DOCUMENTED RELEASE SAMPLING REPORT

FOR

DYSART #2 URANIUM MINE
GRANTS LEGACY URANIUM SITES
GRANTS, MCKINLEY COUNTY, NEW MEXICO

Prepared for

U.S. Environmental Protection Agency Region 6
Linda Carter, Project Officer
1445 Ross Avenue
Dallas, Texas 75202

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EPA SAM: Lisa Price
START-3 PTL: Patrick Buster

Prepared by

Weston Solutions, Inc.
Robert Beck, VP, P.E., Program Manager
70 NE Loop 410, Suite 600
San Antonio, Texas 78216
(210) 308-4300

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EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency (EPA) tasked Weston Solutions, Inc. (WESTON®), the EPA Region 6 Superfund Technical Assessment and Response Team (START-3) contractor, to conduct Documented Release Sampling (DRS) at the Dysart #2 Uranium Mine located near Ambrosia Lake, McKinley County, New Mexico.

The Dysart #2 Uranium Mine was identified as a potential hazardous waste site and entered into the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) under CERCLIS No. NMN000607186. According to the New Mexico Environment Department (NMED) Ground Water Quality Bureau Pre-CERCLIS Screening Assessment of Dysart #2 Mine, 17 August 2010, the last documented site reconnaissance was performed on 29 July 2010 by NMED, the New Mexico Energy, Minerals and Natural Resources Department (NMEMNRD), Mr. George Lotspeich (President of Southwest Resources, Inc.), and representatives from Neutron Energy, Inc. (Reference 1). During the site reconnaissance performed on 29 July 2010, radiological readings recorded at Dysart #2 Uranium Mine ranged from 9,000 to 20,000 counts per minute (cpm). On 23 August 2011, the EPA conducted an Airborne Spectral Photometric Environmental Collection Technology (ASPECT) overflight of the Ambrosia Lake area and collected gamma radiological measurements for exposure rate, total count rate, and elemental uranium. Results from the ASPECT overflight indicated elevated radiation exposure rates and gamma radiation activity (total count rate). The ASPECT overflight results also indicated that elemental uranium was detected at concentrations that ranged between 20 to 30 picocuries per gram (pCi/g) or up to 13 times the background average concentration of 2.41 pCi/g.

START-3 conducted DRS at the Dysart #2 Mine Site on 08 and 09 November 2011 that included collecting surface gamma radiation measurements, in addition to conducting sampling and performing chemical/radiological analyses of surface soil. The specific sampling objectives for the DRS were to collect data that could be used to document a potential release of hazardous substances to the environment and to potentially warrant further site investigation and/or reclamation. Based on the results of the DRS sampling event, soil contamination attributable to the Dysart #2 Uranium Mine was documented via these contributing factors:

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- Sixty-five out of the 79 stationary 1-minute gamma measurement locations had readings higher than two times the mean background average reading of 18,121 cpm, indicating a documented release at the Dysart #2 Uranium Mine.
- Ra-226 soil sampling results from the Dysart #2 Uranium Mine ranged from 5.93 to 149 pCi/g. Nine sample results significantly exceeded three times the background Ra-226 result average of 2.41 pCi/g for the mine. This indicates a documented release at the Dysart #2 Uranium Mine.
- Uranium, vanadium, molybdenum, and nickel were detected in soil samples that exceeded three times background concentrations, indicating a documented release at the Dysart #2 Uranium Mine.
- The current EPA drinking water standard for combined Ra-226/228 is 5 pCi/l. The surface water sample from the stock pond located immediately west of the mine was 11.06 pCi/l, though the detected concentration of Ra-226 cannot be directly linked to the Dysart #2 Uranium Mine or any other mine in the area.

START-3 has prepared this Documented Release Sampling Report to describe the technical scope of work that was completed as part of the Technical Direction Document (TDD) No. TO-0035-11-09-01 under Contract No. EP-W-06-042 for EPA Region 6. The EPA Site Assessment Manager (SAM) was Lisa Price, and the START-3 Project Team Leader (PTL) was Patrick Buster.

☐ The EPA Task Monitor did not provide final approval of this report prior to the completion date of the work assignment. Therefore, Weston Solutions, Inc. has submitted this report absent the Task Monitor's approval.

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***All Tables are provided as separate portable document format (PDF) files.**

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1. INTRODUCTION

Weston Solutions, Inc. (WESTON®), the Superfund Technical Assessment and Response Team (START-3) Contractor, was tasked by the U.S. Environmental Protection Agency (EPA) Region 6 under Contract Number EP-W-06-042, Technical Direction Document (TDD) No. TO-0035-11-09-1 (Appendix G) to conduct Documented Release Sampling (DRS) at the Dysart #2 Uranium Mine located in McKinley County, New Mexico. Site coordinates are Latitude 35.454367° North and Longitude -107.858192° West. A Site Location Map is provided as Figure 1-1. All figures and tables are provided as separate portable document format (PDF) files. START-3 has prepared this DRS Report to provide the EPA with the field radiation scanning results and present the analytical data obtained during the field investigation performed at the Dysart #2 Uranium Mine.

1.1 SITE BACKGROUND

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), WESTON, was tasked to perform DRS at the Dysart #2 Uranium Mine located near Ambrosia Lake, McKinley County, New Mexico.

The Dysart #2 Uranium Mine was identified as a potential hazardous waste site and entered into the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) under CERCLIS No. NMN000607186. According to the New Mexico Environment Department (NMED) Ground Water Quality Bureau Pre-CERCLIS Screening Assessment of Dysart #2 Mine, 17 August 2010, the last documented site reconnaissance was performed on 29 July 2010 by NMED, the New Mexico Energy, Minerals and Natural Resources Department (NMEMNRD), Mr. George Lotspeich (President of Southwest Resources, Inc.) and representatives from Neutron Energy, Inc. (Reference 1). During the site reconnaissance performed on 29 July 2010, radiological readings recorded at Dysart #2 Uranium Mine ranged from 9,000 to 20,000 counts per minute (cpm). On 23 August 2011, the EPA conducted an Airborne Spectral Photometric Environmental Collection Technology (ASPECT) overflight of the Ambrosia Lake area and collected gamma radiological measurements for exposure rate, total count rate, and

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elemental uranium. Results from the ASPECT overflight indicated elevated radiation exposure rates and gamma radiation activity (total count rate). Figure 1-2 presents the ASPECT overflight exposure rate results. The ASPECT overflight results also indicated that elemental uranium was detected at concentrations that ranged between 20 to 30 picocuries per gram (pCi/g) or up to 13 times the background average concentration of 2.41 pCi/g.

START-3 has prepared this report to provide available background information collected for the Dysart #2 Uranium Mine, discuss the DRS activities, and present the analytical data obtained as part of the investigation.

1.2 OBJECTIVES OF THE INVESTIGATION

After reviewing the NMED memorandum and reviewing the results obtained from the ASPECT overflight, the EPA concluded that an investigation was needed to determine if hazardous substances have been released to the environment from past historical mining activities and despite reclamation histories of the mine. This investigation is designed to provide a high-confidence determination by direct observation, field measurement, and laboratory analysis that a hazardous substance has been released at the mine site, termed a "documented release." The definition of a release under CERCLA (Section 101(22) is *"[A]ny spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant)..."* For the purpose of this investigation, a documented release can be established by chemical analysis that requires attributing the hazardous substance to the site, determining background concentrations, demonstrating that the concentration of the hazardous substance in a release sample is significantly increased above site background concentrations, and attributing some portion of the significant increase to the site. EPA will use this information obtained during the DRS to determine if additional investigation and/or reclamation is warranted and to prioritize those actions for all uranium mines in the Grants Mining District.

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1.3 SCOPE OF WORK

The DRS Scope of Work is intended to describe the tasks requiring completion in order to evaluate the Dysart #2 Uranium Mine. As part of this DRS, START-3 performed the following major tasks:

- Prepared a site-specific Quality Assurance Sampling Plan (QASP), approved by the EPA, and Health and Safety Plan (HASP) prior to sampling activities.
- Evaluated the available information from the on-site observations, historical aerial photographs, area environmental information, and historical documents provided by the EPA.
- Conducted DRS field sampling/scanning activities on 08 and 09 November 2011. Samples were collected at various locations with significantly elevated 1-minute stationary gamma measurements. The samples were collected in general accordance with the site-specific QASP and HASP to document the presence and migration of hazardous substances attributable to the Dysart #2 Uranium Mine.
- Submitted the DRS samples to National Environmental Laboratory Accreditation Program (NELAP) certified laboratories for analysis and reviewed and tabulated the resulting data.
- Compared the laboratory results to three times the background concentrations to establish a documented release.
- Prepared this report to present the findings of the DRS.

1.4 REPORT FORMAT

The DRS report contains the following sections:

- Section 1 – Introduction
- Section 2 – Site Characteristics
- Section 3 – Documented Release Sampling
- Section 4 – Summary
- Section 5 – References

Additional information is provided in the following appendices:

- Appendix A Digital Photographs
- Appendix B START-3 Site Logbook
- Appendix C START-3 Quality Assurance Sampling Plan
- Appendix D Laboratory Data Packages
- Appendix E Laboratory Data Validation Packages
- Appendix F Reference Documentation

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- Appendix G TDD No. 0035-11-09-01 and Amendments A - B

Tables and figures cited in this report are provided as PDF files. Photographs taken during the DRS activities are provided as Appendix A. The START-3 field logbook notes are provided as Appendix B. The site-specific QASP is provided as Appendix C.

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2. SITE CHARACTERISTICS

Information regarding the site location, description, and site history is included in the following subsections.

2.1 SITE LOCATION AND DESCRIPTION

The Dysart #2 Uranium Mine is within the Ambrosia Lake Mining District, located 22 miles north-northwest of Grants in McKinley County, New Mexico. The reclaimed area of the Dysart #2 Mine Site is approximately 19 acres in size. The Dysart #2 Uranium Mine can be reached from Grants, New Mexico via Highway 605 north for 13 miles, then turning west on Highway 509 for approximately 7 miles until a gated gravel road leads northwest toward the Dysart #2 Uranium Mine.

2.2 SITE HISTORY

The Grants Mining District provided significant uranium extraction and production in New Mexico from the 1950s until late in the 20th century. Ninety-seven former legacy uranium mines and five mill sites have been identified in the Ambrosia Lake, Laguna, and Marquez subdistricts.

The reclaimed area of the Dysart #2 Uranium Mine Site is approximately 19 acres in size and was in operation from 1959 until 1962. The Dysart #2 Uranium Mine Site was considered an underground dry mine during operation, when a mineshaft was sunk to a depth of approximately 700 feet. The site is in close proximity to Martin Draw, approximately 200 feet to the east. Ambrosia Lake is located approximately 1,200 feet to the east of the site. Site features and conditions are most recently documented in reports from a site reconnaissance visit performed by New Mexico regulatory agency personnel on July 29, 2010 (Reference 1) and from an EPA Airborne Spectral Photometric Environmental Collection Technology (ASPECT) survey conducted in August 2011.

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3. DOCUMENTED RELEASE SAMPLING

The specific information regarding field observations, sampling activities, background determination, gamma scanning and measurements, soil sampling and deviations from the QASP are included in the following subsections (Reference 2).

3.1 OVERVIEW

START-3 was tasked to conduct DRS of the Dysart #2 Uranium Mine, including collecting environmental samples, gamma scanning approximately 10% of the mine area, and collecting 79 stationary 1-minute gamma measurements. The specific sampling objectives were to collect data that could be used to document a release of hazardous substances to the environment as a result of historical mining operations. The Contaminants of Concern (CoCs) include all identifiable gamma emitting radioisotopes, specifically, the daughters of uranium-238 (U-238), and radium-226 (Ra-226). Additional CoCs include arsenic, molybdenum, selenium, and total uranium.

START-3 implemented the Quality Assurance Sampling Plan (QASP) at the Dysart #2 Uranium Mine Site on 08 and 09 November 2011. START-3 collected gamma measurements sufficient to provide approximately 10% coverage of the surface area of the mine. Figure 3-1 illustrates the assessment area. Mine area gamma radiation distribution results are presented in Table 3-1. In addition, 1-minute stationary gamma measurements were collected at 79 evenly spaced grid locations throughout the mine area. The stationary gamma measurements are listed in Table 3-2, and the locations are presented on Figure 3-2. In addition, nine soil samples and one duplicate soil sample were collected at the 1-minute stationary locations that had elevated gamma activity. Four background soil samples, shown on Figure 3-1, were collected to the north, east, south, and west near the perimeter of the mine area, and 1-minute stationary readings were collected at each background location. A soil sample and 1-minute stationary reading were collected from Martin Draw as well as a surface water sample and a 1-minute stationary reading from a stock tank located on the Dysart #2 Uranium Mine Site. The locations of the background samples, Martin Draw, and the stock tank are presented on Figure 3-1, and the 1-minute gamma measurements are listed in Table 3-2.

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Surface soil samples and a surface water sample were collected and submitted to a National Environmental Laboratory Accreditation Program (NELAP) certified laboratory for the following analyses: total metals including arsenic, molybdenum, selenium, and total uranium by Methods SW846 6010/6020 and 7470/7471, and all identifiable gamma emitting radioisotopes by Method LANL ER-0130 gamma spectrometry. The surface water sample was also analyzed for gross alpha/beta activity by EPA Method 900. The analytical data were validated by START-3. Laboratory analytical results for radioisotopes and metals are presented in Tables 3-3 and 3-4, respectively. The laboratory data packages are included in Appendix D. The validated laboratory data packages are included in Appendix E.

3.2 FIELD OBSERVATIONS

The site reconnaissance took place on 08 and 09 November 2011. The weather was mostly cloudy, with a high temperature of 40 degrees Fahrenheit and moderate north winds. Snow was observed covering the mine area on 08 November 2011. On 09 November 2011, the weather was sunny with a high of 42 degrees Fahrenheit with little to no snow on the ground. The mine area was generally flat and was fairly uniformly covered in desert grass vegetation, although grass density varied depending on location. Light brown soil appeared to be the dominant soil layer, and gamma readings on top of this soil layer, for the most part, were significantly lower than the rest of the mine site. There were, however, some small areas of rocks and grayish colored soil scattered throughout the Dysart #2 Uranium Mine area. During the site reconnaissance, it was noted that cattle had access to the mine area, including the stock tank. The main mineshaft was secured with a lock, but an additional open shaft or vent hole observed to the southwest was unsecured.

3.3 BACKGROUND DETERMINATION

The START-3 QASP (Reference 2) protocol determines the background for a legacy uranium mine as the mean of the field measurements and laboratory results of samples collected from four locations at the perimeter of the property. These four sample locations correspond to the four cardinal directions of the compass (north, east, south, and west). The protocol indicates that a site background sample location should have similar physical, chemical, geological,

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radiological, and biological characteristics of the legacy mine site if there were are no impacts from uranium mining and milling at the site. START-3 collected four background soil samples to the north, east, south, and west of the mine site where 1-minute stationary gamma measurements were also collected.

Surface water may have been impacted by uranium mills and other mine sites/activities; therefore, no attempt will be made, at this time, to determine background. For the purpose of the DRS, sampling of surface water is just an opportunity to collect data to further the understanding of the overall impact to the Grants Mining District.

3.4 GAMMA SCANNING

Due to the size of the Dysart #2 Uranium Mine, it was determined that approximately 10% of the surface area would be scanned using a 2 inch X 2 inch NaI detector held approximately 1 meter above the ground surface in conjunction with a Global Positioning System (GPS) unit. Evenly placed transects were walked across the mine site from one end of the disturbed claim boundary to another. Each transect was spaced approximately 100 feet apart. One-second measurements of gamma activity were recorded and electronically attached to the appropriate GPS designation for the subsequent plotting and depiction of the ambient gamma activity. A total of 5,216 gamma radiation measurements were collected from the mine area, ranging from 17,373 cpm to 442,508 cpm. Dysart #2 Uranium Mine gamma radiation results and statistics are presented in Table 3-1 and on Figure 3-1.

3.5 STATIONARY GAMMA MEASUREMENTS

Stationary 1-minute gamma measurements were collected at 79, 100-foot evenly spaced grid locations across the Dysart #2 Uranium Mine using the same type of instrumentation and at the same height above the ground surface as the gamma scanning measurements. Because the stationary measurements are integrated over 1-minute intervals versus 1-second intervals, the measurements provide a more accurate measurement of the ambient gamma activity at that point. The QASP protocol states that a single-point measurement greater than two times the background average concentration indicates a documented release at the mine (Reference 2). At the 79 total stationary locations, gamma measurements ranged from 20,380 cpm to 198,698 cpm,

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with 65 measurements exceeding two times the background average measurement of 18,121 cpm. In addition, the gamma measurement at Martin Draw was 104,285 cpm, and the gamma measurements ranged from 17,000 cpm to 20,000 cpm at the stock pond. The stationary measurement locations and measurements are illustrated in Figure 3-2 and presented in Table 3-2.

3.6 SOIL AND WATER SAMPLING

START-3 collected 15 soil samples (including 4 background, 1 duplicate sample, and 1 sample from Martin Draw) at 0- to 6-inch depth at locations identified by the stationary measurements as being suspect. Figure 3-2 depicts the sampling locations, and Table 3-2 presents the 1-minute stationary gamma measurements at each sample location. Surface soil samples were collected and submitted for total metals including arsenic, molybdenum, selenium, and total uranium by Methods SW846 6010/6020 and 7470/7471, and all identifiable gamma emitting radioisotopes by Method LANL ER-0130 Gamma Spectrometry. The QASP states that if any sample contains U-238 as determined by alpha spectrometry or Ra-226 as determined by gamma spectrometry at a concentration equal to or greater than three times the mean background average concentration, the mine will be identified as having a documented release (Reference 2). All eleven soil samples (this includes the sample from Martin Draw) from the Dysart #2 Uranium Mine exceeded three times the background average concentration for Ra-226. The analytical data were validated by START-3. The metals and radioisotopes laboratory results are included in Tables 3-3 and 3-4. Data are presented in Tables 3-2 and 3-3. The validated laboratory data packages are included in Appendix E.

One surface water sample was collected from the stock tank immediately west (approximately 30 meters) of the Dysart #2 Uranium Mine. Figure 3-2 depicts the sampling location. The surface water sample was collected and submitted for total metals including arsenic, molybdenum, selenium, and total uranium by Methods SW846 6010/6020 and 7470/7471, all identifiable gamma emitting radioisotopes by Method LANL ER-0130 Gamma Spectrometry, and gross alpha/beta activity by EPA Method 900. The EPA drinking water standard for gross alpha is 15 picocuries per liter (pCi/l) and 30 micrograms per liter (ug/l) total uranium. The surface water sample was below both standards; however, the EPA drinking water standard for combined

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Radium 226/228 is 5 pCi/l. The surface water sample exceeds this standard by slightly over a factor of two at 11.06 pCi/l. Field measurements are presented in Tables 3-1 and 3-2. The analytical data were validated by START-3.

The radioisotopes and metals laboratory results are included in Tables 3-3 and 3-4. The validated laboratory data packages are included in Appendix E.

3.7 DEVIATIONS FROM THE QASP

The following deviations from the QASP occurred during the field work:

- Only 79 stationary gamma measurements were taken at the Dysart #2 Uranium Mine rather than 80 as stipulated by the QASP. Due to the large size of the site and the amount of data collected, this is not expected to inhibit the DRS findings.

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4. SUMMARY

START-3 conducted DRS at the Dysart #2 Uranium Mine on 08 and 09 November 2011 that included collecting surface gamma radiation measurements in addition to conducting sampling and performing chemical/radiological analyses of surface soil and surface water. The specific sampling objectives for the DRS were to collect data that could be used to document a potential release of hazardous substances to the environment and to potentially warrant further site investigation and/or reclamation. Based on the results of the DRS sampling event, soil contamination attributable to the Dysart #2 Uranium Mine was documented via these contributing factors:

- Sixty-five out of the 79 stationary 1-minute gamma measurement locations, and the stationary reading in Martin Draw had readings higher than two times the mean background average reading of 18,121 cpm, indicating a documented release at the Dysart #2 Uranium Mine.
- Ra-226 soil sampling results from the Dysart #2 Uranium Mine ranged from 5.93 to 149 pCi/g. Nine soil sample results significantly exceeded three times the background Ra-226 result average of 2.41 pCi/g for the mine. This indicates a documented release at the Dysart #2 Uranium Mine.
- Uranium, vanadium, molybdenum, and nickel were detected in soil samples that exceeded three times background concentrations, indicating a documented release at the Dysart #2 Uranium Mine.
- The current EPA drinking water standard for combined Ra-226/228 is 5 pCi/l. The surface water sample from the stock pond located immediately west of the mine was 11.06 pCi/l, though the detected concentration of Ra-226 cannot be directly linked to the Dysart #2 Uranium Mine or any other mine in the area.

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5. REFERENCES

1. NMED (New Mexico Environment Department). *Pre-CERCLIS Screening Assessment of the Dysart #2 Mine*. 17 August 2010.

2. Weston Solutions, Inc. *Quality Assurance Sampling Plan for the Dysart #2 Uranium Mine, Grants, McKinley County, New Mexico*. November 2011.

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APPENDIX A

DIGITAL PHOTOGRAPHS

To View Photographs:

Open the folder: Appendix A Digital Photographs

Double Click on the file: Click here to view Photo

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APPENDIX B

START-3 SITE LOGBOOK

"Rite in the Rain"®

ALL-WEATHER

JOURNAL

No. 391

DYSART #2 DRS

~~SECTION 12 ORS~~

TDD # TO-0035-11-09-02

20406.012.035.0675.01

NOV 2011

START-3 DYSART #2 URANIUM MINE 11/8/11

0730 START-3 members Patrick Buster, Olin Garner, and Monique Pedroza arrive at Grants EPA command Post. Source check ERG Ludlum Unit # 282973 and Probe # 282973 and Ludlum unit Z which is ludlum # PR308060 and sensor #. 157037. Sources are within 10%. Significant snow accumulated overnight. START-3 will mobilized to mine to observe field conditions ——— PB

0840 Arrive at Dysart #2 Uranium Mine. Have safety briefing. Surface snow cover is near 100%. Weather will warm into 40's today. START will lay 80-evenly spaced pinflags across the site (~100' apart) and sample the stock tank west of the mineshaft. ——— PB

1030 Finish collecting surface water sample from stock pond (ST1-01-111108) and laying 80 pinflags. EPA SAM LaDonna Turner has flat tire — START assists. ——— PB

1050 Depart for Command Post to await snowmelt — PB

1400 After charging and testing ERG trimble unit, re-mobilize to Dysart #2 Uranium Mine. ——— PB

1440 Arrive at mine. Turn on trimble to conduct 10% coverage transects, as most snow has melted. Trimble unit has crash and Terrasync is corrupted and unusable. START-3 GIS analyst arrives on

START-3 DYSART #2 URANIUM MINE 11/8/11

1440 Continued — site to assist. Unit is deemed unusable.

1450 Meanwhile, other team has finished collecting single points on Dysart Minesite ——— PB

1730 Arrive at command post. START-3 has lost logbooks, 64 single point locations have been lost. Call ERG concerning bad rental unit. ERG agrees to meet EPA SAM in laguna tomorrow morning to exchange trimbles at 0730. START-3 prepares RAT buggy to use in meantime. Test RAT buggy. Works well.

1900 Depart CP ——— PB

START-3 DYSART#2 URANIUM MINE 11/9/11

0700 START-3 Arrives at command post. Source check Ludlum units, will have ERG only replace trimble unit for ludlum consistency. —— PB

0820 Arrive at site. Two ~~sta~~ PB START-3 members will use RAT buggy on Section 12 to locate 64 lost single point locations and re-record. START-3 still has a few readings that were recorded and not lost. Team Lead instructs team to take 4 readings at known locations to ensure that gamma measurements are similar to previous day. —— PB

0830 START-3 Buster will collect samples at Dysart#2 from locations 11, 17, 32, 33, 41, 44, 48, 65, 77, and a duplicate from #17, as it had the highest gamma reading on-site (1-minute scaler).

0940 Finish collecting above referenced samples for gamma spectroscopy and metals including total uranium analysis. —— PB

0948 EPA SAM arrives onsite with new trimble unit from ERG START-3 Buster begins walking transects for gamma scan. —— PB

1210 Complete transects. Download data in field —— PB

1350 Begin looking for Background locations and places to sample in Martin Draw —— PB

1446 START-3 Flags backgound locations to N, E, S, W of mine, and located an area in Martin Draw to sample.

START-3 DYSART #2 URANIUM MINE 11/9/11

1553 Complete collecting background and Martin Draw samples. —— PB

1730 Arrive at Grants command post to unload equipment

STATIONARY GAMMA MEASUREMENTS (1-MIN)

Location	Time	CPM	Location	Time	CPM
1	1515	20383	20	1556	39497
2	1519	21324	21	1558	32643
3	1523	32925	22	1600	24024
4	1521	25377	23	1612	64240
5	1525	50666	24	1611	129398
6	1527	138004	25	1609	81568
7	1529	32322	26	1607	44328
8	1531	27828	27	1605	66056
9	1535	34988	28	1603	33158
10	1547	63509	29	1601	42156
11	1545	143634	30	1615	106290
12	1543	64485	31	1617	116885
13	1541	37322	32	1619	190346
14	1539	31725	33	1621	149740
15	1537	24442	34	1623	83940
16	1548	40553	35	1625	43552
17	1549	198698	36	1627	45317
18	1552	65053	37	1629	30261
19	1554	43690	38	1646	88803

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START-3 DYSART #2 URANIUM MINE ~~11/9/11~~ RB

STATIONARY GAMMA MEASUREMENTS (1-MIN)

Location	Time	CPM	Location	Time	CPM
39	1644	128221	61	1625	~~53154~~ 52190
40	1642	156821	62	1621	53159
41	1640	145036	63	1619	37523
42	1638	79835	64	1617	101946
43	1636	114881	65	1616	104090
44	1634	139861	66	1614	51895
45	1632	113661	67	1612	39134 ~~45625~~ RD
46	1630	24285	68	1608	53545
47	1648	42435	69	1606	45625
48	1650	123889	70	1605	89078
49	1652	56278	71	1603	69613
50	1648	107295	72	1601	52242
51	1646	90025	73	1557	40562
52	1644	94686	74	1555	59075
53	1642	76770	75	1553	49628
54	1641	55969	76	1550	45658
55	1637	38383	77	1545	70936
56	1634	49922	78	1543	53042
57	1633	55260	79	1541	45603
58	1629	57940	80	N/A	N/A
59	1628	78554			
60	1627	60863			

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START-3 DYSART #2 Uranium Mine 11/9/11

STATIONARY GAMMA MEASUREMENTS (1-MIN)

Location	TIME	CPM
Background-W	1500	19,017
Background-N	1515	18,479
Background-S	1545	17,866
Background-E	1525	17,123
Stock Tank	——	17K-20K
Martin Draw	1519	104,285

APPENDIX C

START-3 QUALITY ASSURANCE SAMPLING PLAN

OBSERVED RELEASE SAMPLING

QUALITY ASSURANCE SAMPLING PLAN

FOR

DYSART #2 URANIUM MINE
GRANTS LEGACY URANIUM SITES
GRANTS, MCKINLEY COUNTY, NEW MEXICO

Prepared for

U.S. Environmental Protection Agency Region 6
Linda Carter, Project Officer
1445 Ross Avenue
Dallas, Texas 75202

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FPN N/A
EPA SAM: Lisa Price
START-3 PTL: Patrick Buster

Prepared by

Weston Solutions, Inc.
Robert Beck, VP, P.E., Program Manager
70 NE Loop 410, Suite 600
San Antonio, Texas 78216
(210) 308-4300

November 2011

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1. INTRODUCTION

Weston Solutions, Inc. (WESTON®), the Superfund Technical Assessment and Response Team (START-3) Contractor, has been tasked by the U.S. Environmental Protection Agency (EPA) Region 6 under Contract Number EP-W-06-042, Technical Direction Document (TDD) No. TO-0035-11-09-01 (Appendix C) to conduct Observed Release Sampling (ORS) at the Dysart #2 Uranium Mine located in McKinley County, New Mexico. Site coordinates are Latitude 35.454367° North and Longitude -107.858192° West. A Site Location Map is provided as Figure 1-1. All figures are provided as separate portable document format (PDF) files. START-3 has prepared this Quality Assurance Sampling Plan (QASP) to describe the technical scope of work to be completed as part of the TDD.

