%	0.003	-0.648	-0.803	0.000	-3.265	6.579	6.412
σ		1.013%	0.011	0.172	0.109	0.000	1.193	0.852	1.109
%RSD		1.150	373.000	26.480	13.620	0.000	36.540	12.950	17.300

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:48:23	2.306	3.159	0.000	13.960	3.828	4.850	82.763%	-0.138
2	07:49:06	2.386	2.320	0.000	15.900	6.807	4.622	83.989%	-0.291
3	07:49:49	2.826	2.499	0.000	17.480	0.694	6.467	82.498%	-0.251
x		2.506	2.660	0.000	15.780	3.776	5.313	83.083%	-0.227
σ		0.280	0.442	0.000	1.763	3.057	1.006	0.795%	0.080
%RSD		11.170	16.610	0.000	11.180	80.950	18.930	0.957	35.120

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:48:23	-0.001	0.001	0.389	3.275	7.257	0.003	-0.005	0.015
2	07:49:06	-0.032	-0.023	0.408	4.087	9.531	0.019	0.012	-0.011
3	07:49:49	-0.013	0.001	0.453	5.288	9.257	0.027	-0.027	-0.008
x		-0.015	-0.007	0.416	4.217	8.681	0.017	-0.007	-0.002
σ		0.016	0.014	0.033	1.013	1.241	0.012	0.019	0.014
%RSD		104.400	197.200	7.915	24.020	14.300	73.500	291.800	859.200

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:48:23	-0.036	-0.490	-0.371	0.043	-0.111	0.001	0.000	0.029
2	07:49:06	-0.047	-0.345	-0.287	0.094	-0.142	0.425	0.000	0.036
3	07:49:49	-0.028	-0.371	-0.447	0.252	0.029	0.735	0.000	0.022
x		-0.037	-0.402	-0.368	0.130	-0.075	0.387	0.000	0.029
σ		0.010	0.077	0.080	0.109	0.091	0.368	0.000	0.007
%RSD		25.800	19.170	21.750	84.040	121.800	95.150	0.000	24.060

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:48:23	82.163%	0.140	0.165	82.576%	-0.005	-0.012	-0.101	-0.069
2	07:49:06	82.819%	0.109	0.129	83.277%	-0.007	-0.003	-0.091	-0.053
3	07:49:49	83.683%	0.175	0.110	84.084%	-0.000	-0.002	-0.072	-0.041
x		82.888%	0.141	0.135	83.313%	-0.004	-0.006	-0.088	-0.054
σ		0.763%	0.033	0.028	0.755%	0.004	0.005	0.015	0.014
%RSD		0.920	23.360	20.770	0.906	88.590	95.180	16.750	26.050

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:48:23	87.641%	0.026	0.040	0.032	0.032	0.024	81.619%	81.877%
2	07:49:06	88.088%	0.015	0.032	0.041	0.008	0.016	81.774%	81.536%
3	07:49:49	88.422%	-0.002	0.043	0.034	0.045	0.059	83.719%	82.989%
x		88.050%	0.013	0.038	0.036	0.028	0.033	82.371%	82.134%
σ		0.392%	0.014	0.006	0.005	0.019	0.023	1.170%	0.760%
%RSD		0.445	110.300	14.790	13.070	67.000	69.570	1.420	0.925

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	07:48:23	0.003	0.002	-0.001	0.010	0.008	84.000%
2	07:49:06	0.000	0.001	0.011	0.007	0.011	83.534%
3	07:49:49	-0.000	0.004	0.020	0.018	0.016	83.730%
x		0.001	0.002	0.010	0.012	0.012	83.755%
σ		0.002	0.001	0.010	0.005	0.004	0.234%
%RSD		172.000	58.190	105.100	47.470	38.150	0.279

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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	07:56:40	58.768%	2.628	19.710	19.290	0.000	298.400	14060.000	14370.000
2	07:57:23	58.296%	2.735	19.370	19.050	0.000	302.600	14170.000	14150.000
3	07:58:06	57.974%	2.905	20.220	19.900	0.000	300.100	13960.000	14410.000
x		58.346%	2.756	19.770	19.420	0.000	300.400	14060.000	14310.000
σ		0.400%	0.140	0.424	0.437	0.000	2.142	106.500	139.800
%RSD		0.685	5.070	2.147	2.250	0.000	0.713	0.757	0.977

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:40	43320.000	8237.000	0.000	4674.000	18420.000	17520.000	55.729%	557.100
2	07:57:23	42710.000	8255.000	0.000	4635.000	18250.000	17400.000	55.740%	552.300
3	07:58:06	42970.000	8288.000	0.000	4713.000	18970.000	17480.000	55.284%	549.600
x		43000.000	8260.000	0.000	4674.000	18550.000	17470.000	55.584%	553.000
σ		306.900	25.970	0.000	39.220	377.500	59.380	0.260%	3.766
%RSD		0.714	0.314	0.000	0.839	2.035	0.340	0.469	0.681

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:40	77.190	68.960	5142.000	127200.000	125600.000	57.100	124.700	114.900
2	07:57:23	78.030	68.660	5165.000	127100.000	126800.000	57.340	125.200	115.100
3	07:58:06	77.560	68.600	5202.000	127700.000	126500.000	57.070	123.800	113.100
x		77.590	68.740	5170.000	127300.000	126300.000	57.170	124.600	114.400
σ		0.424	0.192	29.800	278.700	624.000	0.146	0.688	1.117
%RSD		0.547	0.280	0.576	0.219	0.494	0.256	0.552	0.976

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:40	115.600	439.100	436.400	66.680	2.270	4.950	0.000	89.290
2	07:57:23	115.700	443.300	443.900	66.100	1.778	5.777	0.000	89.470
3	07:58:06	112.700	437.700	442.100	66.210	2.042	5.374	0.000	89.120
x		114.700	440.000	440.800	66.330	2.030	5.367	0.000	89.290
σ		1.716	2.916	3.919	0.311	0.246	0.414	0.000	0.170
%RSD		1.496	0.663	0.889	0.468	12.130	7.712	0.000	0.191

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:40	0.000	5.228	5.145	51.070%	1.413	1.387	2.182	2.021
2	07:57:23	0.000	5.217	5.045	50.488%	1.356	1.446	2.072	2.014
3	07:58:06	0.000	4.989	5.341	50.209%	1.366	1.266	2.110	1.980
x		0.000	5.145	5.177	50.589%	1.378	1.367	2.121	2.005
σ		0.000	0.135	0.151	0.439%	0.030	0.092	0.056	0.022
%RSD		0.000	2.619	2.910	0.868	2.180	6.712	2.618	1.110

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:40	55.591%	1.971	0.521	0.528	385.100	382.000	59.516%	59.375%
2	07:57:23	55.411%	1.994	0.466	0.543	384.300	383.700	59.934%	59.572%
3	07:58:06	55.749%	1.911	0.445	0.482	382.400	379.300	59.648%	60.431%
x		55.584%	1.958	0.477	0.518	383.900	381.700	59.699%	59.792%
σ		0.169%	0.043	0.039	0.032	1.411	2.211	0.214%	0.561%
%RSD		0.304	2.183	8.211	6.151	0.368	0.579	0.358	0.939

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:40	0.723	0.721	100.100	102.000	101.600	53.868%
2	07:57:23	0.762	0.698	104.000	103.600	104.300	53.313%
3	07:58:06	0.721	0.768	107.800	107.500	106.900	53.129%
x		0.736	0.729	104.000	104.400	104.300	53.437%
σ		0.023	0.036	3.847	2.814	2.652	0.384%
%RSD		3.165	4.879	3.700	2.696	2.542	0.719

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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	08:04:54	58.120%	2.540	13.550	13.240	0.000	180.000	8391.000	8455.000
2	08:05:37	56.996%	2.361	14.210	13.160	0.000	180.800	8252.000	8396.000
3	08:06:20	56.323%	2.607	13.010	12.720	0.000	184.600	8433.000	8411.000
x		57.146%	2.503	13.590	13.040	0.000	181.800	8359.000	8421.000
σ		0.908%	0.127	0.596	0.281	0.000	2.438	94.930	30.550
%RSD		1.589	5.070	4.387	2.155	0.000	1.341	1.136	0.363

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:54	34630.000	8689.000	0.000	3823.000	13080.000	12480.000	57.390%	564.400
2	08:05:37	34330.000	8621.000	0.000	3879.000	13730.000	12590.000	54.664%	570.200
3	08:06:20	34360.000	8583.000	0.000	3913.000	13460.000	12510.000	53.514%	570.800
x		34440.000	8631.000	0.000	3872.000	13420.000	12530.000	55.189%	568.500
σ		167.000	53.760	0.000	45.330	323.700	57.030	1.991%	3.529
%RSD		0.485	0.623	0.000	1.171	2.412	0.455	3.607	0.621

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:54	72.620	69.540	5181.000	97980.000	97090.000	54.780	93.170	157.200
2	08:05:37	72.890	70.540	5302.000	99030.000	98900.000	55.440	92.230	157.800
3	08:06:20	72.370	70.210	5323.000	99230.000	98410.000	54.670	92.920	157.800
x		72.630	70.100	5269.000	98750.000	98130.000	54.970	92.770	157.600
σ		0.257	0.511	76.430	671.000	936.100	0.418	0.488	0.326
%RSD		0.354	0.729	1.451	0.679	0.954	0.760	0.526	0.207

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:54	160.400	679.300	686.000	34.190	1.424	5.179	0.000	55.760
2	08:05:37	160.800	679.100	679.300	32.180	1.883	5.546	0.000	55.400
3	08:06:20	158.600	697.000	699.400	33.880	1.713	5.335	0.000	56.760
x		159.900	685.100	688.200	33.420	1.673	5.353	0.000	55.970
σ		1.148	10.290	10.230	1.084	0.232	0.184	0.000	0.707
%RSD		0.718	1.502	1.486	3.243	13.860	3.442	0.000	1.263

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:54	0.000	5.298	5.401	51.166%	0.392	0.365	3.402	3.051
2	08:05:37	0.000	5.558	5.707	50.861%	0.407	0.378	3.448	3.143
3	08:06:20	0.000	5.434	5.360	49.710%	0.410	0.364	3.428	3.322
x		0.000	5.430	5.489	50.579%	0.403	0.369	3.426	3.172
σ		0.000	0.130	0.190	0.768%	0.010	0.008	0.023	0.138
%RSD		0.000	2.395	3.453	1.518	2.400	2.122	0.676	4.335

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:54	55.741%	4.062	24.080	23.270	474.800	471.700	60.046%	59.540%
2	08:05:37	55.653%	3.931	23.800	23.920	464.500	464.800	59.515%	59.275%
3	08:06:20	54.066%	4.026	23.900	24.240	468.100	464.800	59.461%	59.440%
x		55.153%	4.006	23.920	23.810	469.200	467.100	59.674%	59.418%
σ		0.942%	0.068	0.142	0.492	5.214	3.997	0.323%	0.134%
%RSD		1.708	1.689	0.593	2.065	1.111	0.856	0.542	0.225

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:54	0.754	0.775	1037.000	1053.000	1078.000	55.621%
2	08:05:37	0.803	0.787	1033.000	1052.000	1078.000	55.160%
3	08:06:20	0.788	0.820	1068.000	1074.000	1096.000	53.419%
x		0.782	0.794	1046.000	1060.000	1084.000	54.733%
σ		0.025	0.023	19.280	12.060	10.420	1.162%
%RSD		3.168	2.938	1.843	1.138	0.961	2.122

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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	08:13:09	54.660%	3.995	14.820	12.660	0.000	358.400	14340.000	12650.000
2	08:13:52	52.497%	4.217	15.020	12.540	0.000	359.600	14040.000	13230.000
3	08:14:35	51.538%	4.156	14.110	13.120	0.000	362.100	14630.000	13650.000
x		52.898%	4.123	14.650	12.770	0.000	360.000	14340.000	13180.000
σ		1.599%	0.115	0.477	0.311	0.000	1.895	294.300	504.500
%RSD		3.023	2.778	3.253	2.438	0.000	0.526	2.053	3.829

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:13:09	71580.000	10160.000	0.000	5624.000	11520.000	10810.000	51.779%	997.600
2	08:13:52	72030.000	10080.000	0.000	5628.000	11830.000	10820.000	50.402%	987.100
3	08:14:35	73160.000	9969.000	0.000	5537.000	11460.000	10820.000	50.034%	990.400
x		72260.000	10070.000	0.000	5596.000	11600.000	10810.000	50.738%	991.700
σ		813.600	95.160	0.000	51.730	200.400	7.681	0.920%	5.387
%RSD		1.126	0.945	0.000	0.924	1.727	0.071	1.813	0.543

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:13:09	148.800	104.900	4925.000	182500.000	181700.000	72.650	142.000	101.600
2	08:13:52	146.400	103.700	4983.000	182200.000	180800.000	71.540	139.000	100.500
3	08:14:35	147.600	104.600	4997.000	182500.000	181500.000	71.720	142.800	100.600
x		147.600	104.400	4968.000	182400.000	181400.000	71.970	141.300	100.900
σ		1.220	0.623	38.090	200.100	473.600	0.594	1.978	0.632
%RSD		0.827	0.597	0.767	0.110	0.261	0.825	1.400	0.626