1.1 PROJECT OBJECTIVES

START-3 is providing technical assistance to EPA Region 6 for conducting ORS activities at legacy uranium mines. The purpose of the ORS is to determine if past mining activities resulted in releases of hazardous substances to the environment at uranium mine sites that have a wide range of reclamation histories. START-3 will assess the existence and migration of hazardous substances and identify the receptors, or targets, potentially exposed to the hazardous substances. This Quality Assurance Sampling Plan (QASP) provides the generic guidance for conducting ORS and specific field sampling plans for the Dysart #2 Mine.

The ORS objective will be achieved by evaluating data obtained during the site assessment using a 2 inches by 2 inches NaI detector in conjunction with a Global Positioning System (GPS) unit. The detector will be mounted on a cart or hand-held approximately 15 inches above the soil surface. The instrument will be set with an “open” window to allow detection of the broad spectrum of gamma energies associated with the naturally occurring radionuclides. Samples will be collected from surface soil and potential surface water on-site, downgradient, and at background locations. Sediment samples in the surface water pathway may also be collected during this ORS. Additional samples may be collected to determine specific conditions in anomalous features on-site, if warranted. Section 4.1 describes the laboratory analyses that will be used as part of this investigation.

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1.2 PROJECT TEAM

The Project Team will consist of START-3 personnel including Patrick Buster as the Project Team Leader (PTL), a Data Manager (DM), and a START-3 Field Team Leader (FTL) who will also act as the Field Safety Officer (FSO). The FTL will oversee collection of the samples as necessary, record the activities at each sample location in the field logbook, and verify sample documentation. Sample documentation and preparation is also the responsibility of START-3. The FTL will be responsible for documenting the work performed and will serve as START-3 liaison to EPA Region 6.

1.3 QASP FORMAT

This QASP has been organized in a format that is intended to facilitate and effectively meet the objective of the removal assessment. The QASP is organized as follows:

- Section 1 – Introduction
- Section 2 – Site Background
- Section 3 – Sampling Approach and Procedures
- Section 4 – Laboratory Analyses
- Section 5 – Data Validation
- Section 6 – Water Sampling
- Section 7 – Quality Assurance

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2. SITE BACKGROUND

Information regarding the site location, description, and site history is included in the following subsections.

2.1 SITE LOCATION AND DESCRIPTION

The Dysart #2 Uranium Mine Site is within the Ambrosia Lake Mining District, located 19 miles north-northwest of Grants in McKinley County, New Mexico. The reclaimed area of the Dysart #2 Mine Site is approximately 19 acres in size and was in operation from the 1959 until 1962.

2.2 SITE HISTORY

The Grants Mining District provided significant uranium extraction and production in New Mexico from the 1950s until late in the 20th century. Ninety-seven former legacy uranium mines and five mill sites have been identified in the Ambrosia Lake, Laguna, and Marquez subdistricts.

The Dysart #2 Mine Site was considered an underground dry mine during operation, when a mineshaft was sunk to a depth of approximately 700 feet. The site is in close proximity to Martin Draw, approximately 200 feet to the east. Ambrosia Lake is located approximately 1200 feet to the east of the site. Site features and conditions are most recently documented in reports from a site reconnaissance visit by New Mexico regulatory agency personnel in July 29, 2010 and from an EPA Airborne Spectral Photometric Environmental Collection Technology (ASPECT) survey. The gamma radiation readings at the Dysart #2 Mine Site were statistically greater than background readings in the area.

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3. SAMPLING APPROACH AND PROCEDURES

3.1 OBJECTIVE

The objective of this QASP is to develop a standardized assessment process for legacy uranium mines that includes site reconnaissance and limited sampling that can be accomplished by a small work crew of three to five staff members in one work day or less. The QASP includes direct observation, field measurements, soil and water sampling, and laboratory analyses to determine with high confidence if a release of hazardous substances has occurred at the mine site. EPA and Weston Standard Operating Procedures (SOPs) are provided as Appendix A.

3.2 CRITERIA FOR OBSERVED RELEASE AND DATA QUALITY OBJECTIVES

The criteria against which each site will be evaluated are taken from the New Mexico Environmental Department (NMED) draft document *"Generic Field Investigation and Soil/Sediment Sampling Work Plan Guidance to Assess a Legacy Uranium Mine Site for An Observed Release"* dated July, 2011. That document describes the following three numerical criteria that define whether a hazardous substance is present and represents an observed release.

1. The on-site gamma count rate will be compared to the mean background gamma count rate to determine if the count rate is equal to or greater than two times the background mean.
2. Laboratory analyses of soil/sediment samples will be compared to the background isotopic concentrations to determine if the concentration is equal to or greater than three times the background mean.
3. Laboratory analyses of soil/sediment samples will be compared to the background isotopic concentrations to determine if the concentration is equal to or greater than two standard deviations above the background mean.

An observed release is part of the Site Investigation strategy for computing a Hazardous Ranking System (HRS) under CERCLA, which is the program administered primarily by the EPA for evaluation of sites for the Superfund NPL ("Guidance for Performing Site Inspections Under CERCLA, EPA/540-R-92-021"). For the purposes of this QASP, the only radioisotopes of concern related to Criteria 2 and 3 above are U-238 and Ra-226. The laboratory analyses will generate data for other radioisotopes (such as K-40) as a bi-product of the analyses, but these

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other isotopic data are not relevant to the project objectives and will not be evaluated or compared to any criteria because they are unrelated to uranium mine operations.

More detailed instructions as to how to apply these criteria are discussed in the sections below. However, these criteria are applied to individual measurements or laboratory analyses for each sampling/measurement point. If measurements or laboratory analyses exceed any of these criteria, the site is determined to demonstrate conditions of an "observed release" and is to be considered for further evaluation and possible follow-on action. The criteria are not based on risk or dose, nor are they based on the area size of the impacted soil.

The objective of soil sampling is to determine if a hazardous substance is present and represents an observed release. To accomplish this, data quality objectives (DQOs) have been established and are included in Appendix B. The DQOs presented were developed using the seven-step process set out in the *EPA Guidance for Quality Assurance Project Plans: EPA QA/G-5*.

3.3 DETERMINATION OF BACKGROUND

As stated above, the numerical criteria are relative to either the count rate or soil concentration at some level above the background mean. Therefore, it is critical to accurately identify the background mean for each property or mining claim site. Background radiation has many sources including cosmic, terrestrial, and man-made sources, all of which can contribute to the natural variability of the ambient gamma background count rate level. When considering the natural background concentration of various radioisotopes, uranium 238 (U-238) and its daughter products (particularly Ra-226), in equilibrium, are commonly found in U.S. soils at concentrations ranging from about 0.5 to 1.5 picocuries per gram (pCi/g). However, since uranium mines are normally located in areas geologically enhanced in uranium, the background levels of U-238 and daughters near legacy uranium mines may be above these concentrations. Other radionuclides found in natural background soils include K-40 at typical concentrations ranging from 10 to 25 pCi/g; Th-232 and daughters ranging from 0.5 to 1.5 pCi/g; and Cs-137, a man-made radioisotope from nuclear weapons testing, at about 0.5 pCi/g. Establishing background concentrations that describe a distribution of measurement data is necessary to identify and evaluate contributions attributable to legacy mines.

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A site background location should have similar physical, chemical, geological, radiological, and biological characteristics as the legacy mine site if there were no impacts from uranium mining or milling at the site. For purposes of this QASP, the background for each legacy mine site is determined following guidance provided by the HRS protocol. The HRS protocol determines the background for the individual site as the mean of field measurements and laboratory analyses of samples collected from four locations at the perimeter of the property corresponding to the four directions of a compass (N, S, E, and W). After locating the four background locations at the perimeter of the mining claim (or at the boundary of the property), each location should be gamma-scanned (the technique of gamma scanning is described in a following section) to verify that the area appears to have a homogenous gamma ambient level and a visual confirmation that the other four characteristics listed above appear satisfied. The gamma-scan data (count rate and location) should be saved for data validation and quality control purposes.

Due to the nature of the extended uranium mining in the area, a pre-designated background location may exhibit radiological characteristics that do not appear to meet the HRS requirement for a site background to have a similar chemical, physical, radiological, geological, and biological characteristics as the legacy mine site if there were no impacts from uranium mining/milling. If the FTL determines that significantly elevated readings are encountered or physical conditions indicate possible impacts from past mining or milling activities, that background location may be moved to another area reasonably close by. If a more suitable background location cannot be located, a sample will still be collected and data will be recorded from the most suitable location in that immediate area. That background location may be used or omitted from consideration based on final data evaluation when the site report is developed.

At each background location, a 1-minute stationary gamma count rate measurement will be collected with the detector held approximately 15 inches above the ground surface. The count rate and location, as recorded by GPS, will be saved and the mean calculated from these four measurements. At each background location, a soil sample will be collected for radiochemical and stable chemical analyses. A sample of approximately 6-inch depth and 1 kilogram (kg) mass will be collected in a ziplock plastic bag. Rocks of greater than approximately 0.25-inch-diameter should be discarded, as should any biological material such as grass or twigs. Samples

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should be analyzed by gamma spectrometry for all detectable radioisotopes by this method and by alpha spectrometry for isotopes of the U-238 and Th-232 decay chains. The suite of metal analytes to be analyzed in each soil sample include the 23 Target Analyte List (TAL) metals: aluminum, tin, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, selenium, silver, thallium, vanadium, zinc, and mercury, plus two additional metals, total uranium and molybdenum. Additional information and specific analytical techniques are discussed in a subsequent section.

3.4 DIRECT OBSERVATION

An observed release means that hazardous substances have been documented on the mine site or surrounding area soil or water, and that the substances are attributable, at least in part, to the site that is being evaluated. An observed release can be established by direct observation if hazardous substances such as mine ore and/or waste rock that are geologically foreign and mineralogically distinct from the native surface soil and rock composition on the surface of the mine property are present. An observed release can also be established by observation of ore or waste rock transported off-site by wind or water erosion, particularly into nearby drainage channels. Determination of mine surface or off-site contamination by direct observation should be documented by photographs and logbook entries that clearly demonstrate that the site remains impacted by prior mining activities. Determination by direct observation does not quantitatively demonstrate that the numerical criteria have been exceeded, but it is highly likely that subsequent stationary gamma measurements and soil sampling in the areas noted by direct observation will conclusively demonstrate conditions of “observed release.”

3.5 GAMMA SCANNING

Like direct observation, scanning does not provide a quantitative assessment of site conditions but is an excellent tool to assess the relative gamma activity of the area. Scanning is useful in quickly determining the general radiological condition of the site and determining where background radiological conditions exist. It literally paints a picture that depicts where areas of elevated gamma activity are present and identifies where additional measurements and sampling efforts should be placed.

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Gamma scanning will be conducted using a 2 inches by 2 inches NaI detector in conjunction with a GPS unit. The detector will be mounted on a cart or hand-held approximately 15 inches above the soil surface. The instrument will be set with an "open window" to allow detection of the broad spectrum of gamma energies associated with the naturally occurring radionuclides. The technician will walk transects at approximately 0.5 meter-per-second from one end of the mine claim boundary to another. One-second measurements of gamma activity are recorded and electronically attached to the appropriate GPS designation for subsequent plotting and depiction of ambient gamma activity. The field-of-view for this detector system is approximately 1 meter wide perpendicular to the direction of the travel. The Dysart #2 Mine Site is approximately 19 acres in size, so 10% coverage will be the objective, and transects will be walked at a distance of approximately 10 meters apart. With a 10-meter transect spacing the technician can gamma-scan 4.4 acres/hour. It is expected that these transects can be completed within four to six hours with one monitoring team. The FTL may modify the transect spacing as necessary to ensure maximum site coverage and compliance with project scheduling and time constraints based on actual site conditions encountered in the field.

In addition to walking the transects, the technician will visually search for suspect areas such as waste rock or ore piles, mine portals (adits, shafts, vents, bore holes), machinery, building foundations, haul roads, arroyos, stream beds, or surface impoundments to gamma-scan. The technician should use the audible signal from the instrument system to help guide him to areas of elevated gamma activity. If there are many suspect areas needing to be gamma-scanned, a second gamma-scanning system should be employed to help with the survey load.

Data are recorded and plotted in units of gamma counts per minute (CPM). However, the data are collected in counts per second and then multiplied by 60 seconds/minute to arrive at CPM. Therefore, any slight variation in the collected count rate is magnified by this multiplication. For this reason, it is not unusual for isolated measurements to be significantly elevated above background. These isolated measurements are usually statistical outliers and are not indicative of actual elevated gamma activity. However, any significantly elevated gamma measurements (greater than 2 times background) should be re-investigated, particularly if there is a locus of elevated measurements around a common point.

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Data from these gamma scans provide a useful representation of site conditions and will be presented in the site report with a color-coded display to clearly show the various levels of elevated readings. Because of the statistical variation in the readings, the gamma-scanning data are not used for comparison to the observed release criteria for gamma measurements. These data are useful to identify areas where soil samples should be collected and stationary gamma measurements made.

3.6 STATIONARY GAMMA MEASUREMENTS

Stationary 1-minute gamma measurements will be collected at grid points across the property, and at additional suspect locations identified by the gamma-scanning data. Because these stationary measurements are integrated over 1-minute intervals versus 1-second intervals for the scanning measurements, the stationary measurements will be a more accurate measurement of the ambient gamma activity at that point. Stationary measurements will be made with the same type of instrumentation and at the same height above ground surface as the gamma-scanning measurements. The instrument set will again be a 2 inches by 2 inches NaI detector coupled to a GPS system, operated in the “open window” mode, and held at about 15 inches above the ground surface.

The approximate size of the mine site is 19 acres. To collect thorough and sufficient data, grid spacing will be placed at approximately 100-foot-square spacing. 100-foot grid spacing will generate 80 evenly spaced locations across the property. Assuming 1 minute to collect the data plus 4 minutes of additional time to walk to the next grid point, 80 measurements would require one person approximately 7 hours to collect, allowing the task to be completed in one work day if performed in parallel with the other site activities. Visual Sample Plan (VSP) software will be used to precisely generate sample locations using the designated grid spacing once the perimeter of the site is established. Each measurement location will be assigned its applicable GPS coordinates and located in the field using an appropriate electronic device. If the size of the mine site is altered or other site conditions change during the site reconnaissance, VSP software will be used to re-establish the number of grids and grid spacing most suitable for the mine site as determined by the FTL.

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In addition to the grid locations, stationary 1-minute measurements will be collected at suspect areas as identified by direct observation of the site or by gamma-scanning. These measurements will again be collected using the same instrument and GPS system. It is presumed that a second instrument set will be required for these measurements at suspect areas.

Interpretation of these data compares each count rate measurement, collected either from grid points or suspect areas, with the mean gamma background count rate measurement. If any count rate measurement is equal to or greater than two times (2X) the mean background count rate, the property is identified as having an observed release. It is important to note that a property identified as having an observed release may require no further action eventually if, for instance, the majority of the property has levels equal to background. Clean-up levels for these sites are not established in the document, and the observed release criteria are not the clean-up criteria.

3.7 SOIL SAMPLING

Soil samples of 0 to 6-inch depths and approximately 1 kg mass will be collected at locations identified by the stationary measurements as being suspect. It is recommended that the locations with the highest 1-minute stationary readings be the primary locations considered for sampling. It is expected that about 10 samples will be collected from a typical mine site. When a suspect location is selected for sampling based on the stationary measurement, the potential location will first be carefully examined both visually and by radiological scanning to confirm that the site is free of nuggets of ore or waste rock, or other hot particles that can significantly impact analytical results. It is the intent of soil sample analyses to quantify the residual uranium concentration averaged over the entire 1 kg mass, and therefore a reasonably homogeneous sample is desired.

If the suspect area has a few obvious nuggets or hot spots of contamination that are not typical of a broad area being sampled and can be excised, remove the hot spots and re-survey the potential location. Document in the field log what the conditions were and the number of nuggets or hot spots removed. If the ambient gamma activity is still significantly elevated and the location is therefore a good candidate for sampling, continue with the collection of the soil sample at this location, and re-collect the 1-minute stationary measurement at the location. If removing the hot spots has also removed the elevated gamma activity, then another sampling spot should be

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selected. If the potential sample location is obviously composed of multiple nuggets or hot spots that will likely be excluded when the sample is collected, the sample should not be collected, and another location should be selected for that sample. Again, any non-radioactive rocks of greater than 0.25-inch diameter and any biological material should be removed from the sample, possibly using a sieve. Alternately, if nuggets of elevated radioactivity appear to be widespread and typical for the site, they may be included in the sample if the laboratory has a procedure for crushing and grinding the sample prior to homogenizing, and the laboratory is directed to do so.

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4. LABORATORY ANALYSES

4.1 ANALYTICAL METHODS

All samples from the background locations and the suspect locations will be submitted to a qualified radiological laboratory for gamma spectrometry analyses. Sample preparation should include drying and homogenization of the entire 1 kg sample. The minimum gamma spectrometry aliquot size should be 0.5 kg. The laboratory will be requested to report all identifiable gamma emitting radioisotopes, and specifically the daughters of U-238, Ra-226, Th-232, and K-40. The requested sensitivity should be 0.1 pCi/g. The requested analytical procedure for Ra-226 should be by quantification of Bi-214 after an ingrowth period of at least 21 days. The suite of metal analytes to be analyzed in each soil sample include the 23 Target Analyte List (TAL) metals: aluminum, tin, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, selenium, silver, thallium, vanadium, zinc, and mercury, plus two additional metals, total uranium and molybdenum. Information regarding laboratory, analytical methods, container size, preservation techniques, and hold times is included in Table 4-1.

Since these samples are from legacy mine sites, it is assumed that the U-238 and Th-232 radioisotope decay chains will be in equilibrium. However, due to different solubilities of the chemical species found naturally in the environment, it is possible that the daughters may not be in equilibrium with the parents. Also, it is possible that mill tailings may have been returned to the mine site for storage and/or disposal. If this is the case, then the concentrations of the residual radioisotopes will not be in equilibrium. If it is suspected that any sample may not be in equilibrium, or if verification of equilibrium is desired, then additional analyses for isotopic uranium and isotopic thorium by alpha spectrometry will be requested of the laboratory. Analytical sensitivity of 0.1 pCi/g and a minimum aliquot size of 10 g will be required. It is recommended that one laboratory be selected for both types of analyses.

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4.2 DATA INTERPRETATION

Interpretation of these data compares analytical results of each sample with the background mean concentration. If any sample contains U-238 as determined by alpha spectrometry or Ra-226 as determined by gamma spectrometry at a concentration equal to or greater than three times (3x) the mean background concentration or at a concentration equal to or greater than two times (2x) the standard deviation above the mean concentration, the property will be identified as having an observed release. No other isotopic results will be compared to background concentrations. However, the project Certified Health Physicist (CHP) will review any analytical data for isotopes other than U-238 and Ra-226 for which the results appear to exceed the two previously described criteria.

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Table 4-1
Requirements for Containers, Preservation Techniques, Sample Volumes, and Holding Times
Dysart #2 Uranium Mine
Grants, McKinley County, New Mexico

Name	Analytical Methods	Container	Preservation	Minimum Sample Volume or Weight	Maximum Holding Time
TAL Metals plus total uranium, molybdenum, tin and mercury	SW846 6010/6020 SW846 7470/7471	Polyethylene (water), Glass (solid)	HNO_3 to pH<2 (water), 4°C	500 mL, 8oz	28 days for mercury 180 days all other metals
U-238, Ra-226	Gamma Spectrometry	Polyethylene (water), Glass (solid)	NA (soil/water)	1 gallon, 1 kg (32 oz)	6 months
Uranium/Thorium if determined in field	Alpha Spec ASTM 3972-90M	Polyethylene (water), Glass (solid)	HNO_3 to pH< 2 (water), NA (soil)	1 liter, 8 oz	6 months

Radiological methods to be conducted by Eberline Analytical, Oakridge, Tennessee.

TAL Metals analyzed by ALS Laboratories, Fort Collins, Colorado.

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5. DATA VALIDATION

5.1 FIELD INSTRUMENTS

Each field instrument will be calibrated on an annual basis by a qualified and registered calibration vendor. Validation of field measurements will be accomplished by maintenance and review of daily background and source checks of the instrument sets. Prior to initiation of field activities, 20 one-minute background counts and 20 one-minute source check counts will be collected and a mean calculated. During field operations, a one-minute background count and one-minute source check count will be made at the start and end of each work day. If the individual one-minute count falls outside of the mean +/- 20%, the instrument will not be used until evaluated by the project CHP. Individual control charts will be maintained for the background and source check on each instrument to monitor instrument performance for trends.

5.2 LABORATORY ANALYSES

Analytical laboratory reports will be reviewed by a CHP to confirm compliance with the technical specifications and reasonableness of the analytical results. Technical specifications reviewed will be that the requested isotopes are reported, that the minimum sensitivity was attained, and the required 21-day in-growth time for Ra-226 was observed. The reasonableness of the data will be evaluated by review of the various gamma spectrometry results to determine if they are in equilibrium, if appropriate, and if the results are within the expected range of results.

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6. WATER SAMPLING

6.1 WATER SAMPLING PROCEDURES

WESTON Standard Operating Procedures (SOPs) 1002-01 for Surface Water Sample Collection and 1002-02 for Groundwater Monitoring Well Sample Collection (Appendix A) will be utilized if either groundwater or surface water is observed on or in the vicinity of the mine site. The specific sampling procedures are described below.

6.2 GROUNDWATER PATHWAY SAMPLING

An attempt will be made to collect groundwater samples from any groundwater monitoring wells or home/stock water supply wells that exist either on-site or within 1,000 meters of the nearest property boundary. No on-site wells were noted during the NMED site reconnaissance on 29 July 2010. Survey personnel will measure depth to groundwater in each of the wells and then follow the EPA Guidance for Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures (Appendix A) for sampling the wells, if appropriate. Readings for temperature, pH, and conductivity will be collected every 5 minutes. Once three consecutive readings stabilize for pH (+ 0.5 units), conductivity (+ 10% µmhos/cm), and temperature (+ 1°C), or the water has purged for a maximum of 30 minutes, the samples will be collected. The groundwater samples will be analyzed for the same list of radionuclides and TAL metals as were identified for soil samples.

6.3 SURFACE WATER PATHWAY SAMPLING

An attempt will be made to collect a surface water sample and a sediment sample from any existing surface water impoundments, streams, or stock ponds that exist either on-site or within 1,000 meters of the nearest property boundary to document a release to the surface water pathway from the site. Samples will be analyzed for the same list of radionuclides and TAL metals as were identified for soil samples. Martin Draw is a drainage pathway located approximately 200 feet to the east of the Dysart #2 Mine Site. Though Martin Draw is typically void of surface water, START-3 will collect surface water samples as directed from the EPA if water is present at the time of the site reconnaissance. If Martin Draw is dry during the site

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reconnaissance, START-3 will collect gamma scanning data from the channel in order to assess the potential occurrence of impacts from dispersal of waste materials that may have been left on the Dysart #2 Mine Site. If gamma scanning data collected from the channel are suspect, soil/sediment sample(s) may be collected from Martin Draw and analyzed for the same list of radionuclides and TAL metals as identified for soil samples. Ambrosia Lake is a surface water impoundment clearly relevant to this site, but it is located on the Section 12 Mine Site and will be addressed in the QASP for that site. Data from samples collected at the Ambrosia Lake feature will be included in the report for the Dysart #2 Mine Site, as appropriate.

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7. QUALITY ASSURANCE

Quality assurance will be conducted in accordance with the WESTON Corporate Quality Management Manual, dated March 2004; the WESTON START-3 Quality Management Plan, dated August 2007; and EPA Quality Assurance/Quality Control Guidance for Removal Activities, dated April 1990. Following receipt of the TDD from EPA, a Quality Control (QC) officer will be assigned and will monitor work conducted throughout the entire project including reviewing interim report deliverables and field audits. The START-3 PTL will be responsible for QA/QC of the field investigation activities. The designated laboratory utilized during the investigation will be responsible for QA/QC related to the analytical work. START-3 will also collect samples to verify that laboratory QA/QC is consistent with the required standards and to validate the laboratory data received.

7.1 SAMPLE CUSTODY PROCEDURES

Because of the evidentiary nature of sample collection, the possession of samples must be traceable from the time the samples are collected until they are introduced as evidence in legal proceedings. After sample collection and identification, samples will be maintained under chain-of-custody (COC) procedures. If the sample collected is to be split (laboratory QC), the sample will be allocated into similar sample containers. Sample labels completed with the same information as that on the original sample container will be attached to each of the split samples. All personnel required to package and ship coolers containing potentially hazardous material will be trained accordingly.