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:13:09	103.200	327.100	327.300	88.870	2.026	5.530	0.000	58.180
2	08:13:52	101.400	331.300	338.800	90.930	2.393	5.797	0.000	58.550
3	08:14:35	99.060	332.300	337.500	89.070	1.859	6.486	0.000	59.450
x		101.200	330.200	334.500	89.630	2.093	5.937	0.000	58.730
σ		2.054	2.739	6.274	1.136	0.273	0.493	0.000	0.655
%RSD		2.029	0.829	1.875	1.268	13.060	8.308	0.000	1.115

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:13:09	0.000	8.384	8.220	46.760%	0.371	0.349	1.103	0.865
2	08:13:52	0.000	7.912	8.450	45.835%	0.378	0.355	0.907	0.861
3	08:14:35	0.000	8.726	8.515	44.998%	0.405	0.345	0.983	0.971
x		0.000	8.341	8.395	45.864%	0.385	0.350	0.998	0.899
σ		0.000	0.409	0.155	0.881%	0.018	0.005	0.098	0.062
%RSD		0.000	4.899	1.847	1.922	4.730	1.472	9.859	6.929

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:13:09	51.564%	1.395	1.069	0.932	581.500	574.500	54.788%	54.324%
2	08:13:52	52.079%	1.413	1.092	0.997	563.900	565.700	55.712%	55.566%
3	08:14:35	50.912%	1.386	1.034	1.095	576.300	574.300	56.057%	55.676%
x		51.518%	1.398	1.065	1.008	573.900	571.500	55.519%	55.189%
σ		0.585%	0.014	0.029	0.082	9.044	5.038	0.656%	0.751%
%RSD		1.136	0.977	2.750	8.146	1.576	0.881	1.182	1.360

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	08:13:09	1.184	1.175	166.600	165.500	164.700	47.433%
2	08:13:52	1.110	1.130	161.800	162.800	162.900	49.545%
3	08:14:35	1.146	1.158	168.000	168.400	167.400	49.454%
x		1.147	1.154	165.500	165.600	165.000	48.811%
σ		0.037	0.023	3.225	2.795	2.232	1.194%
%RSD		3.213	1.998	1.949	1.688	1.352	2.446

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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	08:21:24	54.172%	3.687	20.190	21.140	0.000	483.400	29370.000	29610.000
2	08:22:07	53.739%	3.945	19.480	20.250	0.000	475.000	28940.000	29150.000
3	08:22:50	52.739%	4.028	20.060	21.110	0.000	489.700	29900.000	29800.000
x		53.550%	3.887	19.910	20.840	0.000	482.700	29410.000	29520.000
σ		0.735%	0.178	0.381	0.504	0.000	7.370	479.600	335.800
%RSD		1.372	4.576	1.912	2.421	0.000	1.527	1.631	1.138

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:21:24	72780.000	8738.000	0.000	9456.000	27890.000	25830.000	53.957%	803.700
2	08:22:07	71630.000	8523.000	0.000	9323.000	28410.000	25970.000	52.860%	794.000
3	08:22:50	72220.000	8587.000	0.000	9439.000	27460.000	26140.000	50.723%	800.200
x		72210.000	8616.000	0.000	9406.000	27920.000	25980.000	52.513%	799.300
σ		577.500	110.200	0.000	72.430	475.700	157.800	1.645%	4.936
%RSD		0.800	1.279	0.000	0.770	1.704	0.608	3.132	0.618

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:21:24	125.500	113.200	4617.000	233900.000	232700.000	96.020	237.000	197.100
2	08:22:07	124.500	112.400	4611.000	231800.000	230300.000	92.990	234.500	191.400
3	08:22:50	122.200	112.100	4667.000	234300.000	236000.000	95.550	235.000	194.900
x		124.000	112.500	4632.000	233300.000	233000.000	94.860	235.500	194.500
σ		1.699	0.580	30.620	1381.000	2844.000	1.631	1.310	2.863
%RSD		1.370	0.515	0.661	0.592	1.221	1.719	0.556	1.472

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:21:24	198.600	568.300	576.700	133.900	1.375	5.300	0.000	87.980
2	08:22:07	194.900	560.200	572.300	132.000	1.252	5.381	0.000	87.480
3	08:22:50	198.200	580.200	593.200	134.300	1.112	4.824	0.000	87.340
x		197.200	569.500	580.700	133.400	1.246	5.168	0.000	87.600
σ		2.043	10.050	10.980	1.247	0.131	0.301	0.000	0.340
%RSD		1.036	1.765	1.891	0.935	10.530	5.828	0.000	0.388

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:21:24	0.000	8.981	8.838	48.250%	0.310	0.249	1.749	1.270
2	08:22:07	0.000	8.853	8.402	47.145%	0.290	0.219	1.595	1.326
3	08:22:50	0.000	8.756	9.068	45.839%	0.272	0.242	0.989	0.978
x		0.000	8.863	8.769	47.078%	0.291	0.237	1.444	1.191
σ		0.000	0.113	0.339	1.207%	0.019	0.016	0.402	0.187
%RSD		0.000	1.275	3.860	2.564	6.430	6.669	27.820	15.660

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:21:24	52.688%	1.526	0.504	0.478	453.200	450.100	58.697%	58.478%
2	08:22:07	52.121%	1.632	0.480	0.432	451.300	446.800	57.897%	57.544%
3	08:22:50	51.406%	1.610	0.463	0.441	447.000	446.800	57.269%	56.489%
x		52.072%	1.589	0.482	0.450	450.500	447.900	57.954%	57.504%
σ		0.643%	0.056	0.021	0.025	3.169	1.930	0.716%	0.995%
%RSD		1.234	3.548	4.269	5.441	0.703	0.431	1.236	1.730

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	08:21:24	1.237	1.247	130.000	128.200	129.500	49.647%
2	08:22:07	1.241	1.243	128.000	127.800	127.700	49.936%
3	08:22:50	1.220	1.268	129.500	128.800	129.500	46.696%
x		1.232	1.253	129.200	128.300	128.900	48.760%
σ		0.011	0.013	1.042	0.517	1.027	1.793%
%RSD		0.915	1.074	0.807	0.403	0.797	3.678

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:40	54.047%	4.397	19.030	19.260	0.000	392.200	24060.000	24360.000
2	08:30:23	52.426%	4.082	20.000	18.670	0.000	389.200	23420.000	23580.000
3	08:31:06	51.044%	3.748	20.860	19.490	0.000	399.400	24490.000	24580.000
x		52.506%	4.075	19.960	19.140	0.000	393.600	23990.000	24170.000
σ		1.503%	0.325	0.918	0.426	0.000	5.244	539.500	527.500
%RSD		2.863	7.964	4.599	2.227	0.000	1.332	2.249	2.182

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:40	74720.000	9051.000	0.000	8170.000	12660.000	12040.000	50.954%	942.500
2	08:30:23	72770.000	8797.000	0.000	8234.000	13030.000	12200.000	49.546%	941.400
3	08:31:06	75030.000	8993.000	0.000	8240.000	13220.000	12290.000	49.478%	953.100
x		74180.000	8947.000	0.000	8215.000	12970.000	12170.000	49.993%	945.700
σ		1224.000	133.500	0.000	38.950	282.600	128.300	0.833%	6.447
%RSD		1.650	1.492	0.000	0.474	2.179	1.054	1.666	0.682

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:40	132.600	108.500	4475.000	243000.000	240000.000	94.800	201.800	172.900
2	08:30:23	132.900	108.400	4504.000	242500.000	241600.000	92.210	194.800	170.700
3	08:31:06	133.000	108.800	4517.000	244300.000	241400.000	93.080	198.100	171.700
x		132.800	108.600	4499.000	243300.000	241000.000	93.360	198.200	171.700
σ		0.176	0.223	21.400	934.700	840.500	1.319	3.519	1.095
%RSD		0.132	0.205	0.476	0.384	0.349	1.412	1.775	0.638

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:40	176.800	480.900	487.300	120.700	1.314	3.791	0.000	62.600
2	08:30:23	173.600	478.300	491.000	117.000	0.977	5.168	0.000	65.120
3	08:31:06	173.300	493.900	498.100	120.100	1.352	4.108	0.000	64.500
x		174.600	484.400	492.100	119.300	1.214	4.356	0.000	64.070
σ		1.939	8.333	5.491	1.991	0.206	0.721	0.000	1.311
%RSD		1.111	1.720	1.116	1.669	16.990	16.560	0.000	2.047

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:40	0.000	10.200	9.464	44.917%	0.268	0.204	1.313	0.964
2	08:30:23	0.000	10.370	10.050	44.144%	0.264	0.173	1.372	1.068
3	08:31:06	0.000	9.838	10.090	43.726%	0.227	0.171	1.268	1.128
x		0.000	10.140	9.869	44.262%	0.253	0.183	1.318	1.053
σ		0.000	0.273	0.352	0.605%	0.023	0.018	0.052	0.083
%RSD		0.000	2.693	3.566	1.366	8.998	9.945	3.952	7.877

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:40	50.732%	1.515	0.423	0.438	430.900	429.500	56.427%	54.855%
2	08:30:23	49.367%	1.557	0.440	0.409	430.200	437.200	55.368%	54.832%
3	08:31:06	49.219%	1.593	0.440	0.395	443.100	440.600	54.829%	54.273%
x		49.773%	1.555	0.435	0.414	434.700	435.800	55.541%	54.653%
σ		0.834%	0.039	0.010	0.022	7.234	5.663	0.813%	0.330%
%RSD		1.676	2.521	2.308	5.279	1.664	1.299	1.464	0.604

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:40	1.302	1.288	135.800	134.200	135.500	46.765%
2	08:30:23	1.264	1.290	135.100	133.700	134.700	48.184%
3	08:31:06	1.323	1.298	139.500	137.700	138.000	47.870%
x		1.297	1.292	136.800	135.200	136.100	47.607%
σ		0.030	0.006	2.388	2.175	1.734	0.745%
%RSD		2.298	0.430	1.746	1.609	1.275	1.565

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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	08:37:56	57.419%	3.557	13.270	13.740	0.000	306.200	11640.000	11640.000
2	08:38:39	55.511%	3.657	14.100	13.450	0.000	310.900	11660.000	11680.000
3	08:39:23	56.751%	3.780	13.630	13.010	0.000	307.500	11430.000	11340.000
x		56.560%	3.665	13.670	13.400	0.000	308.200	11580.000	11560.000
σ		0.969%	0.112	0.420	0.370	0.000	2.423	129.900	185.000
%RSD		1.712	3.051	3.072	2.764	0.000	0.786	1.122	1.601

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:37:56	50710.000	7938.000	0.000	7519.000	3609.000	3441.000	54.575%	330.900
2	08:38:39	50710.000	7909.000	0.000	7651.000	3687.000	3481.000	52.635%	331.000
3	08:39:23	49890.000	7804.000	0.000	7605.000	3746.000	3495.000	51.821%	328.900
x		50440.000	7884.000	0.000	7592.000	3681.000	3472.000	53.011%	330.300
σ		476.300	70.120	0.000	67.290	68.670	27.940	1.415%	1.163
%RSD		0.944	0.889	0.000	0.886	1.866	0.805	2.669	0.352

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:37:56	66.210	73.990	4299.000	80560.000	79730.000	63.860	105.100	80.560
2	08:38:39	65.530	76.840	4379.000	81160.000	80720.000	65.210	104.000	80.600
3	08:39:23	65.150	74.840	4375.000	80480.000	80180.000	61.780	101.200	78.550
x		65.630	75.220	4351.000	80730.000	80210.000	63.620	103.400	79.900
σ		0.538	1.462	45.110	369.200	496.500	1.726	2.028	1.176
%RSD		0.820	1.943	1.037	0.457	0.619	2.714	1.961	1.472

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:37:56	80.510	739.800	751.300	4.967	1.476	5.518	0.000	38.680
2	08:38:39	82.480	770.400	769.300	4.556	1.279	5.296	0.000	40.000
3	08:39:23	79.390	731.100	746.100	4.532	0.880	4.381	0.000	39.710
x		80.790	747.100	755.600	4.685	1.211	5.065	0.000	39.470
σ		1.564	20.670	12.210	0.244	0.304	0.602	0.000	0.695
%RSD		1.936	2.767	1.617	5.215	25.060	11.890	0.000	1.760

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:37:56	0.000	1.097	1.223	49.049%	0.200	0.103	2.522	2.475
2	08:38:39	0.000	1.153	1.120	47.931%	0.192	0.112	2.811	2.375
3	08:39:23	0.000	1.134	1.082	47.091%	0.198	0.098	2.563	2.183
x		0.000	1.128	1.142	48.024%	0.197	0.105	2.632	2.344
σ		0.000	0.028	0.073	0.982%	0.004	0.007	0.156	0.148
%RSD		0.000	2.518	6.360	2.045	2.153	6.835	5.942	6.336

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:37:56	54.116%	0.921	0.187	0.180	383.800	379.700	61.787%	59.954%
2	08:38:39	52.527%	0.920	0.150	0.181	381.000	381.600	62.138%	60.936%
3	08:39:23	51.973%	0.919	0.178	0.171	382.300	380.500	60.372%	58.209%
x		52.872%	0.920	0.171	0.177	382.400	380.600	61.432%	59.700%
σ		1.112%	0.001	0.019	0.006	1.412	0.938	0.935%	1.381%
%RSD		2.104	0.098	11.280	3.167	0.369	0.246	1.522	2.314

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	08:37:56	1.491	1.514	104.900	103.100	104.000	52.739%
2	08:38:39	1.468	1.435	103.500	103.800	103.600	50.729%
3	08:39:23	1.510	1.516	109.100	106.600	106.500	46.503%
x		1.489	1.488	105.800	104.500	104.700	49.991%
σ		0.021	0.046	2.906	1.820	1.559	3.183%
%RSD		1.419	3.119	2.746	1.741	1.489	6.367

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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	08:46:13	53.901%	4.482	17.130	16.120	0.000	429.800	21950.000	22040.000
2	08:46:57	52.007%	4.738	15.770	15.510	0.000	439.300	22180.000	22150.000
3	08:47:40	50.927%	4.745	15.450	16.160	0.000	436.900	22070.000	22220.000
x		52.278%	4.655	16.120	15.930	0.000	435.300	22070.000	22140.000
σ		1.505%	0.150	0.893	0.367	0.000	4.938	113.400	88.100
%RSD		2.880	3.220	5.538	2.304	0.000	1.134	0.514	0.398

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:46:13	86330.000	9685.000	0.000	7636.000	12430.000	11430.000	52.230%	936.100
2	08:46:57	87710.000	9647.000	0.000	7625.000	12370.000	11670.000	51.174%	952.100
3	08:47:40	87730.000	9622.000	0.000	7554.000	12550.000	11680.000	49.358%	933.200
x		87260.000	9651.000	0.000	7605.000	12450.000	11590.000	50.920%	940.500
σ		805.900	31.500	0.000	44.270	90.410	144.000	1.453%	10.200
%RSD		0.924	0.326	0.000	0.582	0.726	1.242	2.853	1.084

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:46:13	176.300	132.400	2951.000	254400.000	254200.000	69.670	170.700	168.800
2	08:46:57	175.500	131.100	2987.000	256000.000	257000.000	70.450	173.100	166.500
3	08:47:40	177.400	132.700	3011.000	259500.000	260600.000	71.440	174.100	168.200
x		176.400	132.100	2983.000	256600.000	257300.000	70.520	172.600	167.800
σ		0.986	0.858	30.090	2615.000	3198.000	0.889	1.781	1.180
%RSD		0.559	0.649	1.009	1.019	1.243	1.260	1.031	0.703

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:46:13	168.800	458.400	464.400	117.500	2.060	6.600	0.000	67.940
2	08:46:57	169.100	465.600	472.500	116.600	2.071	5.481	0.000	69.450
3	08:47:40	167.600	454.100	469.200	119.200	1.970	6.623	0.000	69.680
x		168.500	459.400	468.700	117.800	2.034	6.235	0.000	69.020
σ		0.836	5.791	4.036	1.304	0.055	0.653	0.000	0.946
%RSD		0.496	1.261	0.861	1.107	2.727	10.470	0.000	1.370

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:46:13	0.000	9.765	10.040	46.407%	0.417	0.328	1.060	0.811
2	08:46:57	0.000	9.401	9.270	45.061%	0.380	0.366	1.146	0.801
3	08:47:40	0.000	9.902	9.643	44.796%	0.382	0.334	1.214	0.920
x		0.000	9.689	9.650	45.421%	0.393	0.342	1.140	0.844
σ		0.000	0.259	0.383	0.864%	0.021	0.021	0.078	0.066
%RSD		0.000	2.671	3.972	1.901	5.318	6.020	6.803	7.820

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:46:13	51.845%	1.059	0.330	0.358	553.600	551.700	58.014%	56.606%
2	08:46:57	51.317%	1.088	0.335	0.358	546.800	542.500	57.282%	56.819%
3	08:47:40	50.982%	1.105	0.353	0.281	536.400	540.100	57.808%	56.991%
x		51.381%	1.084	0.339	0.332	545.600	544.800	57.702%	56.805%
σ		0.435%	0.023	0.012	0.045	8.668	6.120	0.377%	0.193%
%RSD		0.847	2.157	3.543	13.480	1.589	1.123	0.654	0.339

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	08:46:13	1.457	1.411	141.600	140.700	140.900	48.234%
2	08:46:57	1.429	1.435	140.200	138.700	140.400	49.236%
3	08:47:40	1.406	1.419	142.200	139.200	140.400	48.407%
x		1.431	1.421	141.300	139.500	140.600	48.626%
σ		0.025	0.012	1.036	1.012	0.301	0.536%
%RSD		1.768	0.854	0.733	0.725	0.214	1.102

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:54:29	57.848%	0.999	3.190	2.739	0.000	92.540	4443.000	4491.000
2	08:55:13	58.106%	0.985	2.997	2.123	0.000	93.070	4325.000	4343.000
3	08:55:56	57.678%	0.972	2.939	2.231	0.000	94.300	4402.000	4427.000
x		57.877%	0.985	3.042	2.364	0.000	93.300	4390.000	4420.000
σ		0.216%	0.013	0.131	0.329	0.000	0.908	60.040	74.390
%RSD		0.373	1.364	4.310	13.910	0.000	0.973	1.368	1.683

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:54:29	18340.000	2050.000	0.000	1561.000	2657.000	2435.000	51.724%	198.600
2	08:55:13	17590.000	1967.000	0.000	1539.000	2558.000	2421.000	50.937%	193.400
3	08:55:56	18090.000	1992.000	0.000	1577.000	2612.000	2443.000	49.528%	195.000
x		18010.000	2003.000	0.000	1559.000	2609.000	2433.000	50.730%	195.700
σ		382.800	42.830	0.000	19.050	49.820	11.400	1.112%	2.671
%RSD		2.126	2.138	0.000	1.222	1.909	0.469	2.193	1.365

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:54:29	35.700	26.700	574.200	51650.000	49590.000	13.970	35.280	34.100
2	08:55:13	34.660	25.910	564.600	50620.000	48600.000	13.590	33.480	33.130
3	08:55:56	34.780	26.130	560.900	50470.000	48780.000	13.340	34.680	32.540
x		35.050	26.240	566.600	50910.000	48990.000	13.640	34.480	33.260
σ		0.569	0.409	6.868	640.300	528.700	0.318	0.916	0.788
%RSD		1.623	1.559	1.212	1.258	1.079	2.332	2.656	2.371

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:54:29	32.510	95.760	96.340	23.110	0.387	1.253	0.000	10.540
2	08:55:13	32.630	91.410	92.930	22.620	0.311	1.314	0.000	10.280
3	08:55:56	32.700	91.070	93.610	21.880	0.390	1.482	0.000	10.240
x		32.620	92.750	94.290	22.540	0.363	1.350	0.000	10.350
σ		0.096	2.615	1.805	0.618	0.045	0.119	0.000	0.160
%RSD		0.293	2.819	1.914	2.744	12.430	8.802	0.000	1.547

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:54:29	66.003%	1.481	1.499	49.212%	0.096	0.067	0.160	0.118
2	08:55:13	66.331%	1.585	1.747	48.601%	0.064	0.075	0.191	0.119
3	08:55:56	65.525%	1.525	1.798	48.255%	0.070	0.054	0.120	0.090
x		65.953%	1.530	1.681	48.690%	0.076	0.066	0.157	0.109
σ		0.405%	0.052	0.160	0.484%	0.017	0.011	0.036	0.016
%RSD		0.614	3.417	9.516	0.995	22.090	16.290	22.920	15.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:54:29	52.682%	0.265	0.053	0.040	113.100	112.000	56.202%	55.998%
2	08:55:13	52.710%	0.225	0.055	0.083	110.500	111.800	54.530%	54.852%
3	08:55:56	52.308%	0.171	0.042	0.073	110.700	111.900	55.280%	54.701%
x		52.567%	0.220	0.050	0.065	111.400	111.900	55.338%	55.184%
σ		0.224%	0.047	0.007	0.023	1.462	0.112	0.837%	0.709%
%RSD		0.427	21.390	14.430	34.650	1.312	0.100	1.513	1.285

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	08:54:29	0.242	0.274	27.530	27.000	27.070	53.040%
2	08:55:13	0.292	0.269	27.450	26.600	26.960	51.396%
3	08:55:56	0.286	0.274	27.480	26.850	27.190	48.295%
x		0.274	0.272	27.480	26.820	27.070	50.911%
σ		0.028	0.003	0.039	0.205	0.117	2.409%
%RSD		10.080	1.092	0.142	0.764	0.431	4.733

240-22562-A-22-B DU 5/1/2013 9:02:04 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:02:47	54.720%	3.966	22.200	22.570	0.000	421.900	21280.000	21450.000
2	09:03:30	53.774%	4.009	22.820	20.900	0.000	443.300	21450.000	21920.000
3	09:04:12	51.380%	4.514	21.700	21.040	0.000	433.800	21630.000	21720.000
x		53.291%	4.163	22.240	21.500	0.000	433.000	21450.000	21700.000
σ		1.721%	0.305	0.558	0.928	0.000	10.720	174.400	234.500
%RSD		3.230	7.323	2.510	4.315	0.000	2.475	0.813	1.081

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:02:47	83590.000	13330.000	0.000	7318.000	12680.000	11640.000	52.127%	983.500
2	09:03:30	84870.000	13160.000	0.000	7412.000	12680.000	11760.000	49.921%	981.000
3	09:04:12	83960.000	13060.000	0.000	7359.000	12610.000	11800.000	50.171%	996.200
x		84140.000	13190.000	0.000	7363.000	12660.000	11740.000	50.740%	986.900
σ		657.800	137.200	0.000	47.000	42.230	87.540	1.208%	8.159
%RSD		0.782	1.041	0.000	0.638	0.334	0.746	2.381	0.827

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:02:47	166.100	124.700	2712.000	226100.000	227100.000	69.220	172.500	160.500
2	09:03:30	164.500	124.300	2723.000	227400.000	226800.000	67.220	168.100	161.100
3	09:04:12	165.300	124.300	2757.000	227500.000	226200.000	68.870	169.700	159.700
x		165.300	124.400	2730.000	227000.000	226700.000	68.440	170.100	160.400
σ		0.799	0.235	23.320	766.100	497.300	1.070	2.230	0.749
%RSD		0.483	0.189	0.854	0.338	0.219	1.564	1.311	0.467

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:02:47	161.000	439.100	451.300	101.600	1.911	5.418	0.000	68.910
2	09:03:30	162.400	437.600	449.300	101.400	1.892	7.380	0.000	70.430
3	09:04:12	160.100	452.700	454.400	100.400	1.925	5.812	0.000	70.220
x		161.200	443.100	451.700	101.100	1.909	6.203	0.000	69.850
σ		1.129	8.311	2.570	0.630	0.016	1.038	0.000	0.823
%RSD		0.701	1.876	0.569	0.623	0.855	16.740	0.000	1.178

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:02:47	0.000	9.326	9.906	45.998%	0.323	0.282	0.975	0.881
2	09:03:30	0.000	9.663	9.425	45.013%	0.301	0.346	1.186	0.899
3	09:04:12	0.000	9.451	9.241	44.152%	0.369	0.285	0.996	0.777
x		0.000	9.480	9.524	45.055%	0.331	0.304	1.053	0.852
σ		0.000	0.170	0.343	0.924%	0.035	0.036	0.116	0.065
%RSD		0.000	1.795	3.606	2.050	10.530	11.960	11.020	7.681

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:02:47	52.548%	2.722	0.478	0.543	543.000	546.800	56.578%	56.120%
2	09:03:30	50.845%	2.117	0.452	0.399	557.500	557.900	57.001%	56.535%
3	09:04:12	49.892%	2.018	0.378	0.385	549.000	551.300	55.551%	55.792%
x		51.095%	2.285	0.436	0.442	549.800	552.000	56.377%	56.149%
σ		1.346%	0.381	0.052	0.087	7.315	5.560	0.746%	0.372%
%RSD		2.634	16.670	11.860	19.740	1.330	1.007	1.322	0.663

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:02:47	1.424	1.372	128.400	126.300	128.100	47.264%
2	09:03:30	1.372	1.399	132.900	128.200	130.000	46.975%
3	09:04:12	1.367	1.375	129.800	127.200	128.400	48.541%
x		1.387	1.382	130.400	127.200	128.900	47.593%
σ		0.031	0.015	2.319	0.924	1.008	0.833%
%RSD		2.257	1.065	1.779	0.726	0.782	1.751

240-22562-A-22-C MS 5/1/2013 9:10:19 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:02	51.299%	45.750	814.400	799.800	0.000	46590.000	68870.000	69400.000
2	09:11:45	51.374%	44.360	811.300	796.600	0.000	45270.000	67150.000	67670.000
3	09:12:28	51.305%	44.780	817.700	789.800	0.000	45830.000	67860.000	67870.000
x		51.326%	44.960	814.500	795.400	0.000	45900.000	67960.000	68320.000
σ		0.042%	0.711	3.194	5.135	0.000	660.200	864.800	945.700
%RSD		0.081	1.582	0.392	0.645	0.000	1.438	1.273	1.384

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:02	126700.000	26660.000	0.000	53070.000	57290.000	53060.000	51.630%	1873.000
2	09:11:45	123200.000	26020.000	0.000	52810.000	56880.000	52910.000	51.657%	1874.000
3	09:12:28	122900.000	25880.000	0.000	52830.000	56090.000	52410.000	50.824%	1863.000
x		124300.000	26190.000	0.000	52900.000	56750.000	52790.000	51.371%	1870.000
σ		2078.000	414.100	0.000	145.800	608.900	341.300	0.473%	5.931
%RSD		1.672	1.582	0.000	0.276	1.073	0.647	0.921	0.317