START-3 personnel will prepare and complete chain-of-custody forms using the Scribe Environmental Sampling Data Management System (SCRIBE) for all samples sent to a START-3 designated off-site laboratory. The chain-of-custody procedures are documented and will be made available to all personnel involved with the sampling. A typical chain-of-custody record will be completed each time a sample or group of samples is prepared for shipment to the laboratory. The record will repeat the information on each sample label and will serve as documentation of handling during shipment. A copy of this record will remain with the shipped samples at all times, and another copy will be retained by the member of the sampling team who

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originally relinquished the samples. At the completion of the project, the data manager will export the SCRIBE chain-of-custody documentation to the Analytical Service Tracking System (ANSETS) database.

Samples relinquished to the participating laboratories will be subject to the following procedures for transfer of custody and shipment:

- Samples will be accompanied by the COC record. When transferring possession of samples, the individuals relinquishing and receiving the samples will sign, date, and note the time of the sample transfer on the record. This custody records document transfer of sample custody from the sampler to another person or to the laboratory.
- Samples will be properly packed for shipment and dispatched to the appropriate laboratory for analysis with separate, signed custody records enclosed in each sample box or cooler. Sample shipping containers will be custody-sealed for shipment to the laboratory. The preferred procedure includes use of a custody seal wrapped across filament tape that is wrapped around the package at least twice. The custody seal will then be folded over and stuck to seal to ensure that the only access to the package is by cutting the filament tape or breaking the seal to unwrap the tape.
- If sent by common carrier, a bill of lading or airbill will be used. Bill of lading and airbill receipts will be retained in the project file as part of the permanent documentation of sample shipping and transfer.

SOPs 1101.01 and 1102.01 describe these procedures in more detail.

7.2 PROJECT DOCUMENTATION

All documents will be completed legibly and in ink and by entry into field logbooks, Response Manager, or SCRIBE. Response Manager is the Enterprise Data Collection System designed to provide near real-time access to non-analytical data normally collected in logbooks. Response Manager provides a standard data collection interface for modules of data normally collected by START-3 field personnel while on-site. These modules fall into two basic categories for Response and Removal. The modules include Emergency Response, Reconnaissance, Facility Assessment, Shipping, Containers, Materials, Calls, HHW, and General/Site-Specific data. The system provides users with a standard template for laptop/desktop/tablet PCs that will synchronize to the secure web interface using merge replication technology to provide access to field collected data on the RRC-EDMS EPA Web Hub. Response Manager also includes a PDA application that provides some of the standard data entry templates from Response Manager to

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users for field data entry. Response Manager also includes an integrated GPS unit with the secure PDA application, and the coordinates collected in Response Manager are automatically mapped on the RRC-EDMS interactive mapping site. GIS personnel can then access this data to provide comprehensive site maps for decision-making support.

Response Manager also includes an Analytical Module that is designed to give SCRIBE users the ability to synchronize the SCRIBE field data to the RRC-EDMS Web Hub. This allows analytical data managers and data validators access to data to perform reviews from anywhere with an Internet connection. The Analytical Module is designed to take the analytical data entered into EPA SCRIBE software and make it available for multiple users to access on one site. START-3 personnel will utilize SCRIBE for all data entry on-site and will upload to the Response Manager Analytical module.

7.2.1 Field Documentation

The following field documentation will be maintained as described below.

Field Logbook

The field logbook is a descriptive notebook detailing site activities and observations so that an accurate, factual account of field procedures may be reconstructed. All entries will be signed by the individuals making them. Entries should include, at a minimum, the following:

- Site name and project number.
- Names of personnel on-site.
- Dates and times of all entries.
- Description of all site activities, including site entry and exit times.
- Noteworthy events and discussions.
- Weather conditions.
- Site observations.
- Identification and description of samples and locations.
- Subcontractor information and names of on-site personnel.
- Dates and times of sample collections and chain-of-custody information.
- Records of photographs.
- Site sketches.
- Calibration results.

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Sample Labels

Sample labels will be securely affixed to the sample container. The labels will clearly identify the particular sample and include the following information:

- Site name and project number.
- Date and time the sample was collected.
- Sample preservation method.
- Analysis requested.
- Sampling location.

Chain-of-Custody Record

A chain-of-custody will be maintained from the time of sample collection until final deposition. Every transfer of custody will be noted and signed for and a copy of the record will be kept by each individual who has signed it. The chain-of-custody is discussed in Subsection 7.1 Sample Custody Procedures.

Custody Seal

Custody seals demonstrate that a sample container has not been tampered with or opened. The individual who has custody of the samples will sign and date the seal and affix it to the container in such a manner that it cannot be opened without breaking the seal.

Photographic Documentation

START-3 will take photographs to document site conditions and activities as site work progresses. Initial conditions should be well documented by photographing features that define the site-related contamination or special working conditions. Representative photographs should be taken of each type of site activity. The photographs should show typical operations and operating conditions as well as special situations and conditions that may arise during site activities. Site final conditions should also be documented as a record of how the site appeared at completion of the work.

All photographs should be taken with either a film camera or digital camera capable of recording the date on the image. Each photograph will be recorded in the logbook and within Response

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Manager with the location of the photographer, direction the photograph was taken, the subject of the photograph, and its significance (i.e., why the picture was taken). Where appropriate, the photograph location, direction, and subject will also be shown on a site sketch and recorded within Response Manager.

7.2.2 Report Preparation

At the completion of the project, START-3 will review and validate all laboratory data and prepare a draft report of field activities and analytical results for EPA OSC review. Draft deliverable documents will be uploaded to the EPA TeamLink website for EPA OSC review and comment.

7.2.3 Response Manager

START-3 will use the Response Manager module located on the EPA Web Hub, https://solutions.westonproject.net/epawebhub/, to collect and organize the data collected from project activities. The information to be included encompasses some or all of the following depending on the specific project needs:

- General Module – site-specific data including location and type of site. It also includes an area for all key site locations including geo-spatial data associated with the key site locations.
- Emergency Response Module – includes the following sub-modules: Basic Info, HAZMAT, Release, Time Line Log, Incident Zones, Photos, Sensitive Receptors, Evacuations, Source, Cause, and Weather.
- Reconnaissance Module – provides standard templates with the flexibility of adding any additional questions of values to the drop-down lists for targeted reconnaissance efforts. Typically the data in this module is associated with ESF-10 deployments and the clean-up of orphaned containers and hazardous debris, but the module can be utilized for any and all reconnaissance activities.
- Facility Assessment Module – provides standard templates with the flexibility of adding any additional questions of values to the drop-down lists for assessments of structures. Typically utilized for EPA-regulated program facilities during an ESF-10 deployment of resources. This module can be utilized to track the assessment of any facilities including multiple assessments of the fixed facilities.
- Shipping Module – provides standard templates for creating a cradle-to-grave record of all waste shipments from the site until they are recycled or destroyed. This includes the

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ability to capture manifest and manifest line items and upload photos/original documents to support the records.

- Container Module – provides standard templates for cataloguing containers including HAZCAT and Layer information in each container. The module also allows for the tracking of which containers are bulked.
- Properties Module – provides standard templates with the flexibility of adding any additional questions of values to the drop-down lists for collection of property data including access agreements and assessments of the property and current status of property with regard to the site removal action.
- Materials Module – provides standard templates for tracking materials that are brought on-site or that are removed from the site.
- Daily Reports – provides standard templates for tracking daily site activities, daily site personnel, and daily site notes for reporting back to the EPA OSC in a POLREP or SITREP.
- HHW Module – provides standard templates with the flexibility of adding any additional questions of values to the drop-down lists for tracking the amount of HHW collected at individual collection stations by HHW type.
- Data Files – data files can be uploaded in the photo module section and be associated with individual records or with the site in general. The meta data associated with that data file can be filled in using the photo log fields.

The data stored in the Response Manager database can be viewed and edited by any individual with access rights to those functions. At any time deemed necessary, POLREPs and/or SITREPs can be generated by exporting the data out of Response Manager into Microsoft Excel/Word. The database is stored on a secure server and backed up regularly.

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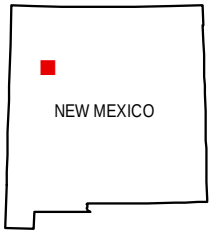
0 2.5 5

SCALE IN MILES

Legend

DYSART #2 URANIUM MINE



N

TDD NO: TO-0035-11-09-01
CERCLIS NO.: NMN000607186

SOURCE: ESRI STREETMAP USA

US EPA REGION 6
START- 3

FIGURE 1-1
SITE LOCATION MAP
DYSART #2 URANIUM MINE
AMBROSIA LAKE AREA
MCKINLEY COUNTY, NEW MEXICO

DATE	PROJECT NO	SCALE
OCT 2011	20406.012.035.0672.01	AS SHOWN

File: L:\20406_START3_R6\DYSART_2_MINE\GIS\FIGURE_1-1_SITE_LOCATION_MAP-DYSART.mxd 5/7/2012 9:09:18 AM bondp

APPENDIX A

EPA GUIDANCE DOCUMENTS AND WESTON STANDARD OPERATING PROCEDURES

United States Environmental Protection Agency | Office of Research and Development | Office of Solid Waste and Emergency Response | EPA/540/S-95/504 April 1996

Ground Water Issue

LOW-FLOW (MINIMAL DRAWDOWN) GROUND-WATER SAMPLING PROCEDURES

by Robert W. Puls[1] and Michael J. Barcelona[2]

Background

The Regional Superfund Ground Water Forum is a group of ground-water scientists, representing EPA's Regional Superfund Offices, organized to exchange information related to ground-water remediation at Superfund sites. One of the major concerns of the Forum is the sampling of ground water to support site assessment and remedial performance monitoring objectives. This paper is intended to provide background information on the development of low-flow sampling procedures and its application under a variety of hydrogeologic settings. It is hoped that the paper will support the production of standard operating procedures for use by EPA Regional personnel and other environmental professionals engaged in ground-water sampling.

For further information contact: Robert Puls, 405-436-8543, Subsurface Remediation and Protection Division, NRMRL, Ada, Oklahoma.

I. Introduction

The methods and objectives of ground-water sampling to assess water quality have evolved over time. Initially the emphasis was on the assessment of water quality of aquifers as sources of drinking water. Large water-bearing units were identified and sampled in keeping with that objective. These were highly productive aquifers that supplied drinking water via private wells or through public water supply systems. Gradually, with the increasing awareness of subsurface pollution of these water resources, the understanding of complex hydrogeochemical processes which govern the fate and transport of contaminants in the subsurface increased. This increase in understanding was also due to advances in a number of scientific disciplines and improvements in tools used for site characterization and ground-water sampling. Ground-water quality investigations where pollution was detected initially borrowed ideas, methods, and materials for site characterization from the water supply field and water analysis from public health practices. This included the materials and manner in which monitoring wells were installed and the way in which water was brought to the surface, treated, preserved and analyzed. The prevailing conceptual ideas included convenient generalizations of ground-water resources in terms of large and relatively homogeneous hydrologic *units*. With time it became apparent that conventional water supply generalizations of *homogeneity* did not adequately represent field data regarding pollution of these subsurface resources. The important role of *heterogeneity* became increasingly clear not only in geologic terms, but also in terms of complex physical,

[1]National Risk Management Research Laboratory, U.S. EPA
[2]University of Michigan

Superfund Technology Support Center for Ground Water

National Risk Management Research Laboratory
Subsurface Protection and Remediation Division
Robert S. Kerr Environmental Research Center
Ada, Oklahoma

Technology Innovation Office
Office of Solid Waste and Emergency Response, US EPA, Washington, DC

Walter W. Kovalick, Jr., Ph.D.
Director

chemical and biological subsurface processes. With greater appreciation of the role of heterogeneity, it became evident that subsurface pollution was ubiquitous and encompassed the unsaturated zone to the deep subsurface and included unconsolidated sediments, fractured rock, and *aquitards* or low-yielding or impermeable formations. Small-scale processes and heterogeneities were shown to be important in identifying contaminant distributions and in controlling water and contaminant flow paths.

It is beyond the scope of this paper to summarize all the advances in the field of ground-water quality investigations and remediation, but two particular issues have bearing on ground-water sampling today: aquifer heterogeneity and colloidal transport. Aquifer heterogeneities affect contaminant flow paths and include variations in geology, geochemistry, hydrology and microbiology. As methods and the tools available for subsurface investigations have become increasingly sophisticated and understanding of the subsurface environment has advanced, there is an awareness that in most cases a primary concern for site investigations is characterization of contaminant flow paths rather than entire aquifers. In fact, in many cases, plume thickness can be less than well screen lengths (e.g., 3-6 m) typically installed at hazardous waste sites to detect and monitor plume movement over time. Small-scale differences have increasingly been shown to be important and there is a general trend toward smaller diameter wells and shorter screens.

The hydrogeochemical significance of colloidal-size particles in subsurface systems has been realized during the past several years (Gschwend and Reynolds, 1987; McCarthy and Zachara, 1989; Puls, 1990; Ryan and Gschwend, 1990). This realization resulted from both field and laboratory studies that showed faster contaminant migration over greater distances and at higher concentrations than flow and transport model predictions would suggest (Buddemeier and Hunt, 1988; Enfield and Bengtsson, 1988; Penrose et al., 1990). Such models typically account for interaction between the mobile aqueous and immobile solid phases, but do not allow for a mobile, reactive solid phase. It is recognition of this third *phase* as a possible means of contaminant transport that has brought increasing attention to the manner in which samples are collected and processed for analysis (Puls et al., 1990; McCarthy and Degueldre, 1993; Backhus et al., 1993; U. S. EPA, 1995). If such a phase is present in sufficient mass, possesses high sorption reactivity, large surface area, and remains stable in suspension, it can serve as an important mechanism to facilitate contaminant transport in many types of subsurface systems.

Colloids are particles that are sufficiently small so that the surface free energy of the particle dominates the bulk free energy. Typically, in ground water, this includes particles with diameters between 1 and 1000 nm. The most commonly observed mobile particles include: secondary clay minerals; hydrous iron, aluminum, and manganese oxides; dissolved and particulate organic materials, and viruses and bacteria. These reactive particles have been shown to be mobile under a variety of conditions in both field studies and laboratory column experiments, and as such need to be included in monitoring programs where identification of the *total* mobile contaminant loading (dissolved + naturally suspended particles) at a site is an objective. To that end, sampling methodologies must be used which do not artificially bias *naturally* suspended particle concentrations.

Currently the most common ground-water purging and sampling methodology is to purge a well using bailers or high speed pumps to remove 3 to 5 casing volumes followed by sample collection. This method can cause adverse impacts on sample quality through collection of samples with high levels of turbidity. This results in the inclusion of otherwise immobile artifactual particles which produce an overestimation of certain analytes of interest (e.g., metals or hydrophobic organic compounds). Numerous documented problems associated with filtration (Danielsson, 1982; Laxen and Chandler, 1982; Horowitz et al., 1992) make this an undesirable method of rectifying the turbidity problem, and include the removal of potentially mobile (contaminant-associated) particles during filtration, thus artificially biasing contaminant concentrations low. Sampling-induced turbidity problems can often be mitigated by using low-flow purging and sampling techniques.

Current subsurface conceptual models have undergone considerable refinement due to the recent development and increased use of field screening tools. So-called hydraulic *push* technologies (e.g., cone penetrometer, Geoprobe®, QED HydroPunch®) enable relatively fast screening site characterization which can then be used to design and install a monitoring well network. Indeed, alternatives to conventional monitoring wells are now being considered for some hydrogeologic settings. The ultimate design of any monitoring system should however be based upon adequate site characterization and be consistent with established monitoring objectives.

If the sampling program objectives include accurate assessment of the magnitude and extent of subsurface contamination over time and/or accurate assessment of subsequent remedial performance, then some information regarding plume delineation in three-dimensional space is necessary prior to monitoring well network design and installation. This can be accomplished with a variety of different tools and equipment ranging from hand-operated augers to screening tools mentioned above and large drilling rigs. Detailed information on ground-water flow velocity, direction, and horizontal and vertical variability are essential baseline data requirements. Detailed soil and geologic data are required prior to and during the installation of sampling points. This includes historical as well as detailed soil and geologic logs which accumulate during the site investigation. The use of borehole geophysical techniques is also recommended. With this information (together with other site characterization data) and a clear understanding of sampling

objectives, then appropriate location, screen length, well diameter, slot size, etc. for the monitoring well network can be decided. This is especially critical for new in situ remedial approaches or natural attenuation assessments at hazardous waste sites.

In general, the overall goal of any ground-water sampling program is to collect water samples with no alteration in water chemistry; analytical data thus obtained may be used for a variety of specific monitoring programs depending on the regulatory requirements. The sampling methodology described in this paper assumes that the monitoring goal is to sample monitoring wells for the presence of contaminants and it is applicable whether mobile colloids are a concern or not and whether the analytes of concern are metals (and metalloids) or organic compounds.

II. Monitoring Objectives and Design Considerations

The following issues are important to consider prior to the design and implementation of any ground-water monitoring program, including those which anticipate using low-flow purging and sampling procedures.

A. Data Quality Objectives (DQOs)

Monitoring objectives include four main types: detection, assessment, corrective-action evaluation and resource evaluation, along with *hybrid* variations such as site-assessments for property transfers and water availability investigations. Monitoring objectives may change as contamination or water quality problems are discovered. However, there are a number of common components of monitoring programs which should be recognized as important regardless of initial objectives. These components include:

1) Development of a conceptual model that incorporates elements of the regional geology to the local geologic framework. The conceptual model development also includes initial site characterization efforts to identify hydrostratigraphic units and likely flow-paths using a minimum number of borings and well completions;

2) Cost-effective and well documented collection of high quality data utilizing simple, accurate, and reproducible techniques; and

3) Refinement of the conceptual model based on supplementary data collection and analysis.

These fundamental components serve many types of monitoring programs and provide a basis for future efforts that evolve in complexity and level of spatial detail as purposes and objectives expand. High quality, reproducible data collection is a common goal regardless of program objectives.

High quality data collection implies data of sufficient accuracy, precision, and completeness (i.e., ratio of valid analytical results to the minimum sample number called for by the program design) to meet the program objectives. Accuracy depends on the correct choice of monitoring tools and procedures to minimize sample and subsurface disturbance from collection to analysis. Precision depends on the repeatability of sampling and analytical protocols. It can be assured or improved by replication of sample analyses including blanks, field/lab standards and reference standards.

B. Sample Representativeness

An important goal of any monitoring program is collection of data that is truly representative of conditions at the site. The term *representativeness* applies to chemical and hydrogeologic data collected via wells, borings, piezometers, geophysical and soil gas measurements, lysimeters, and temporary sampling points. It involves a recognition of the statistical variability of individual subsurface physical properties, and contaminant or major ion concentration levels, while explaining extreme values. Subsurface temporal and spatial variability are facts. Good professional practice seeks to maximize representativeness by using proven accurate and reproducible techniques to define limits on the distribution of measurements collected at a site. However, measures of representativeness are dynamic and are controlled by evolving site characterization and monitoring objectives. An evolutionary site characterization model, as shown in Figure 1, provides a systematic approach to the goal of consistent data collection.

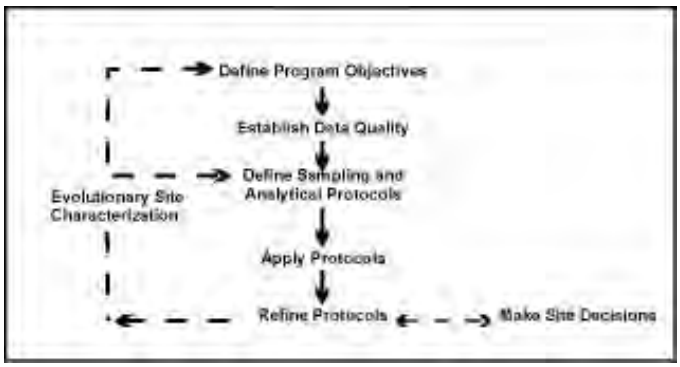


Figure 1. Evolutionary Site Characterization Model

The model emphasizes a recognition of the causes of the variability (e.g., use of inappropriate technology such as using bailers to purge wells; imprecise or operator-dependent methods) and the need to control avoidable errors.

1) Questions of Scale

A sampling plan designed to collect representative samples must take into account the potential scale of changes in site conditions through space and time as well as the chemical associations and behavior of the parameters that are targeted for investigation. In subsurface systems, physical (i.e., aquifer) and chemical properties over time or space are not statistically independent. In fact, samples taken in close proximity (i.e., within distances of a few meters) or within short time periods (i.e., more frequently than monthly) are highly auto-correlated. This means that designs employing high-sampling frequency (e.g., monthly) or dense spatial monitoring designs run the risk of redundant data collection and misleading inferences regarding trends in values that aren't statistically valid. In practice, contaminant detection and assessment monitoring programs rarely suffer these *over-sampling* concerns. In corrective-action evaluation programs, it is also possible that too little data may be collected over space or time. In these cases, false interpretation of the spatial extent of contamination or underestimation of temporal concentration variability may result.

2) Target Parameters

Parameter selection in monitoring program design is most often dictated by the regulatory status of the site. However, background water quality constituents, purging indicator parameters, and contaminants, all represent targets for data collection programs. The tools and procedures used in these programs should be equally rigorous and applicable to all categories of data, since all may be needed to determine or support regulatory action.

C. Sampling Point Design and Construction

Detailed site characterization is central to all decision-making purposes and the basis for this characterization resides in identification of the geologic framework and major hydro-stratigraphic units. Fundamental data for sample point location include: subsurface lithology, head-differences and background geochemical conditions. Each sampling point has a proper use or uses which should be documented at a level which is appropriate for the program's data quality objectives. Individual sampling points may not always be able to fulfill multiple monitoring objectives (e.g., detection, assessment, corrective action).

1) Compatibility with Monitoring Program and Data Quality Objectives

Specifics of sampling point location and design will be dictated by the complexity of subsurface lithology and variability in contaminant and/or geochemical conditions. It should be noted that, regardless of the ground-water sampling approach, few sampling points (e.g., wells, drive-points, screened augers) have zones of influence in excess of a few feet. Therefore, the spatial frequency of sampling points should be carefully selected and designed.

2) Flexibility of Sampling Point Design

In most cases *well-point* diameters in excess of 1 7/8 inches will permit the use of most types of submersible pumping devices for low-flow (minimal drawdown) sampling. It is suggested that *short* (e.g., less than 1.6 m) screens be incorporated into the monitoring design where possible so that comparable results from one device to another might be expected. *Short*, of course, is relative to the degree of vertical water quality variability expected at a site.

3) Equilibration of Sampling Point

Time should be allowed for equilibration of the well or sampling point with the formation after installation. Placement of well or sampling points in the subsurface produces some disturbance of ambient conditions. Drilling techniques (e.g., auger, rotary, etc.) are generally considered to cause more disturbance than *direct-push* technologies. In either case, there may be a period (i.e., days to months) during which water quality near the point may be distinctly different from that in the formation. Proper development of the sampling point and adjacent formation to remove fines created during emplacement will shorten this water quality *recovery* period.

III. Definition of Low-Flow Purging and Sampling

It is generally accepted that water in the well casing is non-representative of the formation water and needs to be purged prior to collection of ground-water samples. However, the water in the screened interval may indeed be representative of the formation, depending upon well construction and site hydrogeology. Wells are purged to some extent for the following reasons: the presence of the air interface at the top of the water column resulting in an oxygen concentration gradient with depth, loss of volatiles up the water column, leaching from or sorption to the casing or filter pack, chemical changes due to clay seals or backfill, and surface infiltration.

Low-flow purging, whether using portable or dedicated systems, should be done using pump-intake located in the middle or slightly above the middle of the screened interval. Placement of the pump too close to the bottom of the well will cause increased entrainment of solids which have collected in the well over time. These particles are present as a result of well development, prior purging and sampling events, and natural colloidal transport and deposition. Therefore, placement of the pump in the middle or toward the top of the screened interval is suggested. Placement of the pump at the top of the water column for sampling is only recommended in unconfined aquifers, screened across the water table, where this is the desired sampling point. Low-

flow purging has the advantage of minimizing mixing between the overlying stagnant casing water and water within the screened interval.

A. Low-Flow Purging and Sampling

Low-flow refers to the velocity with which water enters the pump intake and that is imparted to the formation pore water in the immediate vicinity of the well screen. It does not necessarily refer to the flow rate of water discharged at the surface which can be affected by flow regulators or restrictions. Water level drawdown provides the best indication of the stress imparted by a given flow-rate for a given hydrological situation. The objective is to pump in a manner that minimizes stress (drawdown) to the system to the extent practical taking into account established site sampling objectives. Typically, flow rates on the order of 0.1 - 0.5 L/min are used, however this is dependent on site-specific hydrogeology. Some extremely coarse-textured formations have been successfully sampled in this manner at flow rates to 1 L/min. The effectiveness of using low-flow purging is intimately linked with proper screen location, screen length, and well construction and development techniques. The reestablishment of natural flow paths in both the vertical and horizontal directions is important for correct interpretation of the data. For high resolution sampling needs, screens less than 1 m should be used. Most of the need for purging has been found to be due to passing the sampling device through the overlying casing water which causes mixing of these stagnant waters and the dynamic waters within the screened interval. Additionally, there is disturbance to suspended sediment collected in the bottom of the casing and the displacement of water out into the formation immediately adjacent to the well screen. These disturbances and impacts can be avoided using dedicated sampling equipment, which precludes the need to insert the sampling device prior to purging and sampling.

Isolation of the screened interval water from the overlying stagnant casing water may be accomplished using low-flow minimal drawdown techniques. If the pump intake is located within the screened interval, most of the water pumped will be drawn in directly from the formation with little mixing of casing water or disturbance to the sampling zone. However, if the wells are not constructed and developed properly, zones other than those intended may be sampled. At some sites where geologic heterogeneities are sufficiently different within the screened interval, higher conductivity zones may be preferentially sampled. This is another reason to use shorter screened intervals, especially where high spatial resolution is a sampling objective.

B. Water Quality Indicator Parameters

It is recommended that water quality indicator parameters be used to determine purging needs prior to sample collection in each well. Stabilization of parameters such as pH, specific conductance, dissolved oxygen, oxidation-reduction potential, temperature and turbidity should be used to determine when formation water is accessed during purging. In general, the order of stabilization is pH, temperature, and specific conductance, followed by oxidation-reduction potential, dissolved oxygen and turbidity. Temperature and pH, while commonly used as purging indicators, are actually quite insensitive in distinguishing between formation water and stagnant casing water; nevertheless, these are important parameters for data interpretation purposes and should also be measured. Performance criteria for determination of stabilization should be based on water-level drawdown, pumping rate and equipment specifications for measuring indicator parameters. Instruments are available which utilize in-line flow cells to continuously measure the above parameters.

It is important to establish specific well stabilization criteria and then consistently follow the same methods thereafter, particularly with respect to drawdown, flow rate and sampling device. Generally, the time or purge volume required for parameter stabilization is independent of well depth or well volumes. Dependent variables are well diameter, sampling device, hydrogeochemistry, pump flow rate, and whether the devices are used in a portable or dedicated manner. If the sampling device is already in place (i.e., dedicated sampling systems), then the time and purge volume needed for stabilization is much shorter. Other advantages of dedicated equipment include less purge water for waste disposal, much less decontamination of equipment, less time spent in preparation of sampling as well as time in the field, and more consistency in the sampling approach which probably will translate into less variability in sampling results. The use of dedicated equipment is strongly recommended at wells which will undergo routine sampling over time.

If parameter stabilization criteria are too stringent, then minor oscillations in indicator parameters may cause purging operations to become unnecessarily protracted. It should also be noted that turbidity is a very conservative parameter in terms of stabilization. Turbidity is always the last parameter to stabilize. Excessive purge times are invariably related to the establishment of too stringent turbidity stabilization criteria. It should be noted that natural turbidity levels in ground water may exceed 10 nephelometric turbidity units (NTU).

C. Advantages and Disadvantages of Low-Flow (Minimum Drawdown) Purging

In general, the advantages of low-flow purging include:

- samples which are representative of the *mobile* load of contaminants present (dissolved and colloid-associated);
- minimal disturbance of the sampling point thereby minimizing sampling artifacts;
- less operator variability, greater operator control;

- reduced stress on the formation (minimal drawdown);
- less mixing of stagnant casing water with formation water;
- reduced need for filtration and, therefore, less time required for sampling;
- smaller purging volume which decreases waste disposal costs and sampling time;
- better sample consistency; reduced artificial sample variability.

Some disadvantages of low-flow purging are:

- higher initial capital costs,
- greater set-up time in the field,
- need to transport additional equipment to and from the site,
- increased training needs,
- resistance to change on the part of sampling practitioners,
- concern that new data will indicate a *change in conditions* and trigger an *action*.

IV. Low-Flow (Minimal Drawdown) Sampling Protocols

The following ground-water sampling procedure has evolved over many years of experience in ground-water sampling for organic and inorganic compound determinations and as such summarizes the authors' (and others) experiences to date (Barcelona et al., 1984, 1994; Barcelona and Helfrich, 1986; Puls and Barcelona, 1989; Puls et. al. 1990, 1992; Puls and Powell, 1992; Puls and Paul, 1995). High-quality chemical data collection is essential in ground-water monitoring and site characterization. The primary limitations to the collection of *representative* ground-water samples include: mixing of the stagnant casing and *fresh* screen waters during insertion of the sampling device or ground-water level measurement device; disturbance and resuspension of settled solids at the bottom of the well when using high pumping rates or raising and lowering a pump or bailer; introduction of atmospheric gases or degassing from the water during sample handling and transfer, or inappropriate use of vacuum sampling device, etc.

A. Sampling Recommendations

Water samples should not be taken immediately following well development. Sufficient time should be allowed for the ground-water flow regime in the vicinity of the monitoring well to stabilize and to approach chemical equilibrium with the well construction materials. This lag time will depend on site conditions and methods of installation but often exceeds one week.

Well purging is nearly always necessary to obtain samples of water flowing through the geologic formations in the screened interval. Rather than using a general but arbitrary guideline of purging three casing volumes prior to sampling, it is recommended that an in-line water quality measurement device (e.g., flow-through cell) be used to establish the stabilization time for several parameters (e.g. , pH, specific conductance, redox, dissolved oxygen, turbidity) on a well-specific basis. Data on pumping rate, drawdown, and volume required for parameter stabilization can be used as a guide for conducting subsequent sampling activities.

The following are recommendations to be considered before, during and after sampling:

- use low-flow rates (<0.5 L/min), during both purging and sampling to maintain minimal drawdown in the well;
- maximize tubing wall thickness, minimize tubing length;
- place the sampling device intake at the desired sampling point;
- minimize disturbances of the stagnant water column above the screened interval during water level measurement and sampling device insertion;
- make proper adjustments to stabilize the flow rate as soon as possible;
- monitor water quality indicators during purging;
- collect unfiltered samples to estimate contaminant loading and transport potential in the subsurface system.

B. Equipment Calibration

Prior to sampling, all sampling device and monitoring equipment should be calibrated according to manufacturer's recommendations and the site Quality Assurance Project Plan (QAPP) and Field Sampling Plan (FSP). Calibration of pH should be performed with at least two buffers which bracket the expected range. Dissolved oxygen calibration must be corrected for local barometric pressure readings and elevation.

C. Water Level Measurement and Monitoring

It is recommended that a device be used which will least disturb the water surface in the casing. Well depth should be obtained from the well logs. Measuring to the bottom of the well casing will only cause resuspension of settled solids from the formation and require longer purging times for turbidity equilibration. Measure well depth after sampling is completed. The water level measurement should be taken from a permanent reference point which is surveyed relative to ground elevation.

D. Pump Type

The use of low-flow (e.g., 0.1-0.5 L/min) pumps is suggested for purging and sampling all types of analytes. All pumps have some limitation and these should be investigated with respect to application at a particular site. Bailers are inappropriate devices for low-flow sampling.

1) General Considerations

There are no unusual requirements for ground-water sampling devices when using low-flow, minimal drawdown techniques. The major concern is that the device give consistent results and minimal disturbance of the sample across a range of *low* flow rates (i.e., < 0.5 L/min). Clearly, pumping rates that cause minimal to no drawdown in one well could easily cause *significant* drawdown in another well finished in a less transmissive formation. In this sense, the pump should not cause undue pressure or temperature changes or physical disturbance on the water sample over a reasonable sampling range. Consistency in operation is critical to meet accuracy and precision goals.

2) Advantages and Disadvantages of Sampling Devices

A variety of sampling devices are available for low-flow (minimal drawdown) purging and sampling and include peristaltic pumps, bladder pumps, electrical submersible pumps, and gas-driven pumps. Devices which lend themselves to both dedication and consistent operation at definable low-flow rates are preferred. It is desirable that the pump be easily adjustable and operate reliably at these lower flow rates. The peristaltic pump is limited to shallow applications and can cause degassing resulting in alteration of pH, alkalinity, and some volatiles loss. Gas-driven pumps should be of a type that does not allow the gas to be in direct contact with the sampled fluid.

Clearly, bailers and other *grab* type samplers are ill-suited for low-flow sampling since they will cause repeated disturbance and mixing of *stagnant* water in the casing and the *dynamic* water in the screened interval. Similarly, the use of inertial lift foot-valve type samplers may cause too much disturbance at the point of sampling. Use of these devices also tends to introduce uncontrolled and unacceptable operator variability.

Summaries of advantages and disadvantages of various sampling devices are listed in Herzog et al. (1991), U. S. EPA (1992), Parker (1994) and Thurnblad (1994).

E. Pump Installation

Dedicated sampling devices (left in the well) capable of pumping and sampling are preferred over <u>any</u> other type of device. Any portable sampling device should be slowly and carefully lowered to the middle of the screened interval or slightly above the middle (e.g., 1-1.5 m below the top of a 3 m screen). This is to minimize excessive mixing of the stagnant water in the casing above the screen with the screened interval zone water, and to minimize resuspension of solids which will have collected at the bottom of the well. These two disturbance effects have been shown to directly affect the time required for purging. There also appears to be a direct correlation between size of portable sampling devices relative to the well bore and resulting purge volumes and times. The key is to minimize disturbance of water and solids in the well casing.

F. Filtration

Decisions to filter samples should be dictated by sampling objectives rather than as a *fix* for poor sampling practices, and field-filtering of certain constituents should not be the default. Consideration should be given as to what the application of field-filtration is trying to accomplish. For assessment of truly dissolved (as opposed to operationally *dissolved* [i.e., samples filtered with 0.45 µm filters]) concentrations of major ions and trace metals, 0.1 µm filters are recommended although 0.45 µm filters are normally used for most regulatory programs. Alkalinity samples must also be filtered if significant particulate calcium carbonate is suspected, since this material is likely to impact alkalinity titration results (although filtration itself may alter the CO_2 composition of the sample and, therefore, affect the results).

Although filtration may be appropriate, filtration of a sample may cause a number of unintended changes to occur (e.g. oxidation, aeration) possibly leading to filtration-induced artifacts during sample analysis and uncertainty in the results. Some of these unintended changes may be unavoidable but the factors leading to them must be recognized. Deleterious effects can be minimized by consistent application of certain filtration guidelines. Guidelines should address selection of filter type, media, pore size, etc. in order to identify and minimize potential sources of uncertainty when filtering samples.

In-line filtration is recommended because it provides better consistency through less sample handling, and minimizes sample exposure to the atmosphere. In-line filters are available in both disposable (barrel filters) and non-disposable (in-line filter holder, flat membrane filters) formats and various filter pore sizes (0.1-5.0 µm). Disposable filter cartridges have the advantage of greater sediment handling capacity when compared to traditional membrane filters. Filters must be pre-rinsed following manufacturer's recommendations. If there are no recommendations for rinsing, pass through a minimum of 1 L of ground water following purging and prior to sampling. Once filtration has begun, a filter cake may develop as particles larger than the pore size accumulate on the filter membrane. The result is that the effective pore diameter of the membrane is reduced and particles smaller than the stated pore size are excluded from the filtrate. Possible corrective measures include prefiltering (with larger pore size filters), minimizing particle loads to begin with, and reducing sample volume.

G. Monitoring of Water Level and Water Quality Indicator Parameters

Check water level periodically to monitor drawdown in the well as a guide to flow rate adjustment. The goal is minimal drawdown (<0.1 m) during purging. This goal may be difficult to achieve under some circumstances due to geologic heterogeneities within the screened interval, and may require adjustment based on site-specific conditions and personal experience. In-line water quality indicator parameters should be continuously monitored during purging. The water quality

indicator parameters monitored can include pH, redox potential, conductivity, dissolved oxygen (DO) and turbidity. The last three parameters are often most sensitive. Pumping rate, drawdown, and the time or volume required to obtain stabilization of parameter readings can be used as a future guide to purge the well. Measurements should be taken every three to five minutes if the above suggested rates are used. Stabilization is achieved after all parameters have stabilized for three successive readings. In lieu of measuring all five parameters, a minimum subset would include pH, conductivity, and turbidity or DO. Three successive readings should be within ± 0.1 for pH, ± 3% for conductivity, ± 10 mv for redox potential, and ± 10% for turbidity and DO. Stabilized purge indicator parameter trends are generally obvious and follow either an exponential or asymptotic change to stable values during purging. Dissolved oxygen and turbidity usually require the longest time for stabilization. The above stabilization guidelines are provided for rough estimates based on experience.

H. Sampling, Sample Containers, Preservation and Decontamination

Upon parameter stabilization, sampling can be initiated. If an in-line device is used to monitor water quality parameters, it should be disconnected or bypassed during sample collection. Sampling flow rate may remain at established purge rate or may be adjusted slightly to minimize aeration, bubble formation, turbulent filling of sample bottles, or loss of volatiles due to extended residence time in tubing. Typically, flow rates less than 0.5 L/min are appropriate. The same device should be used for sampling as was used for purging. Sampling should occur in a progression from least to most contaminated well, if this is known. Generally, volatile (e.g., solvents and fuel constituents) and gas sensitive (e.g., Fe^{2+}, CH_4, H_2S/HS^-, alkalinity) parameters should be sampled first. The sequence in which samples for most inorganic parameters are collected is immaterial unless filtered (dissolved) samples are desired. Filtering should be done last and in-line filters should be used as discussed above. During both well purging and sampling, proper protective clothing and equipment must be used based upon the type and level of contaminants present.

The appropriate sample container will be prepared in advance of actual sample collection for the analytes of interest and include sample preservative where necessary. Water samples should be collected directly into this container from the pump tubing.

Immediately after a sample bottle has been filled, it must be preserved as specified in the site (QAPP). Sample preservation requirements are based on the analyses being performed (use site QAPP, FSP, RCRA guidance document [U. S. EPA, 1992] or EPA SW-846 [U. S. EPA, 1982]). It may be advisable to add preservatives to sample bottles in a controlled setting prior to entering the field in order to reduce the chances of improperly preserving sample bottles or introducing field contaminants into a sample bottle while adding the preservatives.

The preservatives should be transferred from the chemical bottle to the sample container using a disposable polyethylene pipet and the disposable pipet should be used only once and then discarded.

After a sample container has been filled with ground water, a Teflon™ (or tin)-lined cap is screwed on tightly to prevent the container from leaking. A sample label is filled out as specified in the FSP. The samples should be stored inverted at 4°C.

Specific decontamination protocols for sampling devices are dependent to some extent on the type of device used and the type of contaminants encountered. Refer to the site QAPP and FSP for specific requirements.

I. Blanks

The following blanks should be collected:

(1) field blank: one field blank should be collected from each source water (distilled/deionized water) used for sampling equipment decontamination or for assisting well development procedures.

(2) equipment blank: one equipment blank should be taken prior to the commencement of field work, from each set of sampling equipment to be used for that day. Refer to site QAPP or FSP for specific requirements.

(3) trip blank: a trip blank is required to accompany each volatile sample shipment. These blanks are prepared in the laboratory by filling a 40-mL volatile organic analysis (VOA) bottle with distilled/deionized water.

V. Low-Permeability Formations and Fractured Rock

The overall sampling program goals or sampling objectives will drive how the sampling points are located, installed, and choice of sampling device. Likewise, site-specific hydrogeologic factors will affect these decisions. Sites with very low permeability formations or fractures causing discrete flow channels may require a unique monitoring approach. Unlike water supply wells, wells installed for ground-water quality assessment and restoration programs are often installed in low water-yielding settings (e.g., clays, silts). Alternative types of sampling points and sampling methods are often needed in these types of environments, because low-permeability settings may require extremely low-flow purging (<0.1 L/min) and may be technology-limited. Where devices are not readily available to pump at such low flow rates, the primary consideration is to avoid dewatering of

the well screen. This may require repeated recovery of the water during purging while leaving the pump in place within the well screen.

Use of low-flow techniques may be impractical in these settings, depending upon the water recharge rates. The sampler and the end-user of data collected from such wells need to understand the limitations of the data collected; i.e., a strong potential for underestimation of actual contaminant concentrations for volatile organics, potential false negatives for filtered metals and potential false positives for unfiltered metals. It is suggested that comparisons be made between samples recovered using low-flow purging techniques and samples recovered using passive sampling techniques (i.e., two sets of samples). Passive sample collection would essentially entail acquisition of the sample with no or very little purging using a dedicated sampling system installed within the screened interval or a passive sample collection device.

A. Low-Permeability Formations (<0.1 L/min recharge)

1. Low-Flow Purging and Sampling with Pumps

a. "portable or non-dedicated mode" - Lower the pump (one capable of pumping at <0.1 L/min) to mid-screen or slightly above and set in place for minimum of 48 hours (to lessen purge volume requirements). After 48 hours, use procedures listed in Part IV above regarding monitoring water quality parameters for stabilization, etc., but do not dewater the screen. If excessive drawdown and slow recovery is a problem, then alternate approaches such as those listed below may be better.

b. "dedicated mode" - Set the pump as above at least a week prior to sampling; that is, operate in a dedicated pump mode. With this approach significant reductions in purge volume should be realized. Water quality parameters should stabilize quite rapidly due to less disturbance of the sampling zone.

2. Passive Sample Collection

Passive sampling collection requires insertion of the device into the screened interval for a sufficient time period to allow flow and sample equilibration before extraction for analysis. Conceptually, the extraction of water from low yielding formations seems more akin to the collection of water from the unsaturated zone and passive sampling techniques may be more appropriate in terms of obtaining "representative" samples. Satisfying usual sample volume requirements is typically a problem with this approach and some latitude will be needed on the part of regulatory entities to achieve sampling objectives.

B. Fractured Rock

In fractured rock formations, a low-flow to zero purging approach using pumps in conjunction with packers to isolate the sampling zone in the borehole is suggested. Passive multi-layer sampling devices may also provide the most "representative" samples. It is imperative in these settings to identify flow paths or water-producing fractures prior to sampling using tools such as borehole flowmeters and/or other geophysical tools.

After identification of water-bearing fractures, install packer(s) and pump assembly for sample collection using low-flow sampling in "dedicated mode" or use a passive sampling device which can isolate the identified water-bearing fractures.

VI. Documentation

The usual practices for documenting the sampling event should be used for low-flow purging and sampling techniques. This should include, at a minimum: information on the conduct of purging operations (flow-rate, drawdown, water-quality parameter values, volumes extracted and times for measurements), field instrument calibration data, water sampling forms and chain of custody forms. See Figures 2 and 3 and "Ground Water Sampling Workshop -- A Workshop Summary" (U. S. EPA, 1995) for example forms and other documentation suggestions and information. This information coupled with laboratory analytical data and validation data are needed to judge the "useability" of the sampling data.

VII. Notice

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Figure 2. **Ground Water Sampling Log**

Project _____ **Site** _____ **Well No.** _____ **Date** _____

Well Depth _____ **Screen Length** _____ **Well Diameter** _____ **Casing Type** _____

Sampling Device _____ **Tubing type** _____ **Water Level** _____

Measuring Point _____ **Other Infor** _____

_____

Sampling Personnel _____

Time	pH	Temp	Cond.	Dis.O_2	Turb.	[ ]Conc			Notes

Type of Samples Collected

_____

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft: $Vol_{cyl} = \pi r^2 h$, $Vol_{sphere} = 4/3\pi r^3$

Figure 3. **Ground Water Sampling Log** (with automatic data logging for most water quality parameters)

Project _____ **Site** _____ **Well No.** _____ **Date** _____

Well Depth _____ **Screen Length** _____ **Well Diameter** _____ **Casing Type** _____

Sampling Device _____ **Tubing type** _____ **Water Level** _____

Measuring Point _____ **Other Infor** _____

_____

Sampling Personnel _____

Time	Pump Rate	Turbidity	Alkalinity	[ ] Conc	Notes

Type of Samples Collected

_____

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft: $Vol_{cyl} = \pi r^2 h$, $Vol_{sphere} = 4/3\pi r^3$

INTRODUCTION

The following Standard Operating Procedure (SOP) is to describe the procedures for collecting representative soil samples. Analysis of soil samples may determine whether concentrations of specific soil pollutants exceed established action levels, or if the concentrations of soil pollutants present a risk to public health, welfare, or the environment. This SOP is similar to SOP Number 1001.03 for collecting near surface soil samples with a hand auger.

PROCEDURE

Surface soil samples may be collected using a variety of methods and equipment. The methods and equipment used are dependent on the depth of the desired sample, the type of sample required (disturbed versus undisturbed), and the type of soil. Near-surface soils may be easily sampled using a spade, trowel, or hand scoop.

Sample Preservation

Cooling to 4°C ± 2°C, supplemented by a minimal holding time, is suggested.

Interferences and Potential Problems

There are two primary interferences or potential problems associated with soil sampling: cross-contamination of samples and improper sample collection. Cross-contamination problems can be eliminated or minimized through the use of dedicated (disposable) sampling equipment. If this is not possible or practical, then decontamination of sampling equipment is necessary. Improper sample collection can involve using contaminated equipment, disturbance of the matrix resulting in compaction of the sample, or inadequate homogenization of the samples where required, resulting in variable, non-representative results. Homogenization may also affect sample representativeness where the analytical requirements include volatile organic compounds.

Equipment or Apparatus

The equipment used for sampling may be selected from the following list, as appropriate:

- Tape measure
- Survey stakes or flags
- Stainless steel, plastic, or other appropriate homogenization bucket or bowl
- Ziploc plastic bags
- Logbook
- Labels
- Chain-of-custody forms and seals
- Coolers
- Ice
- Decontamination supplies and equipment
- Canvas or plastic sheet
- Spatulas/spades/shovels
- Scoops

- Plastic or stainless steel spoons
- Trowel

Preparation

1. Determine the extent of the sampling effort, the sampling methods to be employed, and what equipment and supplies are required.
2. Obtain necessary sampling and monitoring equipment from the list above.
3. Prepare schedules, and coordinate with staff, client, and regulatory agencies, if appropriate.
4. Perform a general site survey prior to site entry in accordance with the site-specific health and safety plan.
5. Decontaminate or preclean equipment, and ensure that it is in working order.
6. Use stakes, buoys, or flagging to identify and mark all sampling locations. Consider specific site factors, including extent and nature of contaminant, when selecting sample locations. If required, the proposed locations may be adjusted based on site access, property boundaries, and surface obstructions. All staked locations will be utility-cleared by the property owner or other responsible party prior to soil sampling.
7. Evaluate safety concerns associated with sampling that may require use of personal protective equipment and/or air monitoring.

Surface Soil Sample Collection

Collect samples from the near-surface soil with tools such as spades, shovels, and scoops. Surface material can be removed to the required depth with this equipment, then a stainless steel or plastic scoop can be used to collect the sample. The use of a flat, pointed mason trowel to cut a block of the desired soil can be helpful when undisturbed profiles are required. A stainless steel scoop, lab spoon, or plastic spoon will suffice in most other applications. Avoid the use of devices plated with chrome or other target analyte materials.

The following procedures should be followed when collecting surface soil samples:

1. Carefully remove the top layer of soil or debris to the desired sample depth with a pre-cleaned spade.
2. Using a pre-cleaned, stainless steel scoop, plastic spoon, or trowel, remove and discard a thin layer of soil from the area which came in contact with the spade.
3. If volatile organic analysis is to be performed, transfer a portion of the sample directly into an appropriate, labeled sample container(s) with a stainless steel lab spoon, plastic lab spoon, or equivalent and secure the cap(s) tightly. Place the remainder of the sample into a stainless steel, plastic, or other appropriate homogenization container, and mix thoroughly to obtain a homogenous sample representative of the entire sampling interval. Then, either place the sample into an appropriate, labeled container(s) and secure the cap(s) tightly; or if composite samples are to be collected, place a sample from another sampling interval into the

homogenization container and mix thoroughly. When compositing is complete, place the sample into appropriate, labeled container(s) and secure the cap(s) tightly.

4. Fill hole created through sampling with unused material or other appropriate backfill material (sand).

5. Record applicable information into field log book or appropriate forms as documentation of sampling.

INTRODUCTION

The following Standard Operating Procedure (SOP) is to describe the procedures for collecting representative surface water samples. Analysis of surface samples may determine whether concentrations of specific soil pollutants exceed established action levels, or if the concentrations of pollutants present a risk to public health, welfare, or the environment.

PROCEDURE

Surface water samples may be collected using a variety of methods and equipment. The methods and equipment used are usually dependent on the location of the body of water being sampled. Sampling can be performed by merely submerging the sample container, a weighted-bottle sampler with stopper, a bailer, or by pump assisted methods. Several types of pumps can be used for sampling depending on the objectives of sampling and the site conditions.

Sample Preservation

Samples are to be preserved in conformance with the site-specific Quality Assurance Project Plan, Sampling and Analysis Plan or work plan. In general these requirements include refrigeration to 4°C, addition of appropriate additives (HCl, H_2SO_4, NaOH) to adjust and fix pH, and a defined maximum holding time. If a site-specific plan is not available, the analytical laboratory should be consulted for the appropriate preservation procedures.

Interferences and Potential Problems

There are two primary interferences or potential problems associated with surface water sampling: cross-contamination of samples and improper sample collection. Cross-contamination problems can be eliminated or minimized through the use of dedicated sampling equipment. If this is not possible or practical, then decontamination of sampling equipment is necessary. Improper sample collection can involve using contaminated equipment, undue disturbance of the sample matrix, or improper sample location.

Equipment or Apparatus

- Ziploc plastic bags
- Logbook
- Labels
- Chain-of-custody forms and seals
- Coolers
- Ice
- Decontamination supplies and equipment
- Discharge tubing
- Sample containers
- Sampling devices

Preparation

1. Determine the extent of the sampling effort, the sampling methods to be employed, and which equipment and supplies are required.
2. Obtain necessary sampling and monitoring equipment.
3. Decontaminate or preclean equipment, and ensure that it is in working order.
4. Prepare schedules, and coordinate with staff, client, and regulatory agencies, if appropriate.
5. Perform a general site survey prior to site entry in accordance with the site-specific health and safety plan.

Surface Water Sampling

Samples from shallow depths can be readily collected by merely submerging the sample container. In flowing surface water bodies, the container's mouth should be positioned so that it faces upstream, while the sampling personnel stand downstream so as not to stir up sediment that could potentially contaminate the sample.

Collecting a representative sample from a larger body of surface water requires that samples be collected near the shore unless boats are feasible and permitted. If boats are used, the body of water should be cross sectioned, and samples should be collected at various depths across the body of water in accordance with the specified sampling plan. For this type of sampling, a weighted-bottle sampler is used to collect samples at a predetermined depth. The sampler consists of a glass bottle, a weighted sinker, a bottle stopper, and a line that is used to open the bottle and to lower and raise the sampler during sampling. The procedure for use is as follows:

- Assemble the weighted bottle sampler.
- Gently lower the sampler to the desired depth so as not to remove the stopper prematurely.
- Pull out the stopper with a sharp jerk of the sampler line.
- Allow the bottle to fill completely, as evidenced by the cessation of air bubbles.
- Raise the sampler and cap the bottle.
- Wipe the bottle clean. The sampling bottle can be also be used as the sample container for shipping.

Teflon bailers have also been used where feasible for collecting samples in deep bodies of water.

Another method of extending the reach of sampling efforts is the use of a small peristaltic pump. In this method the sample is drawn through heavy-wall Teflon tubing and pumped directly into the sample container. This system allows the operator to reach into the liquid body, sample from depth, or sweep the width of narrow streams.

The general sampling procedures are listed below:

1. Collect the sample using whichever technique, submerged bottle, bottle sampler with stopper, pump & tubing, or bailer.

2. The collected sample may be collected in the sample containers or may be transferred to the appropriate sample containers in order of the volatile organics first and inorganics last.