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:02	670.500	332.400	3149.000	244200.000	242500.000	503.900	600.500	372.000
2	09:11:45	665.500	332.000	3173.000	244900.000	242900.000	505.700	607.900	373.100
3	09:12:28	668.800	329.400	3145.000	241400.000	242200.000	503.200	593.200	365.400
x		668.300	331.300	3156.000	243500.000	242500.000	504.200	600.500	370.200
σ		2.541	1.629	15.060	1864.000	374.300	1.306	7.364	4.194
%RSD		0.380	0.492	0.477	0.766	0.154	0.259	1.226	1.133

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:02	374.300	812.300	835.300	147.100	7.178	14.530	0.000	1076.000
2	09:11:45	378.700	833.200	848.500	148.500	7.338	12.630	0.000	1082.000
3	09:12:28	367.200	820.500	819.000	148.100	7.703	11.200	0.000	1090.000
x		373.400	822.000	834.300	147.900	7.407	12.790	0.000	1082.000
σ		5.786	10.580	14.780	0.735	0.269	1.668	0.000	7.365
%RSD		1.550	1.287	1.772	0.497	3.635	13.040	0.000	0.680

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:02	0.000	985.600	966.600	44.451%	44.480	44.830	41.130	39.000
2	09:11:45	0.000	987.800	982.900	43.878%	44.690	44.200	43.100	39.890
3	09:12:28	0.000	992.000	981.500	43.749%	45.290	44.390	42.500	39.480
x		0.000	988.500	977.000	44.026%	44.820	44.470	42.240	39.460
σ		0.000	3.247	9.003	0.374%	0.422	0.321	1.009	0.445
%RSD		0.000	0.329	0.921	0.850	0.942	0.721	2.388	1.127

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:02	50.084%	702.300	157.600	159.900	2382.000	2415.000	55.857%	55.327%
2	09:11:45	49.996%	707.700	160.100	158.000	2327.000	2342.000	57.603%	55.670%
3	09:12:28	49.354%	719.500	161.600	163.200	2374.000	2363.000	56.012%	54.658%
x		49.811%	709.800	159.800	160.400	2361.000	2374.000	56.491%	55.219%
σ		0.399%	8.804	2.054	2.639	29.260	37.670	0.967%	0.515%
%RSD		0.801	1.240	1.286	1.646	1.239	1.587	1.711	0.933

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:02	45.480	46.340	168.300	168.300	166.200	46.533%
2	09:11:45	45.580	46.380	168.300	170.200	169.000	46.544%
3	09:12:28	44.460	45.610	167.400	163.900	164.400	45.705%
x		45.170	46.110	168.000	167.500	166.500	46.261%
σ		0.623	0.432	0.521	3.218	2.305	0.481%
%RSD		1.379	0.938	0.310	1.921	1.384	1.040

240-22562-A-22-A PDS 5/1/2013 9:18:36 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:19:19	51.925%	51.640	946.300	949.900	0.000	53270.000	72860.000	72780.000
2	09:20:02	52.814%	48.680	938.200	929.600	0.000	51250.000	71200.000	71520.000
3	09:20:45	53.121%	48.440	973.000	951.800	0.000	51300.000	70980.000	71600.000
x		52.620%	49.590	952.500	943.800	0.000	51940.000	71680.000	71970.000
σ		0.621%	1.784	18.180	12.280	0.000	1151.000	1027.000	705.700
%RSD		1.180	3.597	1.909	1.301	0.000	2.216	1.433	0.981

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:19:19	91480.000	19990.000	0.000	59400.000	65620.000	60800.000	49.405%	2080.000
2	09:20:02	88320.000	19500.000	0.000	58320.000	64050.000	60630.000	49.409%	2039.000
3	09:20:45	89380.000	19460.000	0.000	59190.000	65110.000	60760.000	49.111%	2053.000
x		89730.000	19650.000	0.000	58970.000	64930.000	60730.000	49.309%	2057.000
σ		1609.000	291.000	0.000	575.300	798.400	90.140	0.171%	20.850
%RSD		1.793	1.481	0.000	0.976	1.230	0.148	0.347	1.013

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:19:19	731.100	351.100	3544.000	262400.000	262500.000	602.900	692.500	426.500
2	09:20:02	724.300	346.700	3523.000	261200.000	261100.000	598.700	693.000	422.200
3	09:20:45	724.200	346.300	3563.000	261300.000	261700.000	599.700	691.100	423.400
x		726.500	348.100	3544.000	261600.000	261800.000	600.400	692.200	424.000
σ		3.967	2.673	20.280	693.700	720.700	2.183	1.021	2.205
%RSD		0.546	0.768	0.572	0.265	0.275	0.363	0.147	0.520

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:19:19	432.700	909.700	911.400	155.000	10.130	14.850	0.000	1318.000
2	09:20:02	427.800	888.200	891.600	157.900	10.160	14.520	0.000	1245.000
3	09:20:45	428.000	909.100	909.400	156.200	10.350	15.500	0.000	1283.000
x		429.500	902.300	904.100	156.400	10.210	14.960	0.000	1282.000
σ		2.794	12.240	10.920	1.446	0.120	0.502	0.000	36.510
%RSD		0.651	1.357	1.208	0.925	1.177	3.356	0.000	2.848

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:19:19	0.000	1271.000	1265.000	41.899%	54.870	53.870	46.960	40.080
2	09:20:02	0.000	1250.000	1250.000	42.656%	52.380	52.630	48.630	41.320
3	09:20:45	0.000	1280.000	1282.000	42.149%	53.810	52.660	47.400	40.140
x		0.000	1267.000	1266.000	42.235%	53.690	53.060	47.660	40.520
σ		0.000	15.180	16.010	0.385%	1.254	0.709	0.869	0.695
%RSD		0.000	1.198	1.265	0.912	2.336	1.336	1.822	1.715

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:19:19	50.395%	2088.000	455.900	443.600	2607.000	2589.000	56.152%	55.354%
2	09:20:02	51.700%	1998.000	423.500	431.800	2548.000	2549.000	57.133%	57.009%
3	09:20:45	51.018%	2075.000	444.900	452.300	2592.000	2592.000	56.823%	56.842%
x		51.038%	2054.000	441.400	442.600	2582.000	2577.000	56.702%	56.401%
σ		0.653%	48.960	16.500	10.300	30.530	24.220	0.501%	0.911%
%RSD		1.279	2.384	3.738	2.326	1.182	0.940	0.884	1.615

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:19:19	53.240	54.070	155.400	154.600	155.700	47.624%
2	09:20:02	56.430	56.580	159.800	157.500	158.500	47.149%
3	09:20:45	53.980	54.650	158.700	156.600	157.800	48.713%
x		54.550	55.100	158.000	156.200	157.300	47.829%
σ		1.667	1.313	2.264	1.482	1.473	0.802%
%RSD		3.056	2.383	1.433	0.948	0.936	1.676

CCV 801624 5/1/2013 9:26:52 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:34	55.746%	96.460	104.200	105.300	0.000	49860.000	49210.000	49610.000
2	09:28:17	54.056%	96.230	108.900	104.400	0.000	49570.000	49630.000	50360.000
3	09:29:01	55.122%	97.490	105.300	103.600	0.000	50970.000	50170.000	50730.000
x		54.975%	96.730%	106.141%	104.449%	0.000	100.262%	99.341%	100.467%
σ		0.854%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.554	0.693	2.301	0.843	0.000	1.472	0.966	1.144

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:34	509.100	5105.000	0.000	49400.000	49610.000	47270.000	51.536%	108.400
2	09:28:17	525.900	5023.000	0.000	50180.000	50700.000	47370.000	50.420%	104.400
3	09:29:01	533.600	5038.000	0.000	50180.000	51060.000	46930.000	49.616%	100.500
x		104.574%	101.104%	0.000	99.841%	100.919%	94.382%	50.524%	104.447%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.964%	n/a
%RSD		2.392	0.857	0.000	0.903	1.494	0.491	1.908	3.750

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:34	102.100	102.100	490.100	25740.000	25120.000	105.800	106.500	105.400
2	09:28:17	100.400	100.200	484.900	25360.000	24680.000	102.700	102.800	102.600
3	09:29:01	100.100	99.390	486.800	25450.000	24880.000	101.600	101.900	102.200
x		100.842%	100.536%	97.450%	102.072%	99.564%	103.383%	103.722%	103.401%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.063	1.365	0.539	0.775	0.877	2.076	2.340	1.702

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:34	106.500	94.380	92.390	97.660	88.560	92.650	0.000	107.000
2	09:28:17	101.800	88.860	89.230	92.760	86.910	89.260	0.000	106.900
3	09:29:01	102.200	92.230	93.290	95.220	85.350	92.490	0.000	107.000
x		103.494%	91.823%	91.636%	95.209%	86.940%	91.468%	0.000	106.952%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.490	3.032	2.329	2.573	1.847	2.089	0.000	0.077

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:34	48.992%	109.600	109.700	48.915%	100.400	102.200	96.970	95.860
2	09:28:17	48.183%	111.300	111.100	48.646%	99.370	100.300	96.690	94.710
3	09:29:01	47.814%	109.400	108.500	48.367%	98.540	100.000	94.810	95.940
x		48.330%	110.088%	109.779%	48.643%	99.421%	100.845%	96.159%	95.503%
σ		0.602%	n/a	n/a	0.274%	n/a	n/a	n/a	n/a
%RSD		1.246	0.930	1.185	0.563	0.914	1.169	1.223	0.722

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:34	51.150%	105.900	97.880	98.320	104.500	99.630	53.030%	53.018%
2	09:28:17	50.361%	104.600	94.740	93.620	101.200	102.200	52.871%	52.652%
3	09:29:01	50.950%	102.300	93.610	93.300	99.040	101.100	53.627%	53.350%
x		50.820%	104.271%	95.408%	95.081%	101.592%	101.007%	53.176%	53.007%
σ		0.410%	n/a	n/a	n/a	n/a	n/a	0.399%	0.349%
%RSD		0.807	1.752	2.319	2.958	2.705	1.298	0.749	0.659

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:34	101.100	100.700	99.280	98.350	99.160	46.000%
2	09:28:17	102.100	102.500	102.100	102.000	101.200	44.527%
3	09:29:01	99.620	99.470	97.730	97.280	98.140	46.009%
x		100.939%	100.873%	99.694%	99.209%	99.491%	45.512%
σ		n/a	n/a	n/a	n/a	n/a	0.853%
%RSD		1.252	1.511	2.209	2.494	1.556	1.874

CCB9 5/1/2013 9:35:09 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	09:35:52	89.567%	0.000	2.495	2.418	0.000	-3.280	11.940	11.780
2	09:36:35	91.398%	0.021	2.283	2.020	0.000	-1.211	12.390	13.040
3	09:37:18	91.290%	-0.021	2.133	2.002	0.000	2.279	16.340	14.960
x		90.752%	-0.000	2.304	2.147	0.000	-0.738	13.560	13.260
σ		1.027%	0.021	0.182	0.235	0.000	2.810	2.422	1.599
%RSD		1.132	18480.000	7.891	10.940	0.000	381.000	17.860	12.060
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:35:52	5.802	10.360	0.000	19.460	12.710	10.030	85.508%	-0.147
2	09:36:35	6.678	9.673	0.000	19.530	18.190	12.450	87.845%	-0.226
3	09:37:18	8.385	12.010	0.000	22.930	13.900	13.060	86.979%	0.011
x		6.955	10.680	0.000	20.640	14.930	11.850	86.777%	-0.121
σ		1.314	1.201	0.000	1.987	2.880	1.598	1.181%	0.121
%RSD		18.890	11.250	0.000	9.627	19.280	13.490	1.361	99.920
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:35:52	0.027	0.023	0.474	11.340	18.320	0.051	0.029	0.039
2	09:36:35	0.020	-0.002	0.589	15.870	23.350	0.070	0.044	0.015
3	09:37:18	0.040	0.052	0.701	18.940	25.940	0.092	0.022	0.041
x		0.029	0.024	0.588	15.380	22.540	0.071	0.032	0.032
σ		0.011	0.027	0.113	3.827	3.876	0.020	0.011	0.014
%RSD		36.200	110.000	19.290	24.870	17.200	28.780	34.550	44.590
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:35:52	-0.016	-0.502	-0.378	0.053	-0.178	0.038	0.000	0.078
2	09:36:35	0.019	-0.381	-0.374	0.146	-0.023	0.593	0.000	0.099
3	09:37:18	0.005	-0.312	-0.245	0.059	0.174	0.170	0.000	0.118
x		0.003	-0.399	-0.332	0.086	-0.009	0.267	0.000	0.098
σ		0.018	0.096	0.076	0.052	0.176	0.289	0.000	0.020
%RSD		685.100	24.070	22.870	60.430	2022.000	108.400	0.000	20.410
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:35:52	77.239%	0.341	0.344	74.541%	0.004	-0.002	-0.064	-0.060
2	09:36:35	78.193%	0.364	0.325	74.024%	0.014	-0.004	-0.095	-0.061
3	09:37:18	78.182%	0.362	0.319	74.879%	0.015	0.010	-0.067	-0.038
x		77.871%	0.355	0.329	74.482%	0.011	0.001	-0.075	-0.053
σ		0.548%	0.013	0.013	0.430%	0.006	0.007	0.017	0.013
%RSD		0.703	3.627	4.072	0.578	53.040	667.000	22.760	24.560
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:35:52	82.967%	0.509	0.222	0.163	0.123	0.155	82.644%	83.604%
2	09:36:35	84.108%	0.519	0.225	0.186	0.133	0.183	86.004%	85.837%
3	09:37:18	84.518%	0.490	0.227	0.191	0.184	0.205	87.903%	86.894%
x		83.864%	0.506	0.225	0.180	0.147	0.181	85.517%	85.445%
σ		0.804%	0.015	0.002	0.015	0.033	0.025	2.663%	1.680%
%RSD		0.958	2.951	1.094	8.105	22.180	13.890	3.114	1.966
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	09:35:52	0.009	0.013	0.019	0.021	0.022	83.279%		
2	09:36:35	0.012	0.018	0.035	0.039	0.032	84.957%		
3	09:37:18	0.023	0.020	0.035	0.046	0.038	87.127%		
x		0.015	0.017	0.029	0.035	0.031	85.121%		
σ		0.007	0.003	0.009	0.013	0.008	1.929%		
%RSD		49.270	19.290	31.240	37.830	27.100	2.267		