3. Label sample containers, place on ice in a cooler, remove, and decontaminate equipment as necessary.

REFERENCES

SOP 0110.01 Sample Nomenclature
SOP 1005.01 Field Duplicate Collection
SOP 1005.02 Rinse Blank Preparation
SOP 1005.03 Field Blank Preparation
SOP 1101.01 Sample Custody - Field
SOP 1102.01 Sample Shipping
SOP 1201.01 Sampling Equipment Decontamination
SOP 1501.01 Field Logbook

INTRODUCTION

The following Standard Operating Procedure (SOP) is to describe the procedures for collecting representative sediment samples using a trowel, piston corer, WILDCO KB Core Sampler, a Ponar Grab Sampler, or other similar equipment. Analysis of sediment samples may be performed to determine whether concentrations of specific sediment pollutants exceed established action levels, or if the concentrations of sediment pollutants present a risk to public health, welfare, or the environment.

PROCEDURE

Overview

Sediment samples may be collected using trowels, core and Ponar sampler, or a variety of similar methods and equipment. The methods and equipment used are dependent on the depth of the desired sample, the type of sample required (disturbed versus undisturbed), and the type of sediment (fines versus coarse). Sampling in shallow areas or streams near the surface may only require a hand trowel, while sampling at depth may be performed using a core or Ponar sampler.

Sample Preservation

Refrigeration to 4° C $\pm$ 2° C, supplemented by a minimal holding time, is suggested.

Interferences and Potential Problems

There are two primary interferences or potential problems associated with sediment sampling: cross-contamination of samples and improper sample collection. Cross-contamination problems can be eliminated or minimized through the use of dedicated (disposable) sampling equipment. If this is not possible or practical, then decontamination of sampling equipment is necessary. Improper sample collection can involve using contaminated equipment, disturbance of the matrix resulting in mixing of the sample, or inadequate homogenization of the samples where required, resulting in variable, non-representative results. Homogenization may also affect sample representativeness when the analytical requirements include volatile organic compounds.

Equipment or Apparatus

The equipment selected for the sampling effort may include the following as appropriate:

- Tape measure
- Survey stakes or flags
- Stainless steel, plastic, or other appropriate homogenization bucket or bowl
- Ziploc plastic bags
- Logbook
- Labels
- Chain-of-custody forms and seals
- Coolers
- Ice

- Decontamination supplies and equipment (i.e. brushes and buckets)
- Canvas or plastic sheeting
- Spatulas
- Scoops
- Plastic or stainless steel spoons
- Trowel
- Auger bucket
- Extension rods
- T-handle
- KB Core Sampler
- Ponar Grab Sampler
- Air monitor

Preparation

1. Determine the extent of the sampling effort, the sampling methods to be employed, and which equipment and supplies are required.
2. Obtain necessary sampling and monitoring equipment from the list above. Additional equipment may be added to this list as appropriate to perform other sampling.
3. Decontaminate or preclean equipment, and ensure that it is in working order.
4. Perform a general site survey prior to site entry in accordance with the site-specific health and safety plan.
5. Use stakes, buoys, or flagging to identify and mark all sampling locations. Consider specific site factors, including extent and nature of contaminant, when selecting sample locations. If required, the proposed locations may be adjusted based on site access, property boundaries, and obstructions.

Sediment Sampling in Shallow Waters

The following procedures should be used when collecting sediment samples in shallow waters:

1. Collect sediments as specified in the work plan or as determined during office preparation activities, using a stainless steel trowel, piston corer or similar device and a stainless steel, tempered glass or aluminum container.
2. Standing downstream of the sample stations, collect discrete sediment samples from each station and, if required in the work plan, composite in stainless steel, tempered glass or aluminum container.
3. Collect sediment samples of deposited material from the depth specified in the work plan or as determined during the office preparation activities. Record the depth in the logbook. Selective removal of the top sediment layers may be required and should be accomplished by carefully removing the sediments with a stainless steel trowel or scoop. In streams where water velocity is insufficient to disturb sediment fines during sediment sampling, a stainless

steel trowel or scoop may be used for sampling. Where water velocities are high, a stainless steel corer will be utilized.

4. When applicable, composite discrete sediment samples by placing equal volumes of sediment material collected from the sample points into the container and mixing thoroughly to obtain a homogeneous mixture. Samples may be sieved or hand picked, if necessary, to remove larger materials, such as leaves, sticks, gravel, or rocks. Record in the logbook the nature of any materials removed from the sediment samples.
5. Place each sediment sample into the proper clean, unused sample container, as required by the work plan or laboratory. Sampling personnel must avoid placing sediment into the sample container and decanting off the excess liquid in analyzing for volatile organics and water soluble compounds in the sediment and reduces accurate representation of sediment analysis.
6. Fill out labels with waterproof ink and attach to the sample container.
7. Decontaminate sampling equipment between samples.

Sediment Sampling in Deep Waters

Procedures for sampling in deep waters are the same as for shallow waters except the sampling equipment is different. Soft, fine-grained sediments collected in deep waters will be sampled with a WILDCO KB Core Sampler or similar equipment . Coarse-grained sediments will be collected utilizing a Ponar Grab Sampler or similar equipment. Both samplers will be operated from a boat following appropriate safety procedures. Documentation, containerization, labeling and decontamination procedures are the same as for sediment samples collected in shallow waters.

Sediment Sampling in Drainage Ditches and Intermittent Streams

Procedures for sediment sampling in drainage ditches and the dry portions of intermittent streams are as specified for shallow water sediments.

INTRODUCTION

The following Standard Operating Procedure (SOP) describes the procedure for collecting field duplicate soil and water samples. When samples are collected for analysis, it is typically desired that independent data allowing evaluation of laboratory precision (i.e., the degree to which a laboratory result can be repeated) on site-specific samples be collected.

A field duplicate sample is a second sample collected at the same location as the original sample. Duplicate samples are collected simultaneously or in immediate succession, using identical recovery techniques, and treated in an identical manner during storage, transportation, and analysis. The sample containers are assigned an identification number in the field such that they cannot be identified (blind duplicate) as duplicated samples by laboratory personnel performing the analysis. Specific locations are designated for collection of field duplicate samples prior to the beginning of sample collection.

The duplicate soil sampling procedure is closely related to SOP Nos. 1001.01, 1001.03, and 1001.10 regarding soil sampling procedures. This procedure serves as an alternative method or extension of sample preparation prior to placing the samples in containers, as described in the 1001 series of the SOPs (e.g. 1001.01 and 1001.03).

DUPLICATE SOIL SAMPLING PROCEDURE

The procedure to be used to physically collect soil samples are described in SOP Nos. 1001.01 and 1001.03. Reference should be made to these SOPs for specific sampling equipment, procedures, and other general guidelines. As soil is collected, the following procedure will be used to prepare a field duplicate sample:

- The soil will be collected in general accordance with SOP 1001.01 or 1001.03, with the exception that samples will generally not be immediately placed into sample containers and an additional preparation step (i.e., sample splitting) will be performed.

- As they are collected, soil samples to be submitted as field duplicates will be staged in a clean mixing bowl or mixing bucket.

- For samples that will be analyzed for volatile organic compounds, the soil sample will be split in half and an equal portion of soil will be placed directly into two or more different sample containers, each container representing a different sample for laboratory analysis. The soil will not be homogenized to minimize the potential for volatilization of the organic compounds potentially in the sample.

- For analyses of chemicals other than volatile organic compounds, the soil removed from the discrete sample location will be homogenized in a clean mixing bowl using a clean scoop or spatula (as described in SOPs 1001.01 and 1001.03). Homogenization will generally continue until the discrete samples being combined are reasonably indistinguishable as individual samples in the soil mixture. However, it is recognized that homogenization can be difficult for highly plastic clays. In this case, equal amounts of the soil core of each clay sample will be cut into small, roughly cubical pieces using a stainless steel knife and placed into a bowl and homogenized to extent practical.

- The field duplicate sample (except for volatiles as note above) will be collected from the mixing bowl containing the homogenized samples after homogenization is performed. The composited sample will be collected using a stainless steel or disposable plastic scoop or similar tool. The sample will be placed in a clean sample container and then handled in accordance with soil sampling SOPs 1001.01 and 1001.03.

Another difference from the referenced SOPs is that additional soil volume may need to be collected from a discrete sample location during the sampling process to provide sufficient sample volume for two or more sets of laboratory analyses. If the collection of additional sample volume will result in the sample interval expanding to greater depths or laterally outward, the sampling tools identified in 1001 series of the SOPs can be used at two immediately vertically or laterally adjacent locations, as appropriate. If sampling from two adjacent but distinct locations is necessary to obtain adequate sample volume, the soil from the two locations should be composited in accordance with SOP 1001.10. Field duplicates of composited samples may also be performed using this SOP for field duplicate samples.

Variations on this procedure are allowable to accommodate different soil conditions and any site requirements specifically identified in the site-specific Sampling and Analysis Plan. Equipment that may be used as part of the soil compositing procedure is identified under SOP Nos. 1001.01 and 1001.03 where soil sampling methods are described.

DUPLICATE WATER SAMPLING PROCEDURES

The procedure to be used to physically collect water samples are described in 1002 series of the SOPs (e.g. 1002.01 and 1002.02). Reference should be made to these SOPs for specific sampling equipment, procedures, and other general guidelines. A duplicate water sample will be collected from the same location as the parent sample and within 15 minutes of the collection of the parent sample.

The number of samples that may be submitted as blind field duplicates for the project in question will be specified in the site-specific sampling plan. Blind field duplicates are typically collected at a frequency of 1 per 10 samples of a given environmental media at sites, especially where laboratory analytical data will be used for evaluating regulatory compliance and other engineering judgments. Sampling in support of a routine monitoring program may not require field duplicates. Reference should be made to the site-specific contract and work plans.

REFERENCES

SOP No. 1001.01 - Standard Operating Procedure, Surface Soil Sampling
SOP No. 1001.03 - Standard Operating Procedure, Soil Sampling - Hand Auger Method
SOP No. 1001.10 - Standard Operating Procedure, Soil Compositing

SOP	**1005.02**				
GROUP	Sampling Procedures				
SUB-GROUP	Field QA/QC Sampling				
TITLE	Rinse Blank Preparation				
DATE	2/6/2009	**FILE**	1005-02.DOC	**PAGE**	1 of 1

INTRODUCTION

The following Standard Operating Procedure (SOP) presents a method to prepare a type of quality control sample specific to the field decontamination process, the equipment rinse blank. The rinse blank provides information on the effectiveness of the decontamination process employed in the field. When used in conjunction with field blanks and trip blanks, the rinse blank can be used to assist in evaluating possible compromise of samples from field related activities.

PROCEDURE

The equipment rinse blank is prepared by passing target analyte-free (i.e., deionized) water over and through a field decontaminated sampling device, then collecting the rinse water in appropriate clean sample containers. Rinse blanks will typically be collected from equipment that comes in contact with samples, such as auger buckets, split spoons, bailers, shelby tubes, and stainless steel spoons/trowels. The collected sample will be coded appropriately prior to logging and shipping. Equipment blanks are not required if dedicated sampling equipment is used. Equipment blanks will be collected periodically during the day immediately after decontamination of the sampling equipment being used.

The frequency for collecting equipment blanks will be determined prior to engaging in field activities, and communicated in site-specific quality assurance project plans, sampling and analyses plans, or a type of work plan. Equipment blanks will be collected at a rate relative to each type of sample collection procedure (i.e., surface sample, sample at depth using a hand auger). Equipment blanks will generally be collected at a frequency of 1 per 20 (normal) samples of a given matrix.

INTRODUCTION

The following Standard Operating Procedure (SOP) presents procedures for maintaining sample chain of custody (COC) during activities where samples are collected.

PROCEDURE

Sample custody is defined as being under a person's custody if any of the following conditions exist:

- it is in their possession,
- it is in their view, after being in their possession,
- it was in their possession and they locked it up, or
- it is in a designated secure area.

A designated field sampler will be personally responsible for the care and custody of collected samples until they are transferred to another person or properly dispatched to the laboratory. To the extent practicable, as few people as possible will handle the samples.

Sample tags or labels will be completed and applied to the container of each sample. When the tags or labels are being completed, waterproof ink will be used. If waterproof ink is not used, the tags or labels will be covered by transparent waterproof tape. Sample containers may also be placed in Ziploc-type storage bags to help keep them clean in the cooler. Information typically included on the sample tags or labels will include the following:

- Project Code
- Station Number and Location
- Sample Identification Number
- Date and Time of Sample Collection
- Type of Laboratory Analysis Required
- Preservation Required, if applicable
- Collector's Signature
- Priority (optional)
- Other Remarks

Additonal information may include:

- Anticipated Range of Results (Low, Medium, or High)
- Sample Analysis Priority

A COC form will be completed each time a sample or group of samples is prepared for transfer to the laboratory. The form will repeat the information on each of the sample labels and will serve as documentation of handling during shipment. The minimum information requirements of the COC form are listed in Table 1101.01-A. An example COC form is shown in Figure 1101.01-A. The completed COC must be reviewed by the Field Team Leader or Site Manager prior to sample shipment. The COC form will remain each sample shipping container at all times, and another copy will be retained by the member of the sampling team who originally relinquished the samples or in a project file.

TABLE 1101.01-A CHAIN OF CUSTODY FORM

INFORMATION	COMPLETED BY	DESCRIPTION
COC	Laboratory	enter a unique number for each chain of custody form
SHIP TO	Field Team	enter the laboratory name and address
CARRIER	Field Team	enter the name of the transporter (e.g., FedEx) or handcarried
AIRBILL	Field Team	enter the airbill number or transporter tracking number (if applicable)
PROJECT NAME	Field Team	enter the project name
SAMPLER NAME	Field Team	enter the name of the person collecting the samples
SAMPLER SIGNATURE	Field Team	signature of the person collecting the samples
SEND RESULTS TO	Field Team	enter the name and address of the prime contractor
FIELD SAMPLE ID	Field Team	enter the unique identifying number given to the field sample (includes MS, MSD, field duplicate and field blanks)
DATE	Field Team	enter the year and date the sample was collected in the format M/D (e.g., 6/3)
TIME	Field Team	enter the time the sample was collected in 24 hour format (e.g., 0900)
MATRIX	Field Team	enter the sample matrix (e.g., water, soil)
PRESERVATIVE	Field Team	enter the preservative used (e.g., HNO3) or “none”
FILTERED/ UNFILTERED	Field Team	enter “F” if the sample was filtered or “U” if the sample was not filtered
CONTAINERS	Field Team	enter the number of containers associated with the sample
MS/MSD	Field Team or Laboratory	enter “X” if the sample is designated for the MS/MSD
ANALYSES REQUESTED	Field Team	enter the method name of the analysis requested (e.g., SW6010A)
COMMENTS	Field Team	enter comments
SAMPLE CONDITION UPON RECEIPT AT LABORATORY	Laboratory	enter any problems with the condition of any sample(s)
COOLER TEMPERATURE	Laboratory	enter the internal temperature of the cooler, in degrees C, upon opening
SPECIAL INSTRUCTIONS/COMMENTS	Laboratory	enter any special instructions or comments
RELEASED BY (SIG)	Field Team and Laboratory	enter the signature of the person releasing custody of the samples
COMPANY NAME	Field Team and Laboratory	enter the company name employing the person releasing/receiving custody
RECEIVED BY (SIG)	Field Team and Laboratory	enter the signature of the person receiving custody of the samples
DATE	Field Team and Laboratory	enter the date in the format M/D/YY (e.g., 6/3/96) when the samples were released/received
TIME	Field Team and Laboratory	enter the date in 24 hour format (e.g., 0900) when the samples were released/received

FIGURE 1101.01-A CHAIN OF CUSTODY FORM

INTRODUCTION

The following Standard Operating Procedure (SOP) presents the methods used for minimizing the potential for cross-contamination, and provides general guidelines for sampling equipment decontamination procedures.

PROCEDURE

As part of the Health and Safety Plan (HASP), develop and set up a decontamination plan before any personnel or equipment enter the areas of potential exposure. The decontamination plan should include the following:

- The number, location, and layout of decontamination stations
- Which decontamination apparatus is needed
- The appropriate decontamination methods
- Methods for disposal of contaminated clothing, apparatus, and solutions

Decontamination Methods

Personnel, samples, and equipment leaving the contaminated area of a site will be decontaminated. Various decontamination methods will be used to either physically remove contaminants, inactivate contaminants by disinfection or sterilization, or both. The physical decontamination techniques appropriate for equipment decontamination can be grouped into two categories: abrasive methods and non-abrasive methods.

Abrasive Cleaning Methods

Abrasive cleaning methods work by rubbing/scrubbing the surface containing the contaminant. This method includes mechanical and wet blasting methods.

Mechanical cleaning methods use brushes of metal or nylon. The amount and type of contaminants removed will vary with the hardness of bristles, length of brushing time, and degree of brush contact.

Cleaning can also be accomplished by water blasting which is also referred to as steam cleaning and pressure washing. Pressure washing utilizes high-pressure that is sprayed from a nozzle onto sampling equipment to physically remove soil or (potentially) contaminated material. Steam cleaning is a modification of pressure washing where the water is heated to temperatures approaching 100°C to assist in removing organic constituents from equipment.

Disinfection/Rinse Methods

Disinfectants are a practical means of inactivating chemicals or contaminants of concern. Standard sterilization methods involve heating the equipment which is impractical for large equipment. Rinsing removes contaminants through dilution, physical attraction, and solubilization.

The use of distilled/deionized water commonly available from commercial vendors may be acceptable for decontamination of sampling equipment provided that it has been verified by laboratory analysis to be target analyte free. Tap water may be used from any municipal water treatment system for mixing of decontamination solutions. An untreated potable water supply is not an acceptable substitute for tap water. Acids and solvents are occasionally utilized in decontamination of equipment to remove metals and organics, respectively, from sampling equipment. Other than ethanol, these are avoided when possible due to the safety, disposal, and transportation concerns associated with them.

Equipment or apparatuses that may be selected for use include the following:

- Personal protective clothing
- Non-phosphate detergent
- Selected solvents for removal of polar and nonpolar organics (ethanol, methanol, hexane)
- Acid washes for removal of metals (nitric acid)
- Long-handled brushes
- Drop cloths or plastic sheeting
- Paper towels
- Galvanized tubs or buckets
- Distilled, deionized, or tap water (as required by the project)
- Storage containers for spent wash solutions
- Sprayers (pressurized and non-pressurized)
- Trash bags
- Safety glasses or splash shield

<u>Field Sampling Equipment Cleaning Procedures</u>

The following procedures should be followed:

1. Where applicable, follow physical removal procedures previously described (pressure wash, scrub wash)
2. Wash equipment with a non-phosphate detergent solution
3. Rinse with tap water
4. Rinse with distilled or deionized water
5. Rinse with 10% nitric acid if the sample will be analyzed for metals/organics
6. Rinse with distilled or deionized water
7. Use a solvent rinse (pesticide grade) if the sample will be analyzed for organics
8. Air dry the equipment completely
9. Rinse again with distilled or deionized water

10. Place in clean bag or container for storage/transport to subsequent sampling locations.

Selection of the solvent for use in the decontamination process is based on the contaminants present at the site. Solvent rinses are not necessarily required when organics are not a contaminant of concern and may be eliminated from the sequence specified below. Similarly, an acid rinse is not required if the analyses do not include inorganics. Use of a solvent is required when organic contamination is present on-site. Typical solvents used for removal of organic contaminants include acetone, ethanol, hexane, methanol, or water. An acid rinse step is required if metals are present on-site. If a particular contaminant fraction is not present at the site, the ten-step decontamination procedure listed above may be modified for site specificity.

Sampling equipment that requires the use of plastic tubing should be disassembled and the tubing replaced with clean tubing before commencement of sampling and between sampling locations. Plastic tubing should not be reused.

INTRODUCTION

The following Standard Operating Procedure (SOP) presents the procedures for documenting activities observed or completed in the field in a field logbook. The documentation should represent all activities of WESTON personnel and entities under WESTON's supervision.

TERMS

FSP - Field Sampling Plan

SAP - Sampling and Analysis Plan

QAPP - Quality Assurance Project Plan

HASP - Health and Safety Plan

PROCEDURE

Field logbooks will be used and maintained during field activities to document pertinent information observed or completed by WESTON personnel or entities that WESTON is responsible for providing oversight. Field logbooks are legal documents that form the basis for later written reports and may serve as evidence in legal proceedings. The Site Manager or Field Team Leader will review field log entries daily and initial each page of entries. Field logbooks will be maintained by the Site Manager or Field Team Leader during field activities and transferred to the project files for a record of activities at the conclusion of the project. General logbook entry procedures are listed below.

- Logbooks must be permanently bound with all pages numbered to the end of the book. Entries should begin on page 1.
- Only use blue or black ink (waterproof) for logbook entries.
- Sign entries at the end of the day, or before someone else writes in the logbook.
- If a complete page is not used, draw a line diagonally across the blank portion of the page and initial and date the bottom line.
- If a line on the page is not completely filled, draw a horizontal line through the blank portion.
- Ensure that the logbook clearly shows the sequence of the day's events.
- Do not write in the margins or between written lines, and do not leave blank pages to fill in later.
- If an error is made, make corrections by drawing a single line through the error and initialing it.
- Maintain control of the logbook and keep in a secure location.

Field logbooks will contain, at a minimum, the following information, if applicable:

General Information

- Name, location of site, and work order number
- Name of the Site Manager or Field Team Leader
- Names and responsibilities of all field team members using the logbook (or involved with activities for which entries are being made)
- Weather conditions
- Field observations
- Names of any site visitors including entities that they represent

Sample Collection Activities

- Date(s) and times of the sample collection or event.
- Number and types of collected samples.
- Sample location with an emphasis on any changes to documentation in governing documents (i.e., SAP, FSP). This may include measurements from reference points or sketches of sample locations with respect to local features.
- Sample identification numbers, including any applicable cross-references to split samples or samples collected by another entity.
- A description of sampling methodology, or reference to any governing document (i.e., FSP, SAP, QAPP).
- Summary of equipment preparation and decontamination procedures.
- Sample description including depth, color, texture, moisture content, and evidence of waste material or staining.
- Air monitoring (field screening) results.
- Types of laboratory analyses requested.

Site Health and Safety Activities

- All safety, accident, and/or incident reports.

- Real-time personnel air monitoring results, if applicable, or if not documented in the HASP.
- Heat/cold stress monitoring data, if applicable.
- Reasons for upgrades or downgrades in personal protective equipment.
- Health and safety inspections, checklists (drilling safety guide), meetings/briefings.
- Calibration records for field instruments.

Oversight Activities

- Progress and activities performed by contractors including operating times.
- Deviations of contractor activities with respect to project governing documents (i.e., specifications).
- Contractor sampling results and disposition of contingent soil materials/stockpiles.
- Excavation specifications and locations of contractor confirmation samples.
- General site housekeeping and safety issues by site contractors.

SOP	**1502.01**				
GROUP	Field Documentation				
SUB-GROUP					
TITLE	Photograph Logs				
DATE	11/19/2001	**FILE**	1502-01.DOC	**PAGE**	1 of 1

INTRODUCTION

The following Standard Operating Procedure (SOP) presents the requirements for collecting information related to photodocumentation of site activities.

PROCEDURE

- Uniquely number each roll of film obtained for use.
- Record the following information for each negative exposed:
    1. Date and Time
    2. Photographer Name
    3. Witness Name
    4. Orientation (Landscape, Portrait, or Panaoramic)
    5. Description (including activity being performed, specific equipment of interest, sample location(s), compass direction photographer is facing)
- Record "NA" for the negatives not used if the roll is not completely used prior to development.
- Record unique roll number on receipt when film is submitted for development.
- Verify descriptions on log with negative numbers when photographs are received from processing.

FORMS

Blank Photograph Logs can be printed from WESTON On-Line from the *Records Management Application.* Selecting the *Reports/Project Planning/Blank Photo Logs* menu option will generate a project specific log with 36 entries.

INTRODUCTION

The following Standard Operating Procedure (SOP) presents the sample nomenclature for analytical samples that will generate unique sample names compatible with most data management systems. The sample nomenclature is based upon specific requirements for the reporting of these results. A site specific data management plan should be prepared prior to sample collection.

PROCEDURE

SAMPLE NOMENCLATURE – SOIL AND SEDIMENT

Area of Concern – ID – Depth - Collection Type + QC Type

Where:

Area of Concern: A four-digit identifier used to designate the particular Area of Concern (AOC) that the location where the sample was collected.

ID: A three-digit identifier used to designate the particular location in the AOC from which the sample was collected or the center of the composite sample.

Depth: A two-digit code used to designate what depth of sample was collected:

03	0 to 3 inches
06	3 to 6 inches
12	6 to 12 inches

Collection Type: A one-digit code used to designate what type of sample was collected:

1	Surface Water
2	Ground Water
3	Leachate
4	Field QC/water sample
5	Soil/Sediment

6	Oil
7	Waste
8	Other
9	Drinking Water

QC Type: A one-digit code used to designate the QC type of the sample:

1	Normal
2	Duplicate
3	Rinsate Blank
4	Trip Blank
5	Field Blank
6	Confirmation

Examples:

- ***2054-055-06-51:*** Represents the normal soil sample collected from AOC 2054 at location 055 from 3 to 6 inches of depth.
- ***2054-055-06-52***: Represents the duplicate soil sample collected from AOC 2054 at location 055 from 3 to 6 inches of depth.
- ***2054-055-06-43***: Represents the rinsate water sample collected after the last sample of the day if last sample was collected from AOC 2054 at location 055 from 3 to 6 inches of depth.

SAMPLE NOMENCLATURE – WATER (from fixed station or location to be sampled more than once)

WELL OR STATION – YYYYMMDD - Collection Type + QC Type

Where:

Well or Station: For Wells and boreholes always assume there will be 10 or more so Monitoring Well 1 becomes designated MW01 or MW-01. If it is anticipated that there will be over 100 wells designate Monitoring Well 1 as MW001 or MW-001.

YYYYMMDD: A four-digit year + two-digit month + two-digit day

Collection Type: A one-digit code used to designate what type of sample was collected and are shown on page 1.

QC Type: A one-digit code used to designate the QC type of the sample and are shown on page 1.