CRI 806392 5/1/2013 9:43:27 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:10	67.925%	0.812	6.261	6.543	0.000	89.300	95.290	93.900
2	09:44:53	66.188%	0.804	6.880	6.377	0.000	91.320	94.820	97.730
3	09:45:36	63.534%	0.816	6.149	6.679	0.000	95.810	99.200	99.000
x		65.882%	81.038%	128.604%	130.660%	0.000	92.143%	96.435%	96.878%
σ		2.211%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.357	0.730	6.122	2.317	0.000	3.614	2.497	2.738

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:10	34.660	450.300	0.000	105.300	87.290	91.990	67.709%	3.734
2	09:44:53	36.020	450.600	0.000	106.100	90.630	97.780	66.763%	4.491
3	09:45:36	36.620	455.600	0.000	105.800	94.360	88.720	67.054%	4.409
x		119.227%	90.436%	0.000	105.726%	90.762%	92.829%	67.175%	84.227%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.485%	n/a
%RSD		2.807	0.659	0.000	0.405	3.898	4.941	0.721	9.869

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:10	0.754	1.709	5.156	51.130	51.470	0.492	0.852	1.807
2	09:44:53	0.876	1.611	5.120	52.280	56.120	0.462	0.888	1.701
3	09:45:36	0.801	1.722	5.153	53.880	55.810	0.438	1.034	1.881
x		81.030%	84.048%	1028.576%	104.857%	108.938%	92.803%	92.474%	89.821%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		7.636	3.613	0.390	2.637	4.774	5.854	10.450	5.052

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:10	1.921	3.736	3.744	1.125	3.533	4.516	0.000	3.996
2	09:44:53	1.656	3.552	3.681	1.048	3.111	3.807	0.000	4.008
3	09:45:36	1.979	3.737	3.571	1.401	3.199	4.494	0.000	3.998
x		92.593%	73.499%	73.302%	119.134%	65.624%	85.444%	0.000	80.009%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		9.279	2.893	2.395	15.600	6.788	9.429	0.000	0.167

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:10	71.964%	4.292	4.263	62.035%	0.926	0.917	0.773	0.968
2	09:44:53	71.960%	4.177	4.162	61.498%	0.921	0.951	0.806	0.984
3	09:45:36	69.208%	4.217	4.513	58.832%	1.024	0.963	0.881	0.805
x		71.044%	84.573%	86.256%	60.788%	95.710%	94.374%	82.011%	91.904%
σ		1.590%	n/a	n/a	1.716%	n/a	n/a	n/a	n/a
%RSD		2.238	1.375	4.181	2.822	6.046	2.487	6.750	10.780

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:10	64.277%	4.880	1.974	1.766	8.986	9.028	64.870%	65.401%
2	09:44:53	63.733%	4.889	1.791	1.857	8.883	9.194	65.143%	64.886%
3	09:45:36	62.895%	5.000	2.019	1.779	9.089	8.823	63.534%	63.401%
x		63.635%	98.457%	96.406%	90.040%	89.859%	90.151%	64.516%	64.563%
σ		0.696%	n/a	n/a	n/a	n/a	n/a	0.861%	1.039%
%RSD		1.095	1.352	6.274	2.745	1.145	2.058	1.334	1.609

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:10	0.844	0.876	0.906	0.897	0.878	66.470%
2	09:44:53	0.816	0.818	0.894	0.926	0.906	65.514%
3	09:45:36	0.845	0.820	0.839	0.921	0.876	62.353%
x		83.486%	83.788%	87.964%	91.472%	88.660%	64.779%
σ		n/a	n/a	n/a	n/a	n/a	2.154%
%RSD		1.946	3.982	4.028	1.661	1.878	3.326

CRI 806392 5/1/2013 9:51:44 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	09:52:27	66.934%	0.730	6.367	5.601	0.000	99.060	102.400	105.200
2	09:53:10	66.129%	1.002	6.331	5.418	0.000	101.800	100.300	103.900
3	09:53:53	66.115%	1.063	6.554	5.479	0.000	104.800	99.810	102.800
x		66.393%	93.173%	128.347%	109.986%	0.000	101.891%	100.863%	103.982%
σ		0.469%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.707	19.000	1.861	1.689	0.000	2.817	1.376	1.154
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:27	37.570	490.900	0.000	129.300	108.000	105.000	56.057%	5.445
2	09:53:10	38.140	485.400	0.000	127.000	121.900	111.000	56.090%	4.423
3	09:53:53	38.030	481.200	0.000	128.100	80.130	108.900	54.539%	4.951
x		126.377%	97.165%	0.000	128.150%	103.354%	108.315%	55.562%	98.793%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.886%	n/a
%RSD		0.787	0.994	0.000	0.887	20.590	2.800	1.595	10.340
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:27	1.108	1.947	5.855	59.130	58.700	0.548	0.991	1.873
2	09:53:10	0.941	2.012	5.782	60.550	60.400	0.550	1.055	2.055
3	09:53:53	0.903	1.913	6.052	61.530	62.870	0.605	0.910	2.020
x		98.388%	97.852%	1179.291%	120.811%	121.315%	113.552%	98.524%	99.147%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		11.110	2.580	2.369	1.998	3.456	5.736	7.401	4.881
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:27	1.932	3.976	3.762	1.187	3.918	4.103	0.000	3.823
2	09:53:10	2.255	3.817	3.836	1.179	3.542	4.319	0.000	3.891
3	09:53:53	2.204	4.320	3.747	1.367	3.369	4.495	0.000	3.817
x		106.516%	80.754%	75.628%	124.429%	72.192%	86.115%	0.000	76.877%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		8.149	6.359	1.261	8.523	7.771	4.557	0.000	1.068
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:27	74.424%	3.926	3.892	60.604%	0.978	0.925	0.973	0.854
2	09:53:10	73.534%	4.036	4.243	59.823%	0.961	0.960	0.910	0.853
3	09:53:53	74.974%	4.059	4.420	59.810%	0.913	0.992	0.739	0.832
x		74.311%	80.136%	83.702%	60.079%	95.058%	95.868%	87.371%	84.607%
σ		0.726%	n/a	n/a	0.455%	n/a	n/a	n/a	n/a
%RSD		0.977	1.776	6.423	0.757	3.550	3.479	13.850	1.478
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:27	63.792%	4.772	1.605	1.738	9.346	8.841	63.653%	64.173%
2	09:53:10	63.202%	4.957	1.861	1.788	9.182	8.915	63.920%	64.504%
3	09:53:53	63.090%	5.054	1.787	1.843	9.138	9.092	64.341%	64.927%
x		63.361%	98.558%	87.540%	89.491%	92.219%	89.493%	63.971%	64.535%
σ		0.377%	n/a	n/a	n/a	n/a	n/a	0.346%	0.378%
%RSD		0.595	2.905	7.518	2.927	1.188	1.444	0.541	0.585
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	09:52:27	0.824	0.839	0.843	0.879	0.881	65.458%		
2	09:53:10	0.863	0.856	0.836	0.881	0.877	65.063%		
3	09:53:53	0.844	0.872	0.882	0.881	0.894	64.395%		
x		84.345%	85.581%	85.350%	88.038%	88.413%	64.972%		
σ		n/a	n/a	n/a	n/a	n/a	0.537%		
%RSD		2.339	1.932	2.929	0.116	1.027	0.827		

CCV 801624 5/1/2013 10:00:01 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:00:44	56.802%	97.360	95.500	94.320	0.000	50330.000	50280.000	50560.000
2	10:01:26	57.055%	97.270	95.430	94.500	0.000	50810.000	50080.000	50430.000
3	10:02:09	55.962%	96.040	98.870	95.460	0.000	49490.000	49240.000	49130.000
x		56.607%	96.890%	96.601%	94.761%	0.000	100.417%	99.738%	100.080%
σ		0.572%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.011	0.762	2.036	0.645	0.000	1.332	1.102	1.573

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:00:44	523.500	5026.000	0.000	50750.000	50080.000	47450.000	53.199%	102.100
2	10:01:26	515.000	5057.000	0.000	50650.000	50010.000	47320.000	51.837%	102.600
3	10:02:09	499.200	4978.000	0.000	49380.000	50040.000	46720.000	52.752%	99.710
x		102.510%	100.409%	0.000	100.515%	100.089%	94.326%	52.596%	101.485%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.694%	n/a
%RSD		2.404	0.787	0.000	1.520	0.068	0.822	1.319	1.527

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:00:44	101.800	100.800	482.100	25360.000	24840.000	103.700	105.400	104.300
2	10:01:26	99.310	101.300	489.900	25580.000	25070.000	105.100	103.500	104.300
3	10:02:09	97.950	99.880	478.600	25030.000	24490.000	101.000	99.580	100.700
x		99.691%	100.652%	96.704%	101.293%	99.195%	103.253%	102.810%	103.098%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.958	0.701	1.189	1.090	1.178	1.996	2.877	2.010

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:00:44	103.400	94.980	93.990	98.940	87.680	93.330	0.000	108.200
2	10:01:26	101.600	94.300	91.690	96.210	87.840	93.410	0.000	107.800
3	10:02:09	100.700	91.930	89.000	95.040	86.600	87.360	0.000	106.100
x		101.904%	93.737%	91.562%	96.731%	87.372%	91.363%	0.000	107.343%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.355	1.705	2.729	2.070	0.770	3.799	0.000	1.033

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:00:44	48.860%	109.000	106.500	49.716%	99.410	100.400	95.430	95.120
2	10:01:26	48.434%	110.400	109.300	49.724%	97.850	100.000	94.130	95.850
3	10:02:09	48.649%	109.000	108.200	49.900%	96.220	98.330	92.090	92.460
x		48.648%	109.462%	108.035%	49.780%	97.825%	99.576%	93.882%	94.475%
σ		0.213%	n/a	n/a	0.104%	n/a	n/a	n/a	n/a
%RSD		0.438	0.728	1.309	0.209	1.630	1.095	1.792	1.890

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:00:44	51.349%	102.700	95.530	95.930	103.700	104.000	53.167%	53.616%
2	10:01:26	51.721%	103.300	96.810	95.600	103.300	101.600	53.557%	53.566%
3	10:02:09	51.528%	101.500	93.730	92.160	99.990	101.200	54.176%	54.502%
x		51.532%	102.484%	95.357%	94.566%	102.318%	102.270%	53.633%	53.894%
σ		0.186%	n/a	n/a	n/a	n/a	n/a	0.509%	0.526%
%RSD		0.361	0.887	1.624	2.208	1.981	1.519	0.949	0.977

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:00:44	96.330	96.480	95.180	95.270	95.890	48.474%
2	10:01:26	98.820	98.490	98.820	97.940	98.490	46.457%
3	10:02:09	97.330	96.330	95.780	96.780	96.530	47.482%
x		97.493%	97.099%	96.592%	96.663%	96.970%	47.471%
σ		n/a	n/a	n/a	n/a	n/a	1.009%
%RSD		1.284	1.242	2.022	1.381	1.393	2.125

CCB10 5/1/2013 10:08:18 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	10:09:01	83.447%	0.009	0.036	0.020	0.000	-2.554	9.414	9.202
2	10:09:44	82.983%	-0.006	0.387	0.061	0.000	1.130	11.380	10.360
3	10:10:27	83.196%	-0.021	0.146	-0.360	0.000	2.861	13.180	11.860
x		83.209%	-0.006	0.190	-0.093	0.000	0.479	11.320	10.470
σ		0.232%	0.015	0.179	0.233	0.000	2.766	1.885	1.333
%RSD		0.279	264.400	94.410	249.900	0.000	577.800	16.650	12.730

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:01	2.617	3.643	0.000	23.380	11.430	7.332	76.465%	-0.255
2	10:09:44	2.768	3.703	0.000	27.100	1.451	11.360	73.459%	-0.353
3	10:10:27	2.802	3.965	0.000	29.980	11.620	10.920	75.602%	-0.294
x		2.729	3.771	0.000	26.820	8.164	9.871	75.175%	-0.301
σ		0.098	0.171	0.000	3.308	5.815	2.210	1.548%	0.049
%RSD		3.605	4.544	0.000	12.330	71.220	22.390	2.059	16.410

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:01	-0.004	-0.016	0.421	5.742	9.065	0.038	0.010	0.008
2	10:09:44	0.013	-0.011	0.467	7.320	10.390	0.051	0.012	0.036
3	10:10:27	-0.010	-0.026	0.516	7.820	11.110	0.038	0.034	0.006
x		-0.001	-0.018	0.468	6.961	10.190	0.042	0.019	0.016
σ		0.012	0.007	0.048	1.085	1.035	0.008	0.013	0.017
%RSD		1820.000	41.380	10.160	15.580	10.170	18.130	71.210	102.400

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:01	0.023	-0.341	-0.447	0.055	0.008	0.119	0.000	0.043
2	10:09:44	-0.020	-0.377	-0.427	0.427	0.034	1.238	0.000	0.058
3	10:10:27	0.008	-0.417	-0.450	-0.004	-0.028	-0.161	0.000	0.053
x		0.004	-0.378	-0.441	0.159	0.005	0.399	0.000	0.052
σ		0.021	0.038	0.013	0.233	0.031	0.740	0.000	0.008
%RSD		586.000	10.120	2.845	146.500	657.200	185.500	0.000	14.730

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:01	79.989%	0.214	0.176	73.121%	-0.002	-0.006	-0.037	-0.020
2	10:09:44	79.731%	0.135	0.179	72.688%	0.006	0.002	-0.086	-0.060
3	10:10:27	81.139%	0.227	0.183	74.646%	0.004	0.001	-0.082	-0.069
x		80.286%	0.192	0.180	73.485%	0.003	-0.001	-0.068	-0.050
σ		0.750%	0.050	0.003	1.028%	0.004	0.005	0.027	0.026
%RSD		0.934	26.130	1.903	1.399	149.800	381.100	39.400	51.990

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:01	78.659%	0.129	0.058	0.065	0.026	0.044	80.590%	80.874%
2	10:09:44	79.166%	0.129	0.057	0.065	0.046	0.047	81.426%	81.048%
3	10:10:27	81.948%	0.131	0.097	0.051	0.069	0.065	82.809%	82.766%
x		79.924%	0.130	0.071	0.060	0.047	0.052	81.608%	81.563%
σ		1.771%	0.001	0.023	0.008	0.021	0.011	1.121%	1.046%
%RSD		2.216	1.078	32.200	13.620	45.290	21.600	1.373	1.282

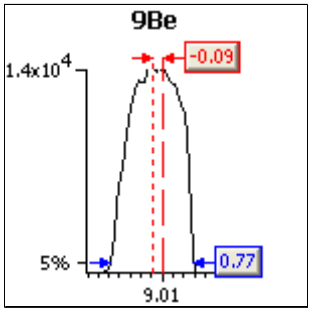
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:01	0.012	0.009	0.018	0.025	0.023	81.482%
2	10:09:44	0.017	0.012	0.016	0.029	0.025	81.525%
3	10:10:27	0.007	0.017	0.020	0.029	0.029	83.246%
x		0.012	0.013	0.018	0.028	0.025	82.084%
σ		0.005	0.004	0.002	0.002	0.003	1.006%
%RSD		38.790	31.850	10.860	7.421	12.160	1.226

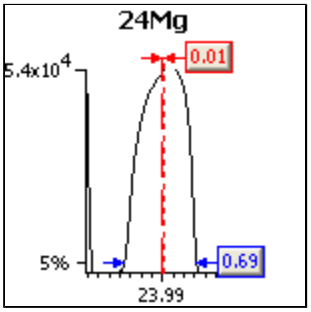
Performance Report

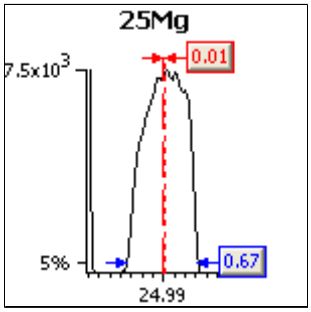
Sample details
Sample name : ITUNE
Acquired at : 4/30/2013 7:08:06 PM
Report name : EPA ILMO5.2/6020A 2.1 [3/15/2013 11:49:53 AM]

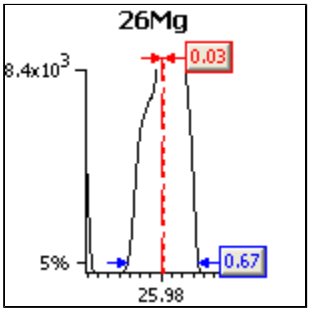
Mass Calibration verification

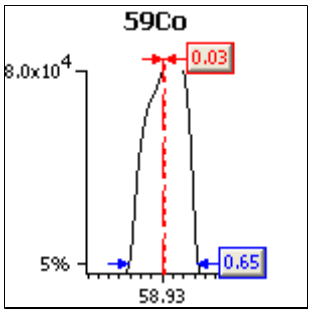
Acquisition parameters
Sweeps : 25
Dwell : 2.0 mSecs
Point spacing : 0.02 amu
Peak width measured at 5% of the peak maximum

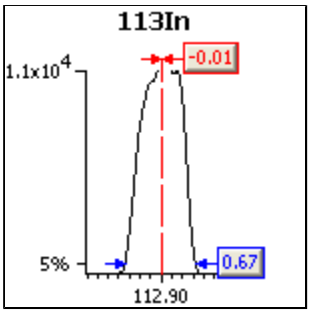


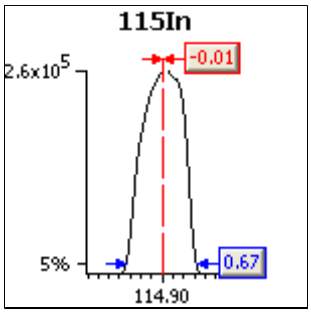


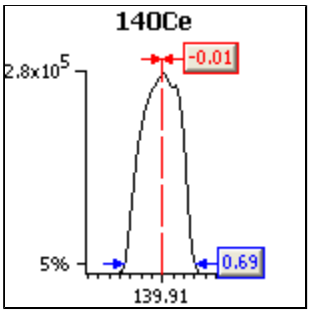


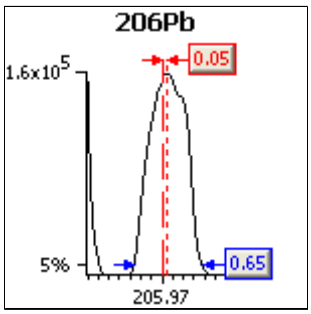


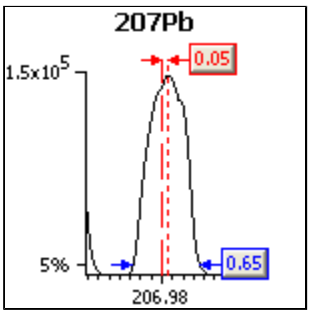


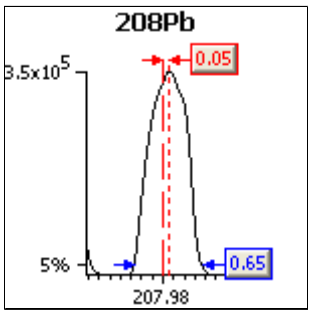












Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.90	0.45	0.10	0.77	-0.09
24Mg	0.90	0.45	0.10	0.69	0.01
25Mg	0.90	0.45	0.10	0.67	0.01
26Mg	0.90	0.45	0.10	0.67	0.03
59Co	0.90	0.45	0.10	0.65	0.03
113In	0.90	0.45	0.10	0.67	-0.01
115In	0.90	0.45	0.10	0.67	-0.01
140Ce	0.90	0.45	0.10	0.69	-0.01
206Pb	0.90	0.45	0.10	0.65	0.05
207Pb	0.90	0.45	0.10	0.65	0.05
208Pb	0.90	0.45	0.10	0.65	0.05

Sample details
Sample name : ITUNE
Acquired at : 4/30/2013 7:08:06 PM
Report name : EPA ILMO5.2/6020A 2.1 [3/15/2013 11:49:53 AM]

Tune conditions

Major	
Extraction	-176
Lens 1	1.2
Focus	22.0
D1	-40.0
Pole Bias	3.0
Hexapole Bias	-3.0
Nebuliser	0.87
Sampling Depth	150

Minor	
Lens 2	-24.3
Lens 3	-156.1
Forward power	1302
Horizontal	72
Vertical	539
D2	-160
DA	-80.0
Cool	18.0
Auxiliary	0.90

Global	
Standard resolution	n/a
High resolution	n/a
Analogue Detector	n/a
PC Detector	n/a

Add. Gases	
He/H2	0.00
He/NH3	0.00

Sensitivity and stability results

Acquisition parameters
Sweeps : 150

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	56Ar O	59Co	137Ba++
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	5.0%	5.0%	5.0%	5.0%	-	5.0%	-
	Countrate	-	>500	>500	>500	>500	-	>5000	-
1	7:08:54 PM	0	14432	54069	6959	8393	80358	83074	0
2	7:10:19 PM	0	14566	55370	7245	8550	83144	83851	1
3	7:11:44 PM	0	14732	54993	7176	8400	82924	83283	1
4	7:13:09 PM	0	14862	55338	7160	8602	83040	84444	1
5	7:14:35 PM	0	14469	56064	7363	8584	85745	83213	1
x		0	14612	55167	7180	8506	83042	83573	1
σ		0.10	181.66	726.58	147.51	101.34	1906.34	569.82	0.30
%RSD		52.973	1.243	1.317	2.054	1.191	2.296	0.682	55.902

Run	Time	138Ba++	101Bkg	113In	115In	138Ba	140Ce	156Ce O	206Pb
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	-	5.0%	5.0%	-	5.0%	-	5.0%
	Countrate	-	-	>200	>5000	-	>10000	-	>500
1	7:08:54 PM	8	0	11031	264233	998	279200	5117	152356
2	7:10:19 PM	9	0	10993	264203	1101	278094	5170	150889
3	7:11:44 PM	13	0	10980	263374	1077	277643	5082	150852
4	7:13:09 PM	10	0	10972	262906	1091	277454	5236	149878
5	7:14:35 PM	8	0	11193	261653	1219	275956	5073	146127
x		10	0	11034	263274	1098	277670	5136	150020
σ		2.03	0.06	91.90	1067.48	79.38	1172.94	67.91	2349.36
%RSD		21.251	55.902	0.833	0.405	7.233	0.422	1.322	1.566

Run	Time	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0
Limits	%RSD	5.0%	5.0%	-
	Countrate	>500	>500	<2500
1	7:08:54 PM	139624	329835	0
2	7:10:19 PM	138596	328997	0
3	7:11:44 PM	137038	324206	0
4	7:13:09 PM	137325	324172	0
5	7:14:35 PM	133678	317619	0
x		137252	324966	0
σ		2250.33	4877.09	0.06
%RSD		1.640	1.501	63.888

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0500
1	7:08:54 PM	0
2	7:10:19 PM	0

3	7:11:44 PM	0
4	7:13:09 PM	0
5	7:14:35 PM	0
x		0.0185
σ		0.00
%RSD		1.2931

Result : The performance report passed.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Batch Number: 81357 Batch Start Date: 04/10/13 14:15 Batch Analyst: Elshaw, Dale

Batch Method: 7471A Batch End Date: 04/10/13 14:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 00490	MTHGCALW 00351	MTKMN04W 00042	
MB 240-81357/1		7471A, 7471/DOD		0.60 g	100 mL	5 mL		15 mL	
LCS 240-81357/2		7471A, 7471/DOD		0.60 g	100 mL	5 mL	5 mL	15 mL	
240-22660-D-6-A	079SB-0082M-0001 ,0002-SO	7471A, 7471/DOD	T	0.54 g	100 mL	5 mL		15 mL	
240-22660-D-6-D DU	079SB-0082M-0001 ,0002-SO	7471A, 7471/DOD	T	0.54 g	100 mL	5 mL		15 mL	
240-22660-D-6-B MS	079SB-0082M-0001 ,0002-SO	7471A, 7471/DOD	T	0.54 g	100 mL	5 mL	1 mL	15 mL	
240-22660-C-1-A	079SB-0076M-0001 -SO	7471A, 7471/DOD	T	0.60 g	100 mL	5 mL		15 mL	
240-22660-C-2-A	079SB-0077M-0001 -SO	7471A, 7471/DOD	T	0.64 g	100 mL	5 mL		15 mL	
240-22660-C-3-A	079SB-0079M-0001 -SO	7471A, 7471/DOD	T	0.59 g	100 mL	5 mL		15 mL	
240-22660-C-4-A	079SB-0080M-0001 -SO	7471A, 7471/DOD	T	0.64 g	100 mL	5 mL		15 mL	
240-22660-C-5-A	079SB-0081M-0001 -SO	7471A, 7471/DOD	T	0.64 g	100 mL	5 mL		15 mL	
240-22660-C-7-A	079SB-0083M-0001 -SO	7471A, 7471/DOD	T	0.62 g	100 mL	5 mL		15 mL	
240-22660-C-8-A	079SB-0084M-0001 -SO	7471A, 7471/DOD	T	0.58 g	100 mL	5 mL		15 mL	

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	g228-2i025
Pipette ID	383364-383366-383389
Digestion Tube/Cup Lot #	122612

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 Canton Job No.: 240-22660-1

SDG No.:

Batch Number: 81478 Batch Start Date: 04/11/13 09:05 Batch Analyst: Sutherland, Aaron