Examples:

- ***MW01-20090226-21:*** Represents the normal groundwater sample collected from Monitoring Well 1 on 26 February 2009.
- ***MW01-20090226-44:*** Represents the trip blank in the same ice chest as the groundwater sample in the previous collected from Monitor Well 1 on 02/26/2009. All trip blanks must have a sample ID and they must be unique and on the Chain-of -Custody.
- ***2054-000-00-43:*** Represents the rinsate sample from AOC 2054

APPENDIX B

SITE-SPECIFIC DATA QUALITY OBJECTIVES

SITE-SPECIFIC DATA QUALITY OBJECTIVES
DYSART #2 URANIUM MINE

STEP 1. STATE THE PROBLEM	
Legacy uranium mine sites in the Grants Mining District of northwest New Mexico may contain soil/sediment and mine waste rock that are elevated in trace metals and radionuclides above background concentrations which may pose a hazard to human health and the environment.	
STEP 2. IDENTIFY THE DECISION	
Does the soil environment at the generic uranium mine site contain hazardous and radiological materials at concentrations that: 1) equals or exceeds a value of two standard deviations above the mean site-specific background concentration for a specific radionuclide; or 2) exceeds three times the natural background concentrations for the specific radionuclide, whichever is lower. If these concentrations satisfy the criteria in 1) and 2), the conditions constitute and establish an *"observed release"* per the HRS Guidance Manual, Section 5.1 page 55; and the CERCLA SI Guidance in Section 4.9.4 page 89-90, (EPA/540-R-92-021).	
IDENTIFY THE ALTERNATIVE ACTIONS THAT MAY BE TAKEN BASED ON THE DECISIONS.	• If the concentrations of hazardous and radiological materials in soil at the uranium mine site constitute an *observed* release, then further remedial action under CERCLA will be recommended.
STEP 3. IDENTIFY INPUTS TO THE DECISION	
INFORMATIONAL INPUTS NEEDED TO RESOLVE A DECISION.	• Elevated metal and radionuclide concentrations in soil at the uranium mine site are equal to or exceed two standard deviations above the mean site-specific background concentrations. • Elevated metal and radionuclide concentrations in soil at the uranium mine site are equal to or exceed by three times the mean background concentrations for radiological measurement and soil sampling.
SOURCES FOR EACH INFORMATIONAL INPUT AND INPUTS THAT ARE OBATINED THROUGH ENVIRONMENTAL MEASUREMENTS.	• Radiological gamma survey measurements with handheld NaI detector instrument conducted at 200 ft., 100 ft., and/or 50 ft. grid spacing across site area and at unique site features. • Background radiological measurements collected at four or more off site locations will provide an average background radioactivity concentration for comparison. • Field measurements of gamma activity are collected and the field variance is calculated to determine the number of soil/sediments to be collected. • Background surface soil samples analyzed by a laboratory for 23 metals and isotopes of three or four radionuclides. • Suspected hot spot soil locations within the mine site property analyzed by a laboratory for 23 metals and isotopes of three or four radionuclides.

SITE-SPECIFIC DATA QUALITY OBJECTIVES
DYSART #2 URANIUM MINE
(Continued)

STEP 3. IDENTIFY INPUTS TO THE DECISION (Continued)	
BASIS FOR THE CONTAMINANT SPECIFIC ACTION LEVELS.	• Concentrations of hazardous materials and radionuclides more than three times the background concentrations constitute and "observed release" per the HRS Guidance Manual, Section 5.1 page 55. • Concentrations of metal and radionuclide concentrations in soil/sediment that are equal to or exceed two standard deviations above the mean site-specific background concentrations constitute an observed release per Section 4.9.4 (page 89) of the guidance document for performing site inspections under CERCLA.
POTENTIAL SAMPLING TECHNIQUES AND APPROPRIATE ANALYTICAL METHODS.	• Gamma radioactivity concentrations in cpm and/or uR/hr (dose) will be determined using field instruments to measure radioactivity on the soil surface and at 3 ft high for a 60 second count rate. • Gamma measurements will be used to calculate the average background concentration, the average site concentration, the range, and the field variance. • The field variance will be used to calculate the number of soil/sediment samples required for laboratory analysis to characterize the specific radionuclide concentrations. • The number of soil/sediments samples will be determined by a calculation using the field variance, Upper Confidence Level 95% (90% or 80% if necessary) and a margin of error at 0.20. • Laboratory analyte concentrations for specific metals and radionuclides will be used to calculate: the background mean concentrations, the site mean concentrations, the range, and the variance.
STEP 4. DEFINE THE BOUNDARIES OF THE STUDY	
DOMAIN OF GEOGRAPHIC AREA WITHIN WHICH ALL DECISIONS MUST APPLY.	Property boundary surrounding uranium mine site and/or all areas suspected of impact by mine activities and/or natural erosion processes that may have dispersed on-site materials beyond property boundaries.
CHARACTERISTICS THAT DEFINE THE POPULATION OF INTEREST.	Gamma radiation and radionuclide concentration measured in soil/sediments impacted by mine waste rock.
DETERMINATION OF WHEN TO COLLECT DATA.	• Data will be collected after target uranium mine sites are identified and access is acquired from land owners. • Field measurements of background gamma activity and site specific activity will be collected using a grid system. • Determination of the field variance from the field measurements will be used in a formula to calculate the number of soil/sediments to be collected for laboratory analysis.

SITE-SPECIFIC DATA QUALITY OBJECTIVES
DYSART #2 URANIUM MINE
(Continued)

STEP 4. DEFINE THE BOUNDARIES OF THE STUDY (Continued)	
PRACTICAL CONSTRAINTS ON DATA COLLECTION.	• Access to the site and/or appropriate background area is not attainable due to landowner and/or physical constraints. • Field radiological measurements may be unreliable due to excessive soil moisture, inclement weather, equipment malfunction, or operator error. • Erroneous determination of field gamma activity measurements and subsequent erroneous calculation of the field variance may result in an inadequate number of soil/sediments collected for laboratory analysis.
STEP 5. DEVELOP A DECISION RULE	
SPECIFY THE PARAMETER THAT CHARACTERIZES THE POPULATION OF INTEREST.	• Field measurements of gamma radioactivity will be used to calculate: the mean background gamma concentration; the on-site mean gamma concentration; the on-site range of gamma concentrations; and the field variance of the on-site gamma concentration. • The on-site gamma concentrations will be compared to the mean background gamma concentration of the mine site to determine if the concentration is equal to or two times the mean. • Laboratory analyte concentrations for specific metals and radionuclides will be used to calculate the specific mean background soil/sediment mean concentrations; the specific on-site mean soil/sediment concentrations; the range of on-site specific concentrations; and the statistical variability of on-site concentrations, e.g., the sample variance and standard deviation. • Laboratory analyte concentrations that are equal to or exceed three times the mean background concentrations will be characterized an observed release. • Laboratory analyte concentrations that are equal to or exceed two standard deviations above the mean background concentration will be characterized as an observed release.
SPECIFY THE ACTION LEVEL FOR THE DECISION.	• Field measurements of gamma radioactivity that are equal to or exceed twice the mean background gamma activity concentration. • Laboratory analyte concentrations that are equal to or exceed three times the mean background concentrations will be characterized an observed release. • Laboratory analyte concentrations that are equal to or exceed two standard deviations above the mean background concentration will be characterized as an observed release.
DECISION RULES.	• If on-site field gamma activity measurements exceed the mean background gamma activity concentration by more than two times, the likelihood of an observed release is high.

SITE-SPECIFIC DATA QUALITY OBJECTIVES
DYSART #2 URANIUM MINE
(Continued)

STEP 6. SPECIFY LIMITS ON DECISION ERRORS	
DETERMINE THE POSSIBLE RANGE OF THE PARAMETER OF INTEREST.	• Limit for uncertainty in measurement is 20% (0.20) at a 95% confidence level for the data set. • Mean background gamma radioactivity concentrations typically range from 12-20 uR/hr or less than 3,000 to 5,000 cpm. • On-site uranium mine waste rock gamma radioactivity concentrations may range over 200 uR/hr & higher, or several tens or hundreds of thousands cpm (>> 10,000-100,000 cpm). • Background concentration of radium-226 in soil is generally 1.0-1.5 pCi/g. • Uranium mass concentrations in soil typically measure 3 ug/g or 2 pCi/g. • Uranium mine site waste rock concentrations of radium-226 may exceed 100 pCi/g.
DEFINE BOTH TYPES OF DECISION ERRORS AND IDENTIFY THE POTENTIAL CONSEQUENCES OF EACH.	Type I Error: Deciding that the uranium mine site is represented by field measurements and/or sample results does not exceed three times the mean background concentration or two standard deviations above the mean background concentration when, in truth, it does. The consequence of this decision error is that the soil/sediment/waste rock material will remain in place, un-remediated, possibly presenting a hazard to human health and the environment. This decision error is the most severe. Type II Error: Deciding that the uranium mine site area represented by field measurements and/or sample results does exceed the mean background concentration by three times or two standard deviations when, in truth, it does not. The consequences of this decision error further remedial action under CERCLA will continue and potentially divert resources from higher priority sites.
TRUE STATE OF NATURE FOR EACH DECISION RULE.	Type I: The field and laboratory measurements of hazardous materials and radionuclide concentrations in soil are greater than three times or two standard deviations above the mean background concentrations. Type II: The field and laboratory measurements of hazardous materials and radionuclide concentrations in soil are less than three times or two standard deviations above the mean background concentrations.
DEFINITION OF THE TRUE STATE OF NATURE FOR THE MORE SEVERE DECISION ERROR AS THE BASELINE CONDITION OR THE NULL HYPOTEHESIS (H_o) AND FOR THE LESS SEVERE DECISION ERROR AS THE ALTERNATIVE HYPOTEHSIS (H_a).TRUE STATE OF NATURE FOR EACH DECISION RULE.	Type I: Ambient radioactivity levels impact human health. Type II: Ambient radioactivity levels do not impact human health.

SITE-SPECIFIC DATA QUALITY OBJECTIVES
DYSART #2 URANIUM MINE
(Continued)

STEP 7. OPTIMIZE THE DESIGN	
REVIEW THE DQOs.	Determine what else can be done to improve the methodology. Get some internal and external review by other staff and agencies. Test implementation of proposed design/methodology at one or two sties then review lessons learned. Make adjustments in design and improve methodology with more sites over time.
DEVELOP GENERAL SAMPLING AND ANALYSIS DESIGN. A total of 15 soil and 2 waste source samples will be collected from the uranium mine pits and waste areas within the Dysart #2 Uranium Mine and analyzed to determine the presence of metals and radionuclides above background concentrations.	

APPENDIX C

TDD No. TO-0035-11-09-01

EPA

U.S. EPA
Washington, DC 20460

START3
Technical Direction Document

Assessment/Inspection Activities - Enforcement Funds (0035)
Weston Solutions, Inc.

TDD #: TO-0035-11-09-01
Contract: EP-W-06-042

! = required field ☐ Moved To EAS

Note: Remaining Amount includes $0.00 in Reserve.

TDD Name:	Dysart #2 Uranium Mine ORS	! Period:	Base Period
! Purpose:	Work Assignment Initiation		
! Priority:	High	! Start Date:	09/30/2011
Overtime:		! Completion Date:	06/29/2012
! Funding Category:	Removal	Invoice Unit:	
! Project/Site Name:	Dysart #2 Uranium Mine ORS	WorkArea:	ASSESSMENT/INSPECTIONS ACTIVITIES
Project Address:		Activity:	Expanded Site Inspections/Remedial Investigation (ESI/RI)
County:	McKinley	Work Area Code:	
City, State:	, NM	Activity Code:	RP
Zip:		EMERGENCY CODE:	☐ KAT ☐ RIT
! SSID:	A6CF	FPN:	
CERCLIS:	NMN000607186	Performance Based:	No
Operable Unit:			

Authorized TDD Ceiling:	Cost/Fee	LOE (Hours)
Previous Action(s):	$0.00	0.0
This Action:	$26,661.00	0.0
New Total:	$26,661.00	0.0

Specific Elements

Description of Work:

All activities performed in support of this TDD shall be in accordance with the contract and TO PWS.

The Grants Mining District provided significant uranium extraction and production in New Mexico from the 1950s until late into the 20th century. There are three mining sub-districts within the Grants Mining District: Ambrosia Lake, Laguna, and Marquez. Land ownership within these sub-districts consists of public, tribal and private property. These mining sub-districts contain 97 former legacy uranium mines and five mill sites. The EPA is currently assessing the mine sites for releases that may have impacted soil, surface water and groundwater. Under this TDD, the contractor shall investigate mine water discharge locations, sample potentially impacted soil for elevated concentrations of elemental uranium and radionuclides, sample any surface water present for metals and radionuclides, and sample any accessible groundwater wells in the immediate area of the Dysart #2 mine site in the Ambrosia Lake sub-district. The contractor shall document mine site features (e.g. open mine portals, waste rock piles, mine operation-related structures, etc.) and sample locations with photographs, descriptions, and geospatially. A draft and final report shall be written for the mine site. Coordinate with SAM, Lisa Price at price.lisa@epa.gov or 214-665-6744, upon receipt of the TDD.

Accounting and Appropriation Information

SFO: 22

Line	DCN	IFMS	Budget/ FY	Appropriation Code	Budget Org Code	Program Element	Object Class	Site Project	Cost Org Code	Amount
1	ENC035	XXX	11	TCD	06S	302EC7C	2505	A6CFRP00	C001	$26,661.00

Funding Summary:	Funding
Previous:	$0.00
This Action:	$26,661.00
Total:	$26,661.00

Funding Category

Removal

Section

- Signed by Lisa Price/R6/USEPA/US on 09/22/2011 08:00:59 AM, according to Jeff Criner/start6/rfw-sta

: Lisa Price **Date:** 09/22/2011

Phone #:

Project Officer Section - Signed by Cora Stanley/R6/USEPA/US on 09/28/2011 04:43:59 PM, according to Jef

Project Officer: Linda Carter **Date:** 09/28/2011

Contracting Officer Section - Signed by Cora Stanley/R6/USEPA/US on 09/28/2011 04:43:59 PM, according t

Contracting Officer: Cora Stanley **Date:** 09/28/2011

Contractor Section - Signed by Robert Beck/start6/rfw-start/us on 09/29/2011 09:34:52 AM, according to /

● No ○ Yes **During the past three (3) calendar years has your company, or any of your employees that will be working at this site, previously performed work at this site /facility?**

Contractor Contact: Robert Beck **Date:** 09/29/2011

APPENDIX D

LABORATORY DATA PACKAGES

WESTON SOLUTIONS, INC.

Dysart #2 Uranium Mine

STANDARD LEVEL IV
REPORT OF ANALYSIS

WORK ORDER #11-11065-OR

December 29, 2011

EBERLINE ANALYTICAL/OAK RIDGE LABORATORY
OAK RIDGE, TN

TABLE OF CONTENTS

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VII	Laboratory Technician's Notes & Run Logs	0027
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Eberline Services – Oak Ridge Laboratory

LABORATORY DATA SUPPORT CHECKLIST

MP-001-3

Eberline Services Work Order # 11-11065

The checklist items listed below are to be initialed by appropriate staff upon completion/verification.

Date for Partial	Initials	Date	Initials	Checklist Items
		11·11·11	JWM	Sample Log-In
		12/12/11	KW	Data Compilation
		12/12/11	MLT	First Technical Data Review
		12/14/11	M	Second Technical Data Review
		12/23/11		Data Entry/Electronic Deliverable
		12/23/11		Case Narrative
		12/23/11	KBS	Electronic Deliverable Proof
		12/23/11	G.H	Samples Analyzed within Holding Time Yes? [ ] No? [ ] YES
		12/23/11	G.H	QA/QC Review
				Client in Possession of Data Electronic or Hard Copy
				Invoiced by Laboratory

Technical/Clerical Corrections, Signatures Needed, Problems, Etc	Date/Initials

Date package approved by: 12/23/11

Laboratory Manager Date

Copy No. _____

SECTION I

CHAIN OF CUSTODY

USEPA
DateShipped: 11/10/2011
CarrierName: FedEx
AirbillNo: 797722979081

CHAIN OF CUSTODY RECORD
Dysart #2 Uranium Mine
Contact Name: Kristie Warr
Contact Phone: 713-985-6636

11-11065

No: TO0035110901-111110-0002
Cooler #: 1
Lab: Eberline Services
Lab Phone: 865-481-0683

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Container	Preservative	MS/MSD	Samp_Concentration	Sampler
4	DY2-11-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:35	16 oz jar	None	N	143,634 cpm	START
5	DY2-17-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:37	16 oz jar	None	N	198,698 cpm	START
6	DY2-17-32-111109	Gamma Spectroscopy	Soil	11/9/2011	08:37	16 oz jar	None	N	198,698 cpm	START
7	DY2-32-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:46	16 oz jar	None	N	190,346 cpm	START
8	DY2-33-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:51	16 oz jar	None	N	149,740 cpm	START
9	DY2-41-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:15	16 oz jar	None	N	145,036 cpm	START
10	DY2-44-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:10	16 oz jar	None	N	139,861 cpm	START
11	DY2-48-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:05	16 oz jar	None	N	123,889 cpm	START
12	DY2-65-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:31	16 oz jar	None	N	104,090 cpm	START
13	DY2-77-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:29	16 oz jar	None	N	70,936 cpm	START
14	DY2-BKGD-E-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:25	16 oz jar	None	N	17,123 cpm	START
15	DY2-BKGD-N-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:15	16 oz jar	None	N	18,478 cpm	START
16	DY2-BKGD-S-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:45	16 oz jar	None	N	17,866 cpm	START
17	DY2-BKGD-W-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:00	16 oz jar	None	N	19,017 cpm	START
18	MD-01-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:19	16 oz jar	None	N	104,285 cpm	START
	ST1-01-111108	Gamma Spectroscopy	Surface Water	11/8/2011	10:40	4 L cubitainer	4 C	N	<25,000 cpm	START
	ST1-01-111108	Isotopic U, Isotopic Th (HOLD)	Surface Water	11/8/2011	10:40	500mL Polyethylene	HNO3 pH<2	N	<25,000 cpm	START

Special Instructions: Level IV Deliverable, Standard TAT. HOLD Alpha Spec for Isotopic U and Isotopic Th ASTM 3972-90M until Gamma Spec results are aquired.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
17/Samples	[illegible]	11/9/11	[illegible]	11.11.11	0900						

REC'D NOV 11 2011

EBERLINE SERVICES Oak Ridge Laboratory	Internal Chain of Custody	Work Order #	11-11065
		Lab Deadline	12/5/2011
		Analysis	Gamma - Level 4
		Sample Matrix	Soil/Solid

Comments	Sample Fraction	HP 210 / 270 Detector Activity	Storage Location
21 day ingrowth: Report Ac228, Bi214, K40, Pa234m, Pb212/214, Th234, Tl208, Ra226 from Bi214 & any positives.	04	46	K1.3
	05	74	K1.3
	06	60	K1.3
	07	195	K1.3
	08	172	K1.3
	09	222	K1.3
	10	199	K1.3
	11	50	K1.3
	12	46	K1.3
	13	43	K1.3
	14	45	K1.3
	15	25	K1.3
	16	38	K1.3
	17	32	K1.3
	18	107	K1.3

	Location (circle one)					Initials	Date
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room 1030	Kenny Scig	11-10-11
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room 0930	Kenny Scig	11-14-11
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room	0920	11-14-11
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room	AG	12/11/11 1330
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		

SECTION II

SAMPLE ACKNOWLEDGEMENT

Client Name	Contract/PO	Project Type	Date Received	Required Turnaround Days	Eberline Services Work Order
Weston Solutions, Inc.	0070138	Environmental	11/11/2011	28	11-11065
Project Name	**Client WO**	**Sample Disp**	**Lab Deadline**	**Internal Deadline**	**Client Deadline**
0070138 U Mines	Dysart #2 Uranium Mine	H	12/05/2011	12/08/2011	12/09/2011

Internal ID	Client ID	Sample Date	Matrix	Storage	Gamma	Ttl
01	LCS	11/11/11	SO	K1.3	X	1
02	BLANK	11/11/11	SO	K1.3	X	1
03	DUP	11/11/11	SO	K1.3	X	1
04	DY2-11-31-111109	11/09/11 08:35	SO	K1.3	X	1
05	DY2-17-31-111109	11/09/11 08:37	SO	K1.3	X	1
06	DY2-17-32-111109	11/09/11 08:37	SO	K1.3	X	1
07	DY2-32-31-111109	11/09/11 08:46	SO	K1.3	X	1
08	DY2-33-31-111109	11/09/11 08:51	SO	K1.3	X	1
09	DY2-41-31-111109	11/09/11 09:15	SO	K1.3	X	1
10	DY2-44-31-111109	11/09/11 09:10	SO	K1.3	X	1
11	DY2-48-31-111109	11/09/11 09:05	SO	K1.3	X	1
12	DY2-65-31-111109	11/09/11 09:31	SO	K1.3	X	1
13	DY2-77-31-111109	11/09/11 09:29	SO	K1.3	X	1
14	DY2-BKGD-E-31-111109	11/09/11 15:25	SO	K1.3	X	1
15	DY2-BKGD-N-31-111109	11/09/11 15:15	SO	K1.3	X	1
16	DY2-BKGD-S-31-111109	11/09/11 15:45	SO	K1.3	X	1
17	DY2-BKGD-W-31-111109	11/09/11 15:00	SO	K1.3	X	1
18	MD-01-31-111109	11/09/11 15:19	SO	K1.3	X	1
						0
						0
				Totals Per Analysis (non QA samples)	15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

EBERLINE SERVICES

Sample Log In Report

Oak Ridge Laboratory
601 Scarboro Rd.
Oak Ridge, TN 37830

Voice: (865) 481-0683
Fax: (865) 483-4621

Invoice	
	ACCOUNTS PAYABLE
	Weston Solutions, Inc.
	5599 San Felipe Suite 700
	Houston, TX 77056
Voice	713-985-6686
Fax	713-985-6703
Contact	Kristie Warr
Voice	713-985-6636
Fax	713-985-6703

Report Data	
	Kristie Warr
	Weston Solutions, Inc.
	5599 San Felipe Suite 700
	Houston, TX 77056
Voice	713-985-6636
Fax	713-985-6703

Printed: 11/11/2011 11:22 AM

Eberline Services – Oak Ridge Laboratory

SAMPLE RECEIPT CHECKLIST
MP-001-2

WORK ORDER # 11-11065

SAMPLE MATRIX/MATRICES: (CIRCLE ONE OR BOTH)

AQUEOUS NON-AQUEOUS

(CIRCLE EITHER YES, NO, OR N/A)

WERE SAMPLES:

Received in good condition?	Y	N	
If aqueous, properly preserved	Y	N	N/A

WERE CHAIN OF CUSTODY SEALS:

Present on outside of package?	Y	N
Unbroken on outside of package?	Y	N
Present on samples?	Y	N
Unbroken on samples?	Y	N
Was chain of custody present upon sample receipt?	Y	N

IF THE RESPONSE TO ANY OF THE ABOVE IS **NO**, A DISCREPANT SAMPLE RECEIPT REPORT (DSR) HAS BEEN ISSUED.

REMARKS: (15) .500mL Jars of Soil

SIGNATURE: Justa McKenzie DATE: 11·11·11

SECTION III

CASE NARRATIVE

EBERLINE SERVICES

EBERLINE ANALYTICAL CORPORATION
601 SCARBORO ROAD
OAK RIDGE, TENNESSEE 37830
PHONE (865) 481-0683
FAX (865) 483-4621

EBS-OR-33178

December 29, 2011

Kristie Warr
Weston Solutions, Inc.
5599 San Felipe Suite 700
Houston, TX 77056

CASE NARRATIVE
Work Order # 11-11065-OR

SAMPLE RECEIPT

This work order contains fifteen soil samples received 11/11/2011. These samples were analyzed by Gamma Spectroscopy.

CLIENT ID	LAB ID	CLIENT ID	LAB ID
DY2-11-31-111109	11-11065-04	DY2-65-31-111109	11-11065-12
DY2-17-31-111109	11-11065-05	DY2-77-31-111109	11-11065-13
DY2-17-32-111109	11-11065-06	DY2-BKGD-E-31-111109	11-11065-14
DY2-32-31-111109	11-11065-07	DY2-BKGD-N-31-111109	11-11065-15
DY2-33-31-111109	11-11065-08	DY2-BKGD-S-31-111109	11-11065-16
DY2-41-31-111109	11-11065-09	DY2-BKGD-W-31-111109	11-11065-17
DY2-44-31-111109	11-11065-10	MD-01-31-111109	11-11065-18
DY2-48-31-111109	11-11065-11		

ANALYTICAL METHODS

Gamma Spectroscopy was performed using Method LANL ER-130 Modified.

ANALYTICAL RESULTS

Combined Standard Uncertainty is reported at 2-sigma value.

GAMMA SPECTROSCOPY

Samples were dried, homogenized and placed into appropriate gamma spectroscopy geometry containers. Samples were then sealed for 21 days to allow for ingrowth of Radon-222 and progeny. Samples were counted on High Purity Germanium (HPGe) gamma ray detectors. Energy lines from Lead-214 and Bismuth-214 were analyzed for determinations of Radium-226 activity.

Samples demonstrated acceptable results for all radionuclides as reported. The method blank demonstrated acceptable results for all radionuclides as reported. Results for the Actinium-228, Bismuth-

ANALYTICAL RESULTS CONTINUED

GAMMA SPECTROSCOPY CONTINUED

214 and Potassium-40 replicate demonstrated an acceptable relative percent difference and normalized difference. Results for the Cobalt-60 and Cesium-137 laboratory control sample demonstrated an acceptable percent recovery.

CERTIFICATION OF ACCURACY

I certify that this data report is in compliance with the terms and conditions of the Purchase Order, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the cognizant project manager or his/her designee to be accurate as verified by the following signature.