Batch Method: 7471A Batch End Date: 04/11/13 09:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 00491	MTHGCALW 00352	MTHgStd 00009	MTKMN04W 00042
ICV 240-81478/7		7471A, 7471/DOD		100 mL	100 mL	5 mL		0.25 mL	15 mL
ICB 240-81478/8		7471A, 7471/DOD		100 mL	100 mL	5 mL			15 mL
CRA 240-81478/9		7471A, 7471/DOD		100 mL	100 mL	5 mL	0.2 mL		15 mL
CCV 240-81478/10		7471A, 7471/DOD		100 mL	100 mL	5 mL	5 mL		15 mL
CCB 240-81478/11		7471A, 7471/DOD		100 mL	100 mL	5 mL			15 mL

Batch Notes	
Pipette ID	383366-383364
Digestion Tube/Cup Lot #	122612

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Batch Number: 81545 Batch Start Date: 04/11/13 15:00 Batch Analyst: Elshaw, Dale

Batch Method: 7471A Batch End Date: 04/11/13 15:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 00491	MTHGCALW 00352	MTKMN04W 00042	
MB 240-81545/1		7471A, 7471/DOD		0.60 g	100 mL	5 mL		15 mL	
LCS 240-81545/2		7471A, 7471/DOD		0.60 g	100 mL	5 mL	5 mL	15 mL	
240-22660-F-15-A	079SB-0091M-0001,0002-SO	7471A, 7471/DOD	T	0.56 g	100 mL	5 mL		15 mL	
240-22660-F-15-D DU	079SB-0091M-0001,0002-SO	7471A, 7471/DOD	T	0.56 g	100 mL	5 mL		15 mL	
240-22660-F-15-B MS	079SB-0091M-0001,0002-SO	7471A, 7471/DOD	T	0.56 g	100 mL	5 mL	1 mL	15 mL	
240-22660-C-9-A	079SB-0085M-0001-SO	7471A, 7471/DOD	T	0.60 g	100 mL	5 mL		15 mL	
240-22660-C-10-A	079SB-0086M-0001-SO	7471A, 7471/DOD	T	0.54 g	100 mL	5 mL		15 mL	
240-22660-C-11-A	079SB-0087M-0001-SO	7471A, 7471/DOD	T	0.66 g	100 mL	5 mL		15 mL	
240-22660-C-12-A	079SB-0088M-0001-SO	7471A, 7471/DOD	T	0.61 g	100 mL	5 mL		15 mL	
240-22660-C-13-A	079SB-0089M-0001-SO	7471A, 7471/DOD	T	0.57 g	100 mL	5 mL		15 mL	
240-22660-C-14-A	079SB-0090M-0001-SO	7471A, 7471/DOD	T	0.58 g	100 mL	5 mL		15 mL	
240-22660-C-16-A	079SB-0092M-0001-SO	7471A, 7471/DOD	T	0.56 g	100 mL	5 mL		15 mL	
240-22660-C-17-A	079SB-0093M-0001-SO	7471A, 7471/DOD	T	0.60 g	100 mL	5 mL		15 mL	
240-22660-C-18-A	079SB-0095M-0001-SO	7471A, 7471/DOD	T	0.57 g	100 mL	5 mL		15 mL	
240-22660-C-19	079SB-0096-0001-SO	7471A, 7471/DOD	T	0.70 g	100 mL	5 mL		15 mL	
240-22660-C-20-A	079SB-0107M-0001-SO	7471A, 7471/DOD	T	0.67 g	100 mL	5 mL		15 mL	
240-22660-C-21-A	079SB-0108M-0001-SO	7471A, 7471/DOD	T	0.67 g	100 mL	5 mL		15 mL	
240-22660-C-22-A	079SB-0110M-0001-SO	7471A, 7471/DOD	T	0.57 g	100 mL	5 mL		15 mL	
240-22660-C-23-A	079SB-0111M-0001-SO	7471A, 7471/DOD	T	0.56 g	100 mL	5 mL		15 mL	
240-22660-C-24-A	079SB-0112M-0001-SO	7471A, 7471/DOD	T	0.53 g	100 mL	5 mL		15 mL	
240-22660-C-25-A	079SB-0113M-0001-SO	7471A, 7471/DOD	T	0.55 g	100 mL	5 mL		15 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Batch Number: 81545 Batch Start Date: 04/11/13 15:00 Batch Analyst: Elshaw, Dale

Batch Method: 7471A Batch End Date: 04/11/13 15:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 00491	MTHGCALW 00352	MTKMN04W 00042	
240-22660-C-26-A	079SB-0114M-0001-SO	7471A, 7471/DOD	T	0.66 g	100 mL	5 mL		15 mL	
240-22660-C-27-A	079SB-0116M-0001-SO	7471A, 7471/DOD	T	0.63 g	100 mL	5 mL		15 mL	

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	g228-2i025
Pipette ID	383364-383366-383389
Digestion Tube/Cup Lot #	122612

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 Canton Job No.: 240-22660-1

SDG No.:

Batch Number: 81976 Batch Start Date: 04/15/13 16:00 Batch Analyst: Sutherland, Aaron

Batch Method: 7471A Batch End Date: 04/15/13 16:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 00492	MTHGCALW 00354	MTKMN04W 00042	
MB 240-81976/1		7471A, 7471/DOD		0.60 g	100 mL	5 mL		15 mL	
LCS 240-81976/2		7471A, 7471/DOD		0.60 g	100 mL	5 mL	5 mL	15 mL	
240-22660-C-28-A	079SB-0117M-0001-SO	7471A, 7471/DOD	T	0.57 g	100 mL	5 mL		15 mL	

Batch Notes	
Balance ID	b 038
Blank Soil Lot Number	f556-2f002
Pipette ID	383364-383366-383389
Digestion Tube/Cup Lot #	122612

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 Canton Job No.: 240-22660-1

SDG No.:

Batch Number: 82099 Batch Start Date: 04/16/13 09:55 Batch Analyst: Sutherland, Aaron

Batch Method: 7471A Batch End Date: 04/16/13 10:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 00493	MTHGCALW 00355	MTHgStd 00009	MTKMN04W 00042
ICV 240-82099/7		7471A, 7471/DOD		100 mL	100 mL	5 mL		0.25 mL	15 mL
ICB 240-82099/8		7471A, 7471/DOD		100 mL	100 mL	5 mL			15 mL
CRA 240-82099/9		7471A, 7471/DOD		100 mL	100 mL	5 mL	0.2 mL		15 mL
CCV 240-82099/10		7471A, 7471/DOD		100 mL	100 mL	5 mL	5 mL		15 mL
CCB 240-82099/11		7471A, 7471/DOD		100 mL	100 mL	5 mL			15 mL

Batch Notes	
Pipette ID	383366-383364-383389
Digestion Tube/Cup Lot #	612122

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Batch Number: 68898 Batch Start Date: 04/11/13 12:30 Batch Analyst: Haluck, Caitlyn

Batch Method: 3050B Batch End Date: 04/11/13 14:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MTAPITTICPMS 00014	MTAPITTMSA 00014	MTAPITTMSC 00020
MB 180-68898/1		3050B, 6020/DOD		NO %SOLIDS FOUND	00001.50 g	100 mL			
LCS 180-68898/2		3050B, 6020/DOD		NO %SOLIDS FOUND	00001.03 g	100 mL	1 mL	1 mL	1 mL
240-22660-B-1	079SB-0076M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.02 g	100 mL			
240-22660-B-2	079SB-0077M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.00 g	100 mL			
240-22660-B-3	079SB-0079M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00000.99 g	100 mL			
240-22660-B-4	079SB-0080M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00000.99 g	100 mL			
240-22660-B-5	079SB-0081M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00000.99 g	100 mL			
240-22660-C-6	079SB-0082M-0001 ,0002-SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.03 g	100 mL			
240-22660-A-6 DU	079SB-0082M-0001 ,0002-SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.00 g	100 mL			
240-22660-A-6 MS	079SB-0082M-0001 ,0002-SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.01 g	100 mL	1 mL	1 mL	1 mL
240-22660-B-7	079SB-0083M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.01 g	100 mL			
240-22660-B-8	079SB-0084M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.00 g	100 mL			
240-22660-B-9	079SB-0085M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.03 g	100 mL			
240-22660-B-10	079SB-0086M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.00 g	100 mL			
240-22660-B-11	079SB-0087M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.02 g	100 mL			
240-22660-B-12	079SB-0088M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.01 g	100 mL			
240-22660-B-13	079SB-0089M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.01 g	100 mL			
240-22660-B-14	079SB-0090M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.00 g	100 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Batch Number: 68898 Batch Start Date: 04/11/13 12:30 Batch Analyst: Haluck, Caitlyn

Batch Method: 3050B Batch End Date: 04/11/13 14:30

Batch Notes	
Analyst	CH
Balance ID	P1856710
Batch Comment	METALS A4
Blank Soil Lot Number	783730
First End time	1430
Filter Paper Lot Number	6326666B
Hydrogen peroxide lot number	10ML 781344
Logbook ID for diluted Nitric	10ML 785050
Lot # of Nitric Acid	5ML 790263
Hot Block ID number	#10
Nominal Amount Used	1.0 g
Oven, Bath or Block Temperature 1	95 Degrees C
Pipette ID	L1201611U
Perform Calculation (0=No, 1=Yes)	1.0
First Start time	1230
Temperature	95 Degrees C
ID number of the thermometer	IP9 (0.0) C2
Digestion Tube/Cup Lot #	MH21KK06
Uncorrected Temperature	95 Celsius

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.: 240-22660-1

SDG No.:

Batch Number: 68991 Batch Start Date: 04/12/13 09:30 Batch Analyst: Ferguson, Caitlin N

Batch Method: 3050B Batch End Date: 04/12/13 13:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MTAPITTICPMS 00014	MTAPITTMSA 00014	MTAPITTMSC 00020
MB 180-68991/1		3050B, 6020/DOD		NO %SOLIDS FOUND	00001.08 g	100 mL			
LCS 180-68991/2		3050B, 6020/DOD		NO %SOLIDS FOUND	00001.21 g	100 mL	1 mL	1 mL	1 mL
240-22660-C-15	079SB-0091M-0001 ,0002-SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.14 g	100 mL			
240-22660-A-15 DU	079SB-0091M-0001 ,0002-SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.12 g	100 mL			
240-22660-A-15 MS	079SB-0091M-0001 ,0002-SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.16 g	100 mL	1 mL	1 mL	1 mL
240-22660-B-16	079SB-0092M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.08 g	100 mL			
240-22660-B-17	079SB-0093M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.08 g	100 mL			
240-22660-B-18	079SB-0095M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.08 g	100 mL			
240-22660-B-19	079SB-0096-0001- SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.24 g	100 mL			
240-22660-B-20	079SB-0107M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.07 g	100 mL			
240-22660-B-21	079SB-0108M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.05 g	100 mL			
240-22660-B-22	079SB-0110M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.20 g	100 mL			
240-22660-B-23	079SB-0111M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.07 g	100 mL			
240-22660-B-24	079SB-0112M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.16 g	100 mL			
240-22660-B-25	079SB-0113M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.08 g	100 mL			
240-22660-B-26	079SB-0114M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.03 g	100 mL			
240-22660-B-27	079SB-0116M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.24 g	100 mL			
240-22660-B-28	079SB-0117M-0001 -SO	3050B, 6020/DOD	T	NO %SOLIDS FOUND	00001.15 g	100 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 240-22660-1

SDG No.:

Batch Number: 68991 Batch Start Date: 04/12/13 09:30 Batch Analyst: Ferguson, Caitlin N

Batch Method: 3050B Batch End Date: 04/12/13 13:30

Batch Notes	
Analyst	CNF
Balance ID	P1856710
Batch Comment	METALS A4
Blank Soil Lot Number	783730
First End time	13:30
Filter Paper Lot Number	6326666B
Hydrogen peroxide lot number	10mL 781344
Logbook ID for diluted Nitric	10mL 785050
Lot # of Nitric Acid	5mL 790265
Hot Block ID number	#10
Nominal Amount Used	1.0 g
Oven, Bath or Block Temperature 1	95 Degrees C
Pipette ID	J1201611U
Person's name who witnessed reagent drop	CNF
Perform Calculation (0=No, 1=Yes)	1
First Start time	09:30
Temperature	95 Degrees C
ID number of the thermometer	IP9 (0.0) E4
Digestion Tube/Cup Lot #	MH21KK06 / 121015
Uncorrected Temperature	95 Celsius

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

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-22660-1

SDG No.:

Project: RVAAP - ECC

Client Sample ID	Lab Sample ID
079SB-0076M-0001-SO	240-22660-1
079SB-0077M-0001-SO	240-22660-2
079SB-0079M-0001-SO	240-22660-3
079SB-0080M-0001-SO	240-22660-4
079SB-0081M-0001-SO	240-22660-5
079SB-0082M-0001,0002-SO	240-22660-6
079SB-0083M-0001-SO	240-22660-7
079SB-0084M-0001-SO	240-22660-8
079SB-0085M-0001-SO	240-22660-9
079SB-0086M-0001-SO	240-22660-10
079SB-0087M-0001-SO	240-22660-11
079SB-0088M-0001-SO	240-22660-12
079SB-0089M-0001-SO	240-22660-13
079SB-0090M-0001-SO	240-22660-14
079SB-0091M-0001,0002-SO	240-22660-15
079SB-0092M-0001-SO	240-22660-16
079SB-0093M-0001-SO	240-22660-17
079SB-0095M-0001-SO	240-22660-18
079SB-0096-0001-SO	240-22660-19
079SB-0107M-0001-SO	240-22660-20
079SB-0108M-0001-SO	240-22660-21
079SB-0110M-0001-SO	240-22660-22
079SB-0111M-0001-SO	240-22660-23
079SB-0112M-0001-SO	240-22660-24
079SB-0113M-0001-SO	240-22660-25
079SB-0114M-0001-SO	240-22660-26
079SB-0116M-0001-SO	240-22660-27
079SB-0117M-0001-SO	240-22660-28
068SB-0057M-0001-SO	240-22660-30

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-22660-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture LOQ Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-22660-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Moisture		10	
Percent Solids		10	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton   Job No.: 240-22660-1

SDG No.:

Instrument ID: NOEQUIP   Method: Moisture

Start Date: 04/08/2013 11:14   End Date: 04/08/2013 11:14

Lab Sample ID	D/F	Type	Time	Analytes: % Sol	Analytes: Moist
ZZZZZZ			11:14		
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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/08/2013 11:14 End Date: 04/08/2013 11:14

Lab Sample ID	D/F	Type	Time	Analytes																			
				%Sol	Moist																		
ZZZZZZ			11:14																				
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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton

Job No.: 240-22660-1

SDG No.:

Instrument ID: NOEQUIP

Method: Moisture

Start Date: 04/08/2013 11:14

End Date: 04/08/2013 11:14

				Analytes																			
Lab Sample ID	D/F	Type	Time	%Sol	Moist																		
ZZZZZZ			11:14																				
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ZZZZZZ			11:14																				
240-22660-1	1	T	11:14	X	X																		
240-22660-2	1	T	11:14	X	X																		
240-22660-3	1	T	11:14	X	X																		
240-22660-4	1	T	11:14	X	X																		
240-22660-5	1	T	11:14	X	X																		
240-22660-5 DU	1	T	11:14	X	X																		
240-22660-6	1	T	11:14	X	X																		
240-22660-6 DU	1	T	11:14	X	X																		
240-22660-7	1	T	11:14	X	X																		
240-22660-8	1	T	11:14	X	X																		
240-22660-9	1	T	11:14	X	X																		
240-22660-10	1	T	11:14	X	X																		
240-22660-11	1	T	11:14	X	X																		
240-22660-12	1	T	11:14	X	X																		
240-22660-13	1	T	11:14	X	X																		
240-22660-14	1	T	11:14	X	X																		
240-22660-15	1	T	11:14	X	X																		
240-22660-15 DU	1	T	11:14	X	X																		
240-22660-16	1	T	11:14	X	X																		
240-22660-17	1	T	11:14	X	X																		
240-22660-18	1	T	11:14	X	X																		
240-22660-19	1	T	11:14	X	X																		

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/08/2013 11:14 End Date: 04/08/2013 11:14

				Analytes																			
Lab Sample ID	D/F	Type	Time	%Sol	Moist																		
240-22660-20	1	T	11:14	X	X																		
240-22660-21	1	T	11:14	X	X																		
240-22660-22	1	T	11:14	X	X																		
240-22660-23	1	T	11:14	X	X																		
240-22660-24	1	T	11:14	X	X																		
240-22660-25	1	T	11:14	X	X																		
240-22660-26	1	T	11:14	X	X																		
240-22660-27	1	T	11:14	X	X																		
240-22660-28	1	T	11:14	X	X																		
240-22660-30	1	T	11:14	X	X																		
ZZZZZZ			11:14																				
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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton

Job No.: 240-22660-1

SDG No.:

Instrument ID: NOEQUIP

Method: Moisture

Start Date: 04/08/2013 11:14

End Date: 04/08/2013 11:14

Lab Sample ID	D/F	Type	Time	Analytes																			
				%Sol	Moist																		
ZZZZZZ			11:14																				
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Prep Types

T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-22660-1

SDG No.:

Batch Number: 80985 Batch Start Date: 04/08/13 11:14 Batch Analyst: Stiller, Jennifer

Batch Method: Moisture Batch End Date: 04/09/13 10:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-22660-A-1	079SB-0076M-0001-SO	Moisture	T	4.4306 g	8.7723 g	8.7300 g			
240-22660-A-2	079SB-0077M-0001-SO	Moisture	T	4.4306 g	8.2190 g	8.1835 g			
240-22660-A-3	079SB-0079M-0001-SO	Moisture	T	4.4306 g	8.9515 g	8.9172 g			
240-22660-A-4	079SB-0080M-0001-SO	Moisture	T	4.4306 g	9.4581 g	9.3722 g			
240-22660-A-5	079SB-0081M-0001-SO	Moisture	T	4.4306 g	7.2739 g	7.2513 g			
240-22660-A-5 DU	079SB-0081M-0001-SO	Moisture	T	4.4306 g	7.1860 g	7.1647 g			
240-22660-A-6	079SB-0082M-0001,0002-SO	Moisture	T	4.4306 g	10.0805 g	10.0230 g			
240-22660-B-6 DU	079SB-0082M-0001,0002-SO	Moisture	T	4.4306 g	9.3204 g	9.2768 g			
240-22660-A-7	079SB-0083M-0001-SO	Moisture	T	4.4306 g	7.9207 g	7.8687 g			
240-22660-A-8	079SB-0084M-0001-SO	Moisture	T	4.4306 g	9.2525 g	9.1815 g			
240-22660-A-9	079SB-0085M-0001-SO	Moisture	T	4.4306 g	10.1829 g	10.1148 g			
240-22660-A-10	079SB-0086M-0001-SO	Moisture	T	4.4306 g	8.8096 g	8.7596 g			
240-22660-A-11	079SB-0087M-0001-SO	Moisture	T	4.4306 g	7.2673 g	7.2320 g			
240-22660-A-12	079SB-0088M-0001-SO	Moisture	T	4.4306 g	7.5006 g	7.4610 g			
240-22660-A-13	079SB-0089M-0001-SO	Moisture	T	4.4306 g	8.6186 g	8.5683 g			
240-22660-A-14	079SB-0090M-0001-SO	Moisture	T	4.4306 g	10.8449 g	10.7651 g			
240-22660-A-15	079SB-0091M-0001,0002-SO	Moisture	T	4.4306 g	9.6595 g	9.5973 g			
240-22660-B-15 DU	079SB-0091M-0001,0002-SO	Moisture	T	4.4306 g	10.7484 g	10.6718 g			
240-22660-A-16	079SB-0092M-0001-SO	Moisture	T	4.4306 g	9.6090 g	9.5443 g			
240-22660-A-17	079SB-0093M-0001-SO	Moisture	T	4.4306 g	8.7009 g	8.6514 g			
240-22660-A-18	079SB-0095M-0001-SO	Moisture	T	4.4306 g	10.1940 g	10.1278 g			

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 Canton Job No.: 240-22660-1

SDG No.:

Batch Number: 80985 Batch Start Date: 04/08/13 11:14 Batch Analyst: Stiller, Jennifer

Batch Method: Moisture Batch End Date: 04/09/13 10:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-22660-A-19	079SB-0096-0001-SO	Moisture	T	4.4306 g	13.5085 g	12.2865 g			
240-22660-A-20	079SB-0107M-0001-SO	Moisture	T	4.4306 g	9.3526 g	9.2821 g			
240-22660-A-21	079SB-0108M-0001-SO	Moisture	T	4.4306 g	9.4714 g	9.4007 g			
240-22660-A-22	079SB-0110M-0001-SO	Moisture	T	4.4306 g	11.0024 g	10.9158 g			
240-22660-A-23	079SB-0111M-0001-SO	Moisture	T	4.4306 g	9.2545 g	9.2015 g			
240-22660-A-24	079SB-0112M-0001-SO	Moisture	T	4.4306 g	8.9597 g	8.9012 g			
240-22660-A-25	079SB-0113M-0001-SO	Moisture	T	4.4306 g	8.4381 g	8.3871 g			
240-22660-A-26	079SB-0114M-0001-SO	Moisture	T	4.4306 g	8.8100 g	8.7564 g			
240-22660-A-27	079SB-0116M-0001-SO	Moisture	T	4.4306 g	8.9869 g	8.9107 g			
240-22660-A-28	079SB-0117M-0001-SO	Moisture	T	4.4306 g	9.5494 g	9.4883 g			
240-22660-D-30	068SB-0057M-0001-SO	Moisture	T	4.4306 g	10.5723 g	9.2153 g			

Batch Notes	
Balance ID	B047 No Unit
Date samples were placed in the oven	4-8-13
Oven Temp when samples are put in oven	102.0 Degrees C
Time samples were place in the oven	12:20pm
Date samples were removed from oven	4-9-13
Oven Temp when samples removed from oven	103.4 Degrees C
Time Samples were removed from oven	5:30
Oven ID	002
ID number of the thermometer	TEMPGUARD BOX C #6

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.

Subcontract Data

Shipping and Receiving Documents

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. BARTHOLOMAY	4-1-13	008869
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 3**
33 BOSTON POST ROAD WEST			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA / 01752	J. DONOVAN		
Project Name and Location (State)	**Carrier/Waybill Number**		
ROVENNA	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): TAL Metals	Special Instructions/ Conditions of Receipt
0795B-0076M-0001-SO	3-22-13	1637				X	X						X	
-0077M-		1637												
-0079M-		1642												
-0080M-		1642												
-0081M		1550												
-0082M		1559												
-0082M-0002-SO		1559												MS/MSD
-0083M-0001-SO		1633												
-0084M-		1645												
-0085M-		1622												

240-22660 Chain of Custody

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: RC Edison	4-1-13	1711	1. Received By: RC Edison	4-1-13	1711
2. Relinquished By: RC Edison	4-1-13	1824	2. Received By:	4/2/13	0800
3. Relinquished By:			3. Received By:		800

Comments
MS = 1SM THIS COC COVERS SAMPLES PICKED UP ON 3-29-13 W/NO COC

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
RCC	B. FASTNACHT	4-1-13	008871
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 3**
33 BOSTON POST RD WEST			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA	J. DONOVAN	MARK LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): TAL METALS	Special Instructions/ Conditions of Receipt
0795B-0086M-0001-SO	3-23-13	1400				X	X						X	
-0087M-		1400												
-0088M-		1409												
-0089M-		1409												
-0090M-		1334												
-0091M-		1319												
-0091M-0002-SO		1319												MS/MSD
-0092M-0001-SO		1356												
-0093M-		1406												
-0095M-		1256												
-0096M-		1335												DISCRETE

Page 675 of 679

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	[signature]	4-1-13	1711	TC F.E.D.S	4-1-13	1711
2.	TC F.E.D.S	4-1-13	1824	[signature]	4/2/13	800
3.						800

Comments
MC 15M -0096-0001-SO IS DISCRETE THIS COC COVERS SAMPLES PICKED UP ON 3-29-13 W/ NO COC

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. BASTENDAV	4-1-13	008870
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 3 of 3
33 BOSTON POST RD #420 WEST			
City	**State** / **Zip Code**	**Site Contact**	**Lab Contact**
MARLBORO	MA / 01752	DiDONATO	MARK COBB
Project Name and Location (State)	**Carrier/Waybill Number**		
	LAB PICK UP		

Contract/Purchase Order/Quote No.

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/ NaOH	TAL METALS
079518-0107M-0001-SO	3-23-13	1120				X	X						X
-0108M-		1120											
-0110M-		1137											
-0111M-		1137											
-0112M-		0856											
-0113M-		0925											
-0114M-		1031											
-0116M-		1055											
-0117M-		1116											

Page 676 of 679

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	4-1-13	1711	1. Received By	4-1-13	1711
2. Relinquished By	4-1-13	1824	2. Received By	4/2/13	800
3. Relinquished By			3. Received By		

Comments
MS/MSD THIS COC COVERS SAMPLES PICKED UP ON 3-29-13 W/ NO COC

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Canton Sample Receipt Form/Narrative Login # : 72660

Client ECC Site Name _____ By: _____ (Signature)

Cooler Received on 3-29-13 Opened on 3-29-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF -2 °C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	☐ Multiple on Back
IR GUN# 4G	(CF 0 °C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 5G	(CF 0 °C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 8	(CF 0 °C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes	(No)
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No (NA)
-Were custody seals on the bottle(s)?	Yes	(No)
3. Shippers' packing slip attached to the cooler(s)?	Yes	(No)
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
7. Could all bottle labels be reconciled with the COC?	(Yes)	No
8. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
9. Sufficient quantity received to perform indicated analyses?	(Yes)	No
10. Were sample(s) at the correct pH upon receipt?	Yes	No (NA)
11. Were VOAs on the COC?	Yes	(No)
12. Were air bubbles >6 mm in any VOA vials?	Yes	No (NA)
13. Was a trip blank present in the cooler(s)?	Yes	(No)

Contacted PM MJZ Date 4/2/13 by CSL via (Verbal) Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

0735B-0018M-0001-50 3/28/13 11:08 SVOC + Metals not on COC.

0685B-0057M-0001-50 3/29/13 11:26 VOC's + percent moisture not on COC

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ______________________ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 031512-HNO3; Sulfuric Acid Lot# 051012-H2SO4; Sodium Hydroxide Lot# 121809-NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)? ______________

Client ID	pH	Date	Initials

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant
Client	2.8	~~0.8~~ 0.8	1	ice
Client	3.3	1.3	1	ice
Client	2.9	0.9	1	ice
Client	2.5	0.5	1	ice

Login Sample Receipt Checklist

Client: Environmental Chemical Corp.

Job Number: 240-22660-1

Login Number: 22660
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh
List Creation: 04/09/13 02:53 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	