M.R. McDougall
Laboratory Manager

Date: 12/29/2011

SECTION IV

ANALYTICAL RESULTS SUMMARY

Eberline Analytical
Final Report of Analysis

Report To:

Kristie Warr
Weston Solutions, Inc.
5599 San Felipe Suite 700
Houston, TX 77056

Work Order Details:

SDG:	**11-11065**
Purchase Order:	0070138
Analysis Category:	ENVIRONMENTAL
Sample Matrix:	SO

Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-11065-01	LCS	KNOWN	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Cobalt-60	LANL ER-130 Modified	1.32E+02	5.20E+00			pCi/g
11-11065-01	LCS	KNOWN	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Cesium-137	LANL ER-130 Modified	8.25E+01	3.30E+00			pCi/g
11-11065-01	LCS	SPIKE	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Cobalt-60	LANL ER-130 Modified	1.37E+02	1.04E+01	1.25E+01	1.28E+00	pCi/g
11-11065-01	LCS	SPIKE	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Cesium-137	LANL ER-130 Modified	8.63E+01	8.89E+00	9.93E+00	1.07E+00	pCi/g
11-11065-02	MBL	BLANK	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Actinium-228	LANL ER-130 Modified	5.69E-02	1.20E-01	1.20E-01	2.55E-01	pCi/g
11-11065-02	MBL	BLANK	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Bismuth-214	LANL ER-130 Modified	-6.45E-02	8.81E-02	8.82E-02	1.36E-01	pCi/g
11-11065-02	MBL	BLANK	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Potassium-40	LANL ER-130 Modified	-2.92E-02	3.57E-01	3.57E-01	7.14E-01	pCi/g
11-11065-02	MBL	BLANK	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	-1.27E+00	2.83E+00	2.83E+00	5.25E+00	pCi/g
11-11065-02	MBL	BLANK	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Lead-212	LANL ER-130 Modified	9.08E-03	4.84E-02	4.84E-02	8.35E-02	pCi/g
11-11065-02	MBL	BLANK	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Lead-214	LANL ER-130 Modified	-7.73E-02	6.68E-02	6.69E-02	9.61E-02	pCi/g
11-11065-02	MBL	BLANK	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Radium-226	LANL ER-130 Modified	-6.45E-02	8.81E-02	8.82E-02	1.36E-01	pCi/g
11-11065-02	MBL	BLANK	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Thorium-234	LANL ER-130 Modified	1.66E-01	4.74E-01	4.74E-01	8.25E-01	pCi/g
11-11065-02	MBL	BLANK	11/11/11 00:00	11/11/2011	12/11/2011	11-11065	Thallium-208	LANL ER-130 Modified	9.14E-02	7.09E-02	7.10E-02	1.59E-01	pCi/g
11-11065-03	DUP	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.93E+00	3.63E-01	3.76E-01	4.10E-01	pCi/g
11-11065-03	DUP	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Bismuth-214	LANL ER-130 Modified	6.16E+00	5.37E-01	6.23E-01	2.08E-01	pCi/g
11-11065-03	DUP	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.60E+01	3.18E+00	3.45E+00	9.43E-01	pCi/g
11-11065-03	DUP	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	1.69E+01	9.73E+00	9.77E+00	1.23E+01	pCi/g
11-11065-03	DUP	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Lead-212	LANL ER-130 Modified	2.31E+00	2.83E-01	3.06E-01	1.86E-01	pCi/g
11-11065-03	DUP	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Lead-214	LANL ER-130 Modified	6.31E+00	5.34E-01	6.25E-01	2.34E-01	pCi/g
11-11065-03	DUP	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Radium-226	LANL ER-130 Modified	6.16E+00	5.37E-01	6.23E-01	2.08E-01	pCi/g
11-11065-03	DUP	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Thorium-234	LANL ER-130 Modified	1.09E+01	2.66E+00	2.72E+00	2.54E+00	pCi/g
11-11065-03	DUP	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Thallium-208	LANL ER-130 Modified	1.62E+00	2.92E-01	3.04E-01	2.99E-01	pCi/g
11-11065-04	DO	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Actinium-228	LANL ER-130 Modified	2.18E+00	3.56E-01	3.73E-01	3.88E-01	pCi/g
11-11065-04	DO	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Bismuth-214	LANL ER-130 Modified	6.45E+00	5.41E-01	6.35E-01	2.16E-01	pCi/g
11-11065-04	DO	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.36E+01	3.09E+00	3.32E+00	1.10E+00	pCi/g
11-11065-04	DO	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	8.76E+00	8.43E+00	8.44E+00	1.10E+01	pCi/g
11-11065-04	DO	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Lead-212	LANL ER-130 Modified	7.78E-01	2.12E-01	2.16E-01	1.86E-01	pCi/g
11-11065-04	DO	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Lead-214	LANL ER-130 Modified	6.61E+00	5.32E-01	6.31E-01	2.41E-01	pCi/g
11-11065-04	DO	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Radium-226	LANL ER-130 Modified	6.45E+00	5.41E-01	6.35E-01	2.16E-01	pCi/g
11-11065-04	DO	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Thorium-234	LANL ER-130 Modified	9.73E+00	2.91E+00	2.95E+00	2.67E+00	pCi/g
11-11065-04	DO	DY2-11-31-111109	11/09/11 08:35	11/11/2011	12/10/2011	11-11065	Thallium-208	LANL ER-130 Modified	1.58E+00	2.92E-01	3.03E-01	3.30E-01	pCi/g

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

EBERLINE SERVICES

EBERLINE ANALYTICAL CORPORATION
601 SCARBORO ROAD OAK RIDGE, TN 37830 865/481-0683 FAX 865/483-4621

Eberline Analytical
Final Report of Analysis

Report To:

Kristie Warr
Weston Solutions, Inc.
5599 San Felipe Suite 700
Houston, TX 77056

Work Order Details:

SDG: 11-11065
Purchase Order: 0070138
Analysis Category: ENVIRONMENTAL
Sample Matrix: SO

Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-11065-05	TRG	DY2-17-31-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.21E+00	8.97E-01	8.99E-01	1.07E+00	pCi/g
11-11065-05	TRG	DY2-17-31-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Bismuth-214	LANL ER-130 Modified	3.09E+01	1.94E+00	2.50E+00	4.05E-01	pCi/g
11-11065-05	TRG	DY2-17-31-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Potassium-40	LANL ER-130 Modified	3.04E+01	4.53E+00	4.79E+00	2.01E+00	pCi/g
11-11065-05	TRG	DY2-17-31-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	2.30E+01	1.78E+01	1.78E+01	2.24E+01	pCi/g
11-11065-05	TRG	DY2-17-31-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Lead-212	LANL ER-130 Modified	9.61E-01	2.00E-01	2.06E-01	4.03E-01	pCi/g
11-11065-05	TRG	DY2-17-31-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Lead-214	LANL ER-130 Modified	3.33E+01	2.33E+00	2.89E+00	4.66E-01	pCi/g
11-11065-05	TRG	DY2-17-31-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Radium-226	LANL ER-130 Modified	3.09E+01	1.94E+00	2.50E+00	4.05E-01	pCi/g
11-11065-05	TRG	DY2-17-31-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Thorium-234	LANL ER-130 Modified	1.99E+01	5.40E+00	5.49E+00	5.21E+00	pCi/g
11-11065-05	TRG	DY2-17-31-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Thallium-208	LANL ER-130 Modified	1.08E+00	2.60E-01	2.66E-01	5.61E-01	pCi/g
11-11065-06	TRG	DY2-17-32-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.75E+00	7.46E-01	7.52E-01	9.36E-01	pCi/g
11-11065-06	TRG	DY2-17-32-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Bismuth-214	LANL ER-130 Modified	3.34E+01	2.14E+00	2.74E+00	4.44E-01	pCi/g
11-11065-06	TRG	DY2-17-32-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.64E+01	4.44E+00	4.64E+00	2.34E+00	pCi/g
11-11065-06	TRG	DY2-17-32-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	1.72E+01	1.77E+01	1.77E+01	3.18E+01	pCi/g
11-11065-06	TRG	DY2-17-32-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Lead-212	LANL ER-130 Modified	7.85E-01	3.26E-01	3.28E-01	5.09E-01	pCi/g
11-11065-06	TRG	DY2-17-32-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Lead-214	LANL ER-130 Modified	3.43E+01	2.43E+00	3.00E+00	4.64E-01	pCi/g
11-11065-06	TRG	DY2-17-32-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Radium-226	LANL ER-130 Modified	3.34E+01	2.14E+00	2.74E+00	4.44E-01	pCi/g
11-11065-06	TRG	DY2-17-32-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Thorium-234	LANL ER-130 Modified	1.78E+01	5.71E+00	5.78E+00	6.03E+00	pCi/g
11-11065-06	TRG	DY2-17-32-111109	11/09/11 08:37	11/11/2011	12/10/2011	11-11065	Thallium-208	LANL ER-130 Modified	1.15E+00	2.66E-01	2.72E-01	6.27E-01	pCi/g
11-11065-07	TRG	DY2-32-31-111109	11/09/11 08:46	11/11/2011	12/10/2011	11-11065	Actinium-228	LANL ER-130 Modified	2.73E+00	2.50E+00	2.50E+00	3.10E+00	pCi/g
11-11065-07	TRG	DY2-32-31-111109	11/09/11 08:46	11/11/2011	12/10/2011	11-11065	Bismuth-214	LANL ER-130 Modified	1.49E+02	9.00E+00	1.18E+01	1.40E+00	pCi/g
11-11065-07	TRG	DY2-32-31-111109	11/09/11 08:46	11/11/2011	12/10/2011	11-11065	Potassium-40	LANL ER-130 Modified	3.02E+01	7.91E+00	8.06E+00	8.09E+00	pCi/g
11-11065-07	TRG	DY2-32-31-111109	11/09/11 08:46	11/11/2011	12/10/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	7.00E+01	6.06E+01	6.07E+01	8.50E+01	pCi/g
11-11065-07	TRG	DY2-32-31-111109	11/09/11 08:46	11/11/2011	12/10/2011	11-11065	Lead-212	LANL ER-130 Modified	1.21E+01	1.52E+00	1.64E+00	1.64E+00	pCi/g
11-11065-07	TRG	DY2-32-31-111109	11/09/11 08:46	11/11/2011	12/10/2011	11-11065	Lead-214	LANL ER-130 Modified	1.54E+02	1.26E+01	1.48E+01	1.60E+00	pCi/g
11-11065-07	TRG	DY2-32-31-111109	11/09/11 08:46	11/11/2011	12/10/2011	11-11065	Radium-226	LANL ER-130 Modified	1.49E+02	9.00E+00	1.18E+01	1.40E+00	pCi/g
11-11065-07	TRG	DY2-32-31-111109	11/09/11 08:46	11/11/2011	12/10/2011	11-11065	Thorium-234	LANL ER-130 Modified	8.67E+01	1.41E+01	1.48E+01	1.70E+01	pCi/g
11-11065-07	TRG	DY2-32-31-111109	11/09/11 08:46	11/11/2011	12/10/2011	11-11065	Thallium-208	LANL ER-130 Modified	5.03E-01	3.48E-01	3.49E-01	2.12E+00	pCi/g

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

Eberline Analytical
Final Report of Analysis

Report To:	Work Order Details:	
Kristie Warr	SDG:	11-11065
Weston Solutions, Inc.	Purchase Order:	0070138
5599 San Felipe Suite 700	Analysis Category:	ENVIRONMENTAL
Houston, TX 77056	Sample Matrix:	SO

Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-11065-08	TRG	DY2-33-31-111109	11/09/11 08:51	11/11/2011	12/10/2011	11-11065	Actinium-228	LANL ER-130 Modified	6.71E-01	7.55E-01	7.55E-01	1.29E+00	pCi/g
11-11065-08	TRG	DY2-33-31-111109	11/09/11 08:51	11/11/2011	12/10/2011	11-11065	Bismuth-214	LANL ER-130 Modified	1.11E+02	6.01E+00	8.27E+00	6.17E-01	pCi/g
11-11065-08	TRG	DY2-33-31-111109	11/09/11 08:51	11/11/2011	12/10/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.97E+01	5.17E+00	5.39E+00	3.45E+00	pCi/g
11-11065-08	TRG	DY2-33-31-111109	11/09/11 08:51	11/11/2011	12/10/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	6.95E+01	3.83E+01	3.84E+01	3.55E+01	pCi/g
11-11065-08	TRG	DY2-33-31-111109	11/09/11 08:51	11/11/2011	12/10/2011	11-11065	Lead-212	LANL ER-130 Modified	8.85E-01	4.46E-01	4.48E-01	5.98E-01	pCi/g
11-11065-08	TRG	DY2-33-31-111109	11/09/11 08:51	11/11/2011	12/10/2011	11-11065	Lead-214	LANL ER-130 Modified	1.15E+02	7.77E+00	9.75E+00	7.54E-01	pCi/g
11-11065-08	TRG	DY2-33-31-111109	11/09/11 08:51	11/11/2011	12/10/2011	11-11065	Radium-226	LANL ER-130 Modified	1.11E+02	6.01E+00	8.27E+00	6.17E-01	pCi/g
11-11065-08	TRG	DY2-33-31-111109	11/09/11 08:51	11/11/2011	12/10/2011	11-11065	Thorium-234	LANL ER-130 Modified	5.92E+01	9.45E+00	9.93E+00	8.63E+00	pCi/g
11-11065-08	TRG	DY2-33-31-111109	11/09/11 08:51	11/11/2011	12/10/2011	11-11065	Thallium-208	LANL ER-130 Modified	5.62E-01	6.20E-01	6.21E-01	9.75E-01	pCi/g
11-11065-09	TRG	DY2-41-31-111109	11/09/11 09:15	11/11/2011	12/10/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.26E+00	1.11E+00	1.11E+00	1.51E+00	pCi/g
11-11065-09	TRG	DY2-41-31-111109	11/09/11 09:15	11/11/2011	12/10/2011	11-11065	Bismuth-214	LANL ER-130 Modified	1.27E+02	6.98E+00	9.55E+00	6.99E-01	pCi/g
11-11065-09	TRG	DY2-41-31-111109	11/09/11 09:15	11/11/2011	12/10/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.71E+01	4.74E+00	4.94E+00	3.84E+00	pCi/g
11-11065-09	TRG	DY2-41-31-111109	11/09/11 09:15	11/11/2011	12/10/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	1.61E+02	4.82E+01	4.89E+01	4.26E+01	pCi/g
11-11065-09	TRG	DY2-41-31-111109	11/09/11 09:15	11/11/2011	12/10/2011	11-11065	Lead-212	LANL ER-130 Modified	2.48E+00	4.86E-01	5.02E-01	7.21E-01	pCi/g
11-11065-09	TRG	DY2-41-31-111109	11/09/11 09:15	11/11/2011	12/10/2011	11-11065	Lead-214	LANL ER-130 Modified	1.30E+02	8.85E+00	1.11E+01	7.77E-01	pCi/g
11-11065-09	TRG	DY2-41-31-111109	11/09/11 09:15	11/11/2011	12/10/2011	11-11065	Radium-226	LANL ER-130 Modified	1.27E+02	6.98E+00	9.55E+00	6.99E-01	pCi/g
11-11065-09	TRG	DY2-41-31-111109	11/09/11 09:15	11/11/2011	12/10/2011	11-11065	Thorium-234	LANL ER-130 Modified	1.37E+02	1.67E+01	1.81E+01	1.01E+01	pCi/g
11-11065-09	TRG	DY2-41-31-111109	11/09/11 09:15	11/11/2011	12/10/2011	11-11065	Thallium-208	LANL ER-130 Modified	7.02E-01	2.40E-01	2.43E-01	1.06E+00	pCi/g
11-11065-10	TRG	DY2-44-31-111109	11/09/11 09:10	11/11/2011	12/10/2011	11-11065	Actinium-228	LANL ER-130 Modified	-3.09E-01	1.53E+00	1.53E+00	2.61E+00	pCi/g
11-11065-10	TRG	DY2-44-31-111109	11/09/11 09:10	11/11/2011	12/10/2011	11-11065	Bismuth-214	LANL ER-130 Modified	1.39E+02	8.31E+00	1.10E+01	1.21E+00	pCi/g
11-11065-10	TRG	DY2-44-31-111109	11/09/11 09:10	11/11/2011	12/10/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.72E+01	6.27E+00	6.43E+00	6.96E+00	pCi/g
11-11065-10	TRG	DY2-44-31-111109	11/09/11 09:10	11/11/2011	12/10/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	4.62E+01	5.08E+01	5.08E+01	7.53E+01	pCi/g
11-11065-10	TRG	DY2-44-31-111109	11/09/11 09:10	11/11/2011	12/10/2011	11-11065	Lead-212	LANL ER-130 Modified	1.08E+01	1.34E+00	1.45E+00	1.42E+00	pCi/g
11-11065-10	TRG	DY2-44-31-111109	11/09/11 09:10	11/11/2011	12/10/2011	11-11065	Lead-214	LANL ER-130 Modified	1.37E+02	1.12E+01	1.32E+01	1.40E+00	pCi/g
11-11065-10	TRG	DY2-44-31-111109	11/09/11 09:10	11/11/2011	12/10/2011	11-11065	Radium-226	LANL ER-130 Modified	1.39E+02	8.31E+00	1.10E+01	1.21E+00	pCi/g
11-11065-10	TRG	DY2-44-31-111109	11/09/11 09:10	11/11/2011	12/10/2011	11-11065	Thorium-234	LANL ER-130 Modified	5.64E+01	1.12E+01	1.16E+01	1.39E+01	pCi/g
11-11065-10	TRG	DY2-44-31-111109	11/09/11 09:10	11/11/2011	12/10/2011	11-11065	Thallium-208	LANL ER-130 Modified	7.52E-01	3.18E-01	3.20E-01	1.88E+00	pCi/g

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

Eberline Analytical
Final Report of Analysis

Report To:	Work Order Details:	
Kristie Warr	SDG:	11-11065
Weston Solutions, Inc.	Purchase Order:	0070138
5599 San Felipe Suite 700	Analysis Category:	ENVIRONMENTAL
Houston, TX 77056	Sample Matrix:	SO

Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-11065-11	TRG	DY2-48-31-111109	11/09/11 09:05	11/11/2011	12/10/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.16E+00	2.87E-01	2.93E-01	4.12E-01	pCi/g
11-11065-11	TRG	DY2-48-31-111109	11/09/11 09:05	11/11/2011	12/10/2011	11-11065	Bismuth-214	LANL ER-130 Modified	5.93E+00	4.86E-01	5.74E-01	1.80E-01	pCi/g
11-11065-11	TRG	DY2-48-31-111109	11/09/11 09:05	11/11/2011	12/10/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.36E+01	2.88E+00	3.13E+00	9.63E-01	pCi/g
11-11065-11	TRG	DY2-48-31-111109	11/09/11 09:05	11/11/2011	12/10/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	1.11E+01	7.45E+00	7.47E+00	1.44E+01	pCi/g
11-11065-11	TRG	DY2-48-31-111109	11/09/11 09:05	11/11/2011	12/10/2011	11-11065	Lead-212	LANL ER-130 Modified	1.41E+00	2.00E-01	2.13E-01	1.75E-01	pCi/g
11-11065-11	TRG	DY2-48-31-111109	11/09/11 09:05	11/11/2011	12/10/2011	11-11065	Lead-214	LANL ER-130 Modified	5.97E+00	4.73E-01	5.63E-01	2.39E-01	pCi/g
11-11065-11	TRG	DY2-48-31-111109	11/09/11 09:05	11/11/2011	12/10/2011	11-11065	Radium-226	LANL ER-130 Modified	5.93E+00	4.86E-01	5.74E-01	1.80E-01	pCi/g
11-11065-11	TRG	DY2-48-31-111109	11/09/11 09:05	11/11/2011	12/10/2011	11-11065	Thorium-234	LANL ER-130 Modified	6.57E+00	2.72E+00	2.74E+00	2.30E+00	pCi/g
11-11065-11	TRG	DY2-48-31-111109	11/09/11 09:05	11/11/2011	12/10/2011	11-11065	Thallium-208	LANL ER-130 Modified	1.16E+00	2.25E-01	2.33E-01	2.82E-01	pCi/g
11-11065-12	TRG	DY2-65-31-111109	11/09/11 09:31	11/11/2011	12/10/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.77E+00	5.26E-01	5.33E-01	5.39E-01	pCi/g
11-11065-12	TRG	DY2-65-31-111109	11/09/11 09:31	11/11/2011	12/10/2011	11-11065	Bismuth-214	LANL ER-130 Modified	1.02E+01	8.15E-01	9.69E-01	2.64E-01	pCi/g
11-11065-12	TRG	DY2-65-31-111109	11/09/11 09:31	11/11/2011	12/10/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.85E+01	4.12E+00	4.37E+00	1.45E+00	pCi/g
11-11065-12	TRG	DY2-65-31-111109	11/09/11 09:31	11/11/2011	12/10/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	2.59E+01	1.83E+01	1.83E+01	1.70E+01	pCi/g
11-11065-12	TRG	DY2-65-31-111109	11/09/11 09:31	11/11/2011	12/10/2011	11-11065	Lead-212	LANL ER-130 Modified	1.73E+00	2.70E-01	2.84E-01	2.47E-01	pCi/g
11-11065-12	TRG	DY2-65-31-111109	11/09/11 09:31	11/11/2011	12/10/2011	11-11065	Lead-214	LANL ER-130 Modified	1.06E+01	8.60E-01	1.02E+00	3.08E-01	pCi/g
11-11065-12	TRG	DY2-65-31-111109	11/09/11 09:31	11/11/2011	12/10/2011	11-11065	Radium-226	LANL ER-130 Modified	1.02E+01	8.15E-01	9.69E-01	2.64E-01	pCi/g
11-11065-12	TRG	DY2-65-31-111109	11/09/11 09:31	11/11/2011	12/10/2011	11-11065	Thorium-234	LANL ER-130 Modified	6.43E+00	2.97E+00	2.99E+00	3.36E+00	pCi/g
11-11065-12	TRG	DY2-65-31-111109	11/09/11 09:31	11/11/2011	12/10/2011	11-11065	Thallium-208	LANL ER-130 Modified	1.48E+00	2.81E-01	2.91E-01	4.22E-01	pCi/g
11-11065-13	TRG	DY2-77-31-111109	11/09/11 09:29	11/11/2011	12/11/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.22E+00	4.69E-01	4.73E-01	5.62E-01	pCi/g
11-11065-13	TRG	DY2-77-31-111109	11/09/11 09:29	11/11/2011	12/11/2011	11-11065	Bismuth-214	LANL ER-130 Modified	1.70E+01	1.11E+00	1.41E+00	2.81E-01	pCi/g
11-11065-13	TRG	DY2-77-31-111109	11/09/11 09:29	11/11/2011	12/11/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.91E+01	3.79E+00	4.08E+00	1.56E+00	pCi/g
11-11065-13	TRG	DY2-77-31-111109	11/09/11 09:29	11/11/2011	12/11/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	1.78E+01	1.49E+01	1.49E+01	1.64E+01	pCi/g
11-11065-13	TRG	DY2-77-31-111109	11/09/11 09:29	11/11/2011	12/11/2011	11-11065	Lead-212	LANL ER-130 Modified	8.00E-01	2.07E-01	2.11E-01	3.17E-01	pCi/g
11-11065-13	TRG	DY2-77-31-111109	11/09/11 09:29	11/11/2011	12/11/2011	11-11065	Lead-214	LANL ER-130 Modified	1.87E+01	1.30E+00	1.61E+00	3.31E-01	pCi/g
11-11065-13	TRG	DY2-77-31-111109	11/09/11 09:29	11/11/2011	12/11/2011	11-11065	Radium-226	LANL ER-130 Modified	1.70E+01	1.11E+00	1.41E+00	2.81E-01	pCi/g
11-11065-13	TRG	DY2-77-31-111109	11/09/11 09:29	11/11/2011	12/11/2011	11-11065	Thorium-234	LANL ER-130 Modified	6.38E+00	3.20E+00	3.22E+00	3.82E+00	pCi/g
11-11065-13	TRG	DY2-77-31-111109	11/09/11 09:29	11/11/2011	12/11/2011	11-11065	Thallium-208	LANL ER-130 Modified	8.04E-01	2.36E-01	2.39E-01	4.63E-01	pCi/g

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

EBERLINE SERVICES

EBERLINE ANALYTICAL CORPORATION
601 SCARBORO ROAD OAK RIDGE, TN 37830 865/481-0683 FAX 865/483-4621

Eberline Analytical
Final Report of Analysis

Report To:	
Kristie Warr	
Weston Solutions, Inc.	
5599 San Felipe Suite 700	
Houston, TX 77056	

Work Order Details:	
SDG:	11-11065
Purchase Order:	0070138
Analysis Category:	ENVIRONMENTAL
Sample Matrix:	SO

Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-11065-14	TRG	DY2-BKGD-E-31-111109	11/09/11 15:25	11/11/2011	12/11/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.03E+00	2.65E-01	2.70E-01	3.44E-01	pCi/g
11-11065-14	TRG	DY2-BKGD-E-31-111109	11/09/11 15:25	11/11/2011	12/11/2011	11-11065	Bismuth-214	LANL ER-130 Modified	1.98E+00	2.54E-01	2.73E-01	1.58E-01	pCi/g
11-11065-14	TRG	DY2-BKGD-E-31-111109	11/09/11 15:25	11/11/2011	12/11/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.11E+01	2.99E+00	3.18E+00	6.99E-01	pCi/g
11-11065-14	TRG	DY2-BKGD-E-31-111109	11/09/11 15:25	11/11/2011	12/11/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	-1.32E-01	5.70E+00	5.70E+00	1.02E+01	pCi/g
11-11065-14	TRG	DY2-BKGD-E-31-111109	11/09/11 15:25	11/11/2011	12/11/2011	11-11065	Lead-212	LANL ER-130 Modified	1.17E+00	1.69E-01	1.79E-01	1.33E-01	pCi/g
11-11065-14	TRG	DY2-BKGD-E-31-111109	11/09/11 15:25	11/11/2011	12/11/2011	11-11065	Lead-214	LANL ER-130 Modified	1.94E+00	2.47E-01	2.67E-01	1.68E-01	pCi/g
11-11065-14	TRG	DY2-BKGD-E-31-111109	11/09/11 15:25	11/11/2011	12/11/2011	11-11065	Radium-226	LANL ER-130 Modified	1.98E+00	2.54E-01	2.73E-01	1.58E-01	pCi/g
11-11065-14	TRG	DY2-BKGD-E-31-111109	11/09/11 15:25	11/11/2011	12/11/2011	11-11065	Thorium-234	LANL ER-130 Modified	2.83E-01	1.13E+00	1.13E+00	1.96E+00	pCi/g
11-11065-14	TRG	DY2-BKGD-E-31-111109	11/09/11 15:25	11/11/2011	12/11/2011	11-11065	Thallium-208	LANL ER-130 Modified	8.21E-01	1.88E-01	1.93E-01	2.61E-01	pCi/g
11-11065-15	TRG	DY2-BKGD-N-31-111109	11/09/11 15:15	11/11/2011	12/11/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.37E+00	2.66E-01	2.75E-01	3.26E-01	pCi/g
11-11065-15	TRG	DY2-BKGD-N-31-111109	11/09/11 15:15	11/11/2011	12/11/2011	11-11065	Bismuth-214	LANL ER-130 Modified	3.32E+00	3.64E-01	4.02E-01	1.79E-01	pCi/g
11-11065-15	TRG	DY2-BKGD-N-31-111109	11/09/11 15:15	11/11/2011	12/11/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.18E+01	3.01E+00	3.21E+00	8.96E-01	pCi/g
11-11065-15	TRG	DY2-BKGD-N-31-111109	11/09/11 15:15	11/11/2011	12/11/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	-2.52E+00	6.70E+00	6.70E+00	1.16E+01	pCi/g
11-11065-15	TRG	DY2-BKGD-N-31-111109	11/09/11 15:15	11/11/2011	12/11/2011	11-11065	Lead-212	LANL ER-130 Modified	1.24E+00	1.90E-01	2.00E-01	1.46E-01	pCi/g
11-11065-15	TRG	DY2-BKGD-N-31-111109	11/09/11 15:15	11/11/2011	12/11/2011	11-11065	Lead-214	LANL ER-130 Modified	3.62E+00	3.31E-01	3.79E-01	1.97E-01	pCi/g
11-11065-15	TRG	DY2-BKGD-N-31-111109	11/09/11 15:15	11/11/2011	12/11/2011	11-11065	Radium-226	LANL ER-130 Modified	3.32E+00	3.64E-01	4.02E-01	1.79E-01	pCi/g
11-11065-15	TRG	DY2-BKGD-N-31-111109	11/09/11 15:15	11/11/2011	12/11/2011	11-11065	Thorium-234	LANL ER-130 Modified	4.60E+00	2.03E+00	2.04E+00	2.19E+00	pCi/g
11-11065-15	TRG	DY2-BKGD-N-31-111109	11/09/11 15:15	11/11/2011	12/11/2011	11-11065	Thallium-208	LANL ER-130 Modified	1.09E+00	2.19E-01	2.26E-01	2.74E-01	pCi/g
11-11065-16	TRG	DY2-BKGD-S-31-111109	11/09/11 15:45	11/11/2011	12/11/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.97E+00	3.04E-01	3.20E-01	3.34E-01	pCi/g
11-11065-16	TRG	DY2-BKGD-S-31-111109	11/09/11 15:45	11/11/2011	12/11/2011	11-11065	Bismuth-214	LANL ER-130 Modified	1.97E+00	2.71E-01	2.90E-01	1.79E-01	pCi/g
11-11065-16	TRG	DY2-BKGD-S-31-111109	11/09/11 15:45	11/11/2011	12/11/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.61E+01	3.22E+00	3.48E+00	7.55E-01	pCi/g
11-11065-16	TRG	DY2-BKGD-S-31-111109	11/09/11 15:45	11/11/2011	12/11/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	-6.44E-01	6.46E+00	6.46E+00	1.14E+01	pCi/g
11-11065-16	TRG	DY2-BKGD-S-31-111109	11/09/11 15:45	11/11/2011	12/11/2011	11-11065	Lead-212	LANL ER-130 Modified	2.07E+00	2.45E-01	2.67E-01	1.51E-01	pCi/g
11-11065-16	TRG	DY2-BKGD-S-31-111109	11/09/11 15:45	11/11/2011	12/11/2011	11-11065	Lead-214	LANL ER-130 Modified	2.40E+00	2.56E-01	2.84E-01	1.91E-01	pCi/g
11-11065-16	TRG	DY2-BKGD-S-31-111109	11/09/11 15:45	11/11/2011	12/11/2011	11-11065	Radium-226	LANL ER-130 Modified	1.97E+00	2.71E-01	2.90E-01	1.79E-01	pCi/g
11-11065-16	TRG	DY2-BKGD-S-31-111109	11/09/11 15:45	11/11/2011	12/11/2011	11-11065	Thorium-234	LANL ER-130 Modified	2.32E+00	1.31E+00	1.31E+00	2.30E+00	pCi/g
11-11065-16	TRG	DY2-BKGD-S-31-111109	11/09/11 15:45	11/11/2011	12/11/2011	11-11065	Thallium-208	LANL ER-130 Modified	1.85E+00	2.76E-01	2.92E-01	2.51E-01	pCi/g

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

Eberline Analytical
Final Report of Analysis

Report To:	Work Order Details:	
Kristie Warr	SDG:	11-11065
Weston Solutions, Inc.	Purchase Order:	0070138
5599 San Felipe Suite 700	Analysis Category:	ENVIRONMENTAL
Houston, TX 77056	Sample Matrix:	SO

Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-11065-17	TRG	DY2-BKGD-W-31-111109	11/09/11 15:00	11/11/2011	12/11/2011	11-11065	Actinium-228	LANL ER-130 Modified	2.40E+00	3.81E-01	4.00E-01	4.45E-01	pCi/g
11-11065-17	TRG	DY2-BKGD-W-31-111109	11/09/11 15:00	11/11/2011	12/11/2011	11-11065	Bismuth-214	LANL ER-130 Modified	2.37E+00	3.42E-01	3.63E-01	2.34E-01	pCi/g
11-11065-17	TRG	DY2-BKGD-W-31-111109	11/09/11 15:00	11/11/2011	12/11/2011	11-11065	Potassium-40	LANL ER-130 Modified	3.16E+01	4.36E+00	4.65E+00	9.50E-01	pCi/g
11-11065-17	TRG	DY2-BKGD-W-31-111109	11/09/11 15:00	11/11/2011	12/11/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	-3.81E+00	8.23E+00	8.23E+00	1.40E+01	pCi/g
11-11065-17	TRG	DY2-BKGD-W-31-111109	11/09/11 15:00	11/11/2011	12/11/2011	11-11065	Lead-212	LANL ER-130 Modified	2.37E+00	2.99E-01	3.22E-01	1.87E-01	pCi/g
11-11065-17	TRG	DY2-BKGD-W-31-111109	11/09/11 15:00	11/11/2011	12/11/2011	11-11065	Lead-214	LANL ER-130 Modified	2.15E+00	2.97E-01	3.17E-01	2.50E-01	pCi/g
11-11065-17	TRG	DY2-BKGD-W-31-111109	11/09/11 15:00	11/11/2011	12/11/2011	11-11065	Radium-226	LANL ER-130 Modified	2.37E+00	3.42E-01	3.63E-01	2.34E-01	pCi/g
11-11065-17	TRG	DY2-BKGD-W-31-111109	11/09/11 15:00	11/11/2011	12/11/2011	11-11065	Thorium-234	LANL ER-130 Modified	2.37E+00	1.58E+00	1.59E+00	2.82E+00	pCi/g
11-11065-17	TRG	DY2-BKGD-W-31-111109	11/09/11 15:00	11/11/2011	12/11/2011	11-11065	Thallium-208	LANL ER-130 Modified	1.87E+00	3.22E-01	3.36E-01	3.30E-01	pCi/g
11-11065-18	TRG	MD-01-31-111109	11/09/11 15:19	11/11/2011	12/11/2011	11-11065	Actinium-228	LANL ER-130 Modified	1.40E+00	9.28E-01	9.31E-01	1.31E+00	pCi/g
11-11065-18	TRG	MD-01-31-111109	11/09/11 15:19	11/11/2011	12/11/2011	11-11065	Bismuth-214	LANL ER-130 Modified	6.72E+01	3.94E+00	5.24E+00	5.48E-01	pCi/g
11-11065-18	TRG	MD-01-31-111109	11/09/11 15:19	11/11/2011	12/11/2011	11-11065	Potassium-40	LANL ER-130 Modified	2.88E+01	4.76E+00	4.98E+00	3.07E+00	pCi/g
11-11065-18	TRG	MD-01-31-111109	11/09/11 15:19	11/11/2011	12/11/2011	11-11065	Protactinium-234m	LANL ER-130 Modified	3.77E+01	2.73E+01	2.74E+01	3.49E+01	pCi/g
11-11065-18	TRG	MD-01-31-111109	11/09/11 15:19	11/11/2011	12/11/2011	11-11065	Lead-212	LANL ER-130 Modified	5.33E-01	3.94E-01	3.95E-01	6.03E-01	pCi/g
11-11065-18	TRG	MD-01-31-111109	11/09/11 15:19	11/11/2011	12/11/2011	11-11065	Lead-214	LANL ER-130 Modified	7.10E+01	4.91E+00	6.11E+00	6.50E-01	pCi/g
11-11065-18	TRG	MD-01-31-111109	11/09/11 15:19	11/11/2011	12/11/2011	11-11065	Radium-226	LANL ER-130 Modified	6.72E+01	3.94E+00	5.24E+00	5.48E-01	pCi/g
11-11065-18	TRG	MD-01-31-111109	11/09/11 15:19	11/11/2011	12/11/2011	11-11065	Thorium-234	LANL ER-130 Modified	4.38E+01	8.34E+00	8.64E+00	7.63E+00	pCi/g
11-11065-18	TRG	MD-01-31-111109	11/09/11 15:19	11/11/2011	12/11/2011	11-11065	Thallium-208	LANL ER-130 Modified	1.09E+00	2.85E-01	2.91E-01	8.27E-01	pCi/g

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

EBERLINE SERVICES

EBERLINE ANALYTICAL CORPORATION
601 SCARBORO ROAD OAK RIDGE, TN 37830 865/481-0683 FAX 865/483-4621

SECTION V

ANALYTICAL STANDARD

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

GAS-1102

83913-416

Sand in 16 oz. PP Taral Jar Filled to Top

Customer: Eberline Services / Eberline Analytical Corp.
P.O. No.: 6705, Item 8
Reference Date: 01-Jan-2011 12:00 PM EST **Grams of Master Source:** 0.016810

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

Nuclide	Gamma-Ray Energy (keV)	Half-Life, Days	Master Source* γps/gram	This Source γps	Uncertainty, % Type u_A	u_B	U	Calibration Method
Am-241	59.5	1.580E+05	———	2.075E+03	0.1	1.7	3.5	4π LS
Cd-109	88.0	4.626E+02	1.697E+05	2.853E+03	0.8	2.3	4.9	HPGe
Co-57	122.1	2.718E+02	8.711E+04	1.464E+03	0.5	2.0	4.1	HPGe
Ce-139	165.9	1.376E+02	1.247E+05	2.096E+03	0.5	1.9	3.9	HPGe
Hg-203	279.2	4.661E+01	2.753E+05	4.628E+03	0.4	1.9	3.9	HPGe
Sn-113	391.7	1.151E+02	1.769E+05	2.974E+03	0.5	1.9	3.9	HPGe
Cs-137	661.7	1.098E+04	1.109E+05	1.864E+03	0.7	1.9	4.0	HPGe
Y-88	898.0	1.066E+02	4.224E+05	7.101E+03	0.5	1.9	3.9	HPGe
Co-60	1173.2	1.925E+03	2.142E+05	3.601E+03	0.6	1.9	4.0	HPGe
Co-60	1332.5	1.925E+03	2.143E+05	3.602E+03	0.6	1.9	4.0	HPGe
Y-88	1836.1	1.066E+02	4.472E+05	7.517E+03	0.5	1.9	3.9	HPGe

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

Calibration Methods: 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

0021

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

GAS-1002

81341-416

Sand in 16 oz PP Taral Jar Filled to Top

Customer: Eberline Services / Eberline Analytical Corp. / Oak Ridge
P.O. No.: 5964, Item 6
Reference Date: 01-Jan-2010 12:00 PM EST **Grams of Master Source:** 0.017446

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

Nuclide	Gamma-Ray Energy (keV)	Half-Life, Days	Master Source* γps/gram	This Source γps	Uncertainty, % Type u_A	u_B	U	Calibration Method
Am-241	59.5	1.580E+05	———	2.020E+03	0.1	1.7	3.5	4π LS
Cd-109	88.0	4.626E+02	1.606E+05	2.802E+03	0.4	2.3	4.7	HPGe
Co-57	122.1	2.718E+02	8.471E+04	1.478E+03	0.5	2.0	4.1	HPGe
Ce-139	165.9	1.376E+02	1.209E+05	2.109E+03	0.4	1.9	3.9	HPGe
Hg-203	279.2	4.661E+01	2.726E+05	4.756E+03	0.4	1.9	3.9	HPGe
Sn-113	391.7	1.151E+02	1.672E+05	2.917E+03	0.5	1.9	3.9	HPGe
Cs-137	661.7	1.098E+04	1.096E+05	1.912E+03	0.6	1.9	4.0	HPGe
Y-88	898.0	1.066E+02	4.077E+05	7.113E+03	0.4	1.9	3.9	HPGe
Co-60	1173.2	1.925E+03	2.055E+05	3.585E+03	0.5	1.9	3.9	HPGe
Co-60	1332.5	1.925E+03	2.056E+05	3.587E+03	0.7	1.9	4.0	HPGe
Y-88	1836.1	1.066E+02	4.308E+05	7.516E+03	0.5	1.9	3.9	HPGe

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

Calibration Methods: 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

Corporate Office

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia 30318

Comments:
260 mL / 260 g of pulverized soil.
This standard will expire one year after the reference date.

Source Prepared by: MITaskaeva
M. I. Taskaeva, Radiochemist

QA Approved: _____ Date: 1/29/10
J. D. McCorvey, QA Manager Alternate

SECTION VI

QUALITY CONTROL SAMPLE RESULTS SUMMARY

Eberline Services
Analysis Control Chart

WO	Analysis	Run	Activity Units	Aliquot Units	Client Name
11-11065	Gamma	1	pCi	g	Weston Solutions, Inc.

Laboratory Control Sample

Analyte	Normalized Difference	LCS Measured	CSU Measured	LCS Expected	Uncert. Expected	Known	Known Error	Result	CSU	Standard ID	Standard ACT (dpm)	Standard Error	Standard Added (g)
CO-60	0.79	103.96%	9.14%	100.00%	3.95%	1.32E+02	5.20E+00	1.37E+02	1.25E+01	GAS-1002	1.32E+02	5.20E+00	7.36E+02
CS-137	0.74	104.62%	11.50%	100.00%	4.00%	8.25E+01	3.30E+00	8.63E+01	9.93E+00	GAS-1002	8.25E+01	3.30E+00	7.36E+02

Matrix Spike

Analyte	Normalized Difference	MS Actual % Rec	Expected MS Result	Expected MS Uncert	Actual MS Result	Actual MS CSU	Sample Result	Sample CSU	Sample Aliquot	Standard ID	Standard ACT (dpm)	Standard Error %	Standard Added (g)

Replicate Sample

Analyte	Normalized Difference	RPD	Original Result	Original CSU	Replicate Result	Replicate CSU
AC-228	0.92	12.08	2.18E+00	3.73E-01	1.93E+00	3.76E-01
BI-214	0.63	4.52	6.45E+00	6.35E-01	6.16E+00	6.23E-01
K-40	1.00	9.83	2.36E+01	3.32E+00	2.60E+01	3.45E+00

QC Summary

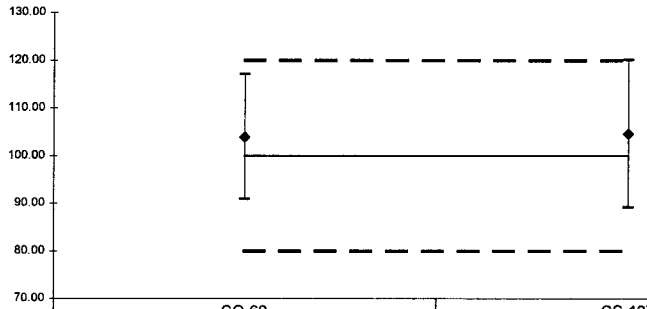
LCS Relative Bias	LCS % R	LCS ND	MS % R	MS ND	Rep RPD	Rep ND
1.04	OK	OK	<CS-137	AC-228>	NA	
1.05	OK	OK	<CO-60	BI-214>	NA	OK
				K-40>	NA	OK

Version

00025

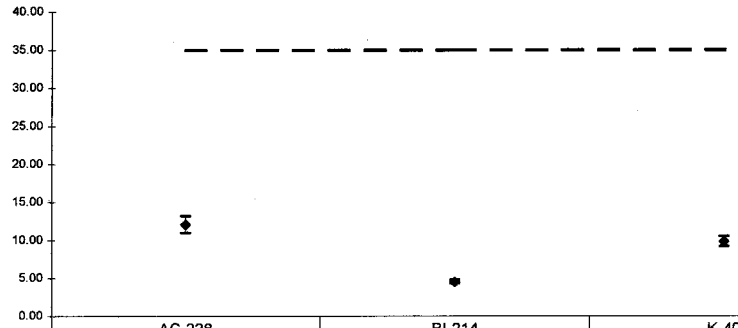
WO	Analysis	Run	Activity Units	Aliquot Units	Client Name
11-11065	Gamma	1	pCi	g	Weston Solutions, Inc.

LCS % Recovery



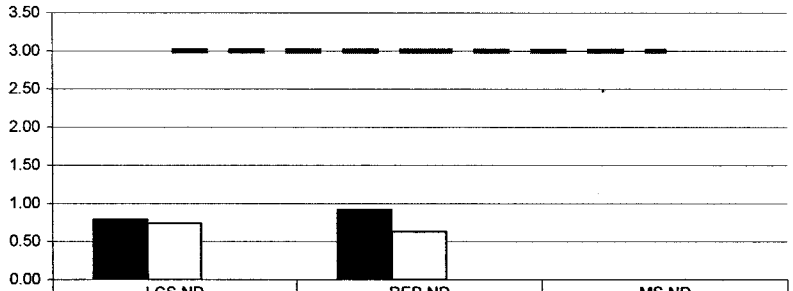
	CO-60	CS-137
Lower Error	90.86	89.12
Upper Error	117.05	120.12
%R	103.96	104.62
LCL	80	80
Mean	100	100
UCL	120	120

Replicate Sample RPD



	AC-228	BI-214	K-40
Lower Error	13.18	4.74	10.50
Upper Error	10.98	4.29	9.16
RPD	12.08	4.52	9.83
CL	35	35	35

Normalized Difference



	LCS ND	REP ND	MS ND
CO-60	0.79	0.92	0.00
CS-137	0.74	0.63	0.00
	0.00	0.00	0.00
UCL	3	3	3

No Matrix Spike

SECTION VII

LABORATORY TECHNICIAN'S NOTES
&
RUN LOGS

GE 1

DATE	Sample #	Client	Load Time	CT Time	Analysis	Tech
12/9/11	1111011-05	USA	0824	1 HR	γ	AG
12/9/11	1111011-09	USA	0926	1 HR	γ	AG
12/9/11	1111011-12	USA	1030	1 hr	γ	ICB
12/9/11	1111011-17	USA	1132	1 hr	γ	ICB
12/9/11	1111108-05	Eberline Serv.	1234	1 hr	γ	ICB
12/9/11	1111108-08	Eberline Serv.	1339	1 hr	γ	ICB
12/9/11	1111108-12	Eberline Serv.	1442	1 hr	γ	ICB
12/9/11	Trafil	Lab	1543	15 min	Ba	ICB
12/9/11	1112052-01	Fox fire	1559	15 min	Ba	ICB
12/9/11	1112052-02	Fox fire	1615	15 min	Ba	ICB
12/9/11	1112052-03	Fox fire	1633	15 min	Ba	ICB
12/9/11	1112052-04	Fox fire	1649	15 min	Ba	ICB
12/9/11	1112052-05	Fox fire	1705	15 min	Ba	ICB
12/9/11	1112052-06	Fox fire	1721	15 min	Ba	ICB
12/9/11	1112052-07	Fox fire	1737	15 min	Ba	ICB
12/9/11	1111120-11	UCOR	1754	2 hr	γ	ICB
12/10/11	Daily Bkgd	Lab	0358	15 min	γ	ICB
12/10/11	GAS 1102	Lab	0418	15 min	γ	ICB
12/10/11	GAS 1102	Lab	0437	15 min	γ	ICB
12/10/11	1111045-03	Weston	0459	1 hr	γ	ICB
12/10/11	1111045-07	Weston	0601	1 hr	γ	ICB
12/10/11	1111045-10	Weston	0702	1 hr	γ	ICB
12/10/11	1111045-13	Weston	0802	1 hr	γ	ICB
12/10/11	1111116-06	Eberline Serv.	0903	1 hr	γ	ICB
12/10/11	1111116-09	Eberline Serv.	1003	1 hr	γ	ICB
12/10/11	1111116-13	Eberline Serv.	1104	1 hr	γ	ICB
12/10/11	1111116-17	Eberline Serv.	1205	1 hr	γ	ICB
12/10/11	1111065-03	Weston	1308	1 hr	γ	ICB
12/10/11	1111065-04	Weston	1413	1 hr	γ	AG
12/10/11	1111065-11	Weston	1523	1 hr	γ	AG
12/10/11	Chamber Bkgd	Lab	1753	12 hr	γ	AG
12/11/11	GAS-1102	Lab	1000	15 MIN	γ	AG
12/11/11	Daily Bkgd	Lab	1025	15 MIN	γ	AG

GE 1

DATE	SAmple #	Client	Load Time	CT Time	Analysis	Tech
12/11/11	1111065-13	Weston	1113	1 HR	γ	AC
12/11/11	1111065-16	Weston	1216	1 HR	γ	AC

GE 2

DATE	Sample #	Client	Load Time	CT Time	Analysis	Tech
12/9/11	Daily Bkgd	Lab	0715	15 MIN	γ	AG
12/9/11	GAW-11	Lab	0736	15 min	γ	AG
12/9/11	1111011-06	USA	0825	1 HR	γ	AG
12/9/11	1111011-10	USA	0928	1 HR	γ	AG
12/9/11	1111011-13	USA	1030	1 hr	γ	ICB
12/9/11	1111011-16	USA	1131	1 hr	γ	ICB
12/9/11	1111108-06	Eberline Servi	1235	1 hr	γ	ICB
12/9/11	1111107-09	Eberline Servi	1340	1 hr	γ	ICB
12/9/11	1111108-13	Eberline Servi	1443	1 hr	γ	ICB
12/9/11	1111120-07	UCOR	1544	2 hrs	γ	ICB
12/9/11	1111120-08	UCOR	1746	2 hrs	γ	ICB
12/10/11	GAS 1102	Lab	0359	15 min	γ	ICB
12/10/11	GAS 1101	Lab	0419	15 min	γ	ICB
12/10/11	Daily Bkgd	Lab	0437	15 min	γ	ICB
12/10/11	1111045-04	Weston	0500	1 hr	γ	ICB
12/10/11	1111045-06	Weston	0602	1 hr	γ	ICB
12/10/11	1111045-11	Weston	0703	1 hr	γ	ICB
12/10/11	1111116-03	Eberline Servi	0803	1 hr	γ	ICB
12/10/11	1111116-04	Eberline Servi	0904	1 hr	γ	ICB
12/10/11	1111116-10	Eberline Servi	1005	1 hr	γ	ICB
12/10/11	1111116-14	Eberline Servi	1106	1 hr	γ	ICB
12/10/11	1111116-18	Eberline Servi	1209	1 hr	γ	ICB
12/10/11	1111065-05	Weston	1309	1 hr	γ	ICB
12/10/11	1111065-08	Weston	1414	1 HR	γ	AG
12/10/11	1111065-12	Weston	1524	1 HR	γ	AG
12/10/11	Chamber Bkgd	Lab	1754	12 Hr	γ	AG
12/11/11	Daily Bkgd	Lab	1001	15 min	γ	AG
12/11/11	GAS-1102	Lab	1026	15 min	γ	AG
12/11/11	1111065-14	Weston	1114	1 HR	γ	AG
12/11/11	1111065-17	Weston	1218	1 HR	γ	AG

DATE	Sample #	Client	Start Time	Time	Analysis	Tech
12/8/11	1111008-08	USA	1401	1 hr	γ	ICB
12/8/11	1112008-11	USA	1504	1 hr	γ	ICB
12/8/11	1112043-03	Solutient Tech	1604	1 hr	γ	ICB
12/8/11	1112043-04	Solutient Tech	1707	1 hr	γ	ICB
12/8/11	1112036-06	UCOR	1813	2 hrs	γ	ICB
12/8/11	1111120-06	UCOR	2040	2 HR	γ	AG
12/9/11	~~Daily Bkgd~~ KD Bkgd	Lab	0634	15 min	γ	AG
12/9/11	GAS-1102	Lab	0653	15 min	γ	AG
12/9/11	GAS-1101	Lab	0715	15 min	γ	AG
12/9/11	~~GAS-1102~~ Daily Bkgd	Lab	0736	15 min	γ	AG
12/9/11	1111011-07	USA	0827	1 HR	γ	AG
12/9/11	1111011-11	USA	0930	1 HR	γ	AG
12/9/11	1111011-14	USA	1031	1 hr	γ	ICB
12/9/11	1111108-03	Eberline Serv.	1134	1 hr	γ	ICB
12/9/11	1111108-04	Eberline Serv.	1236	1 hr	γ	ICB
12/9/11	1111108-10	Eberline Serv.	1341	1 hr	γ	ICB
12/9/11	1111108-14	Eberline Serv.	1444	1 hr	γ	ICB
12/9/11	1111108-16	Eberline Serv.	1546	1 hr	γ	ICB
12/9/11	1111108-18	Eberline Serv.	1647	1 hr	γ	ICB
12/9/11	1111120-10	UCOR	1749	2 hr	γ	ICB
12/10/11	GAS 1101	Lab	0359	15 min	γ	ICB
12/10/11	Daily Bkgd	Lab	0419	15 min	γ	ICB
12/10/11	GAS 1102	Lab	0513	15 min	γ	ICB
12/10/11	1111045-05	Weston	0530	1 hr	γ	ICB
12/10/11	1111045-08	Weston	0631	1 hr	γ	ICB
12/10/11	1111045-12	Weston	0732	1 hr	γ	ICB
12/10/11	1111116-05	Eberline Serv.	0833	1 hr	γ	ICB
12/10/11	1111116-08	Eberline Serv.	0934	1 hr	γ	ICB
12/10/11	1111116-12	Eberline Serv.	1037	1 hr	γ	ICB
12/10/11	1111116-16	Eberline Serv.	1138	1 hr	γ	ICB
12/10/11	1111116-20	Eberline Serv.	1239	1 hr	γ	ICB
12/10/11	1111065-06	Weston	1348	1 HR	γ	AG
12/10/11	1111065-09	Weston	1454	1 HR	γ	AG

GE 3

DATE	SAMPLE #	Client	Load Time	CT Time	Analyzer	Tech
12/10/11	Chamber Bkgd	Lab	1755	12hr	γ	AG
12/11/11	Daily Bkgd	Lab	1002	15 MIN	γ	AG
12/11/11	GAS-1102	Lab	1052	15 MIN	γ	AG
12/11/11	1111065-15	Weston	1115	1 HR	γ	AG
12/11/11	1111065-18	Weston	1220	1 HR	γ	AG

GE 4

DATE	Sample #	Client	Lost Time	CT Time	Analysis	Tech
12/8/11	1111120-02	UCOR	2036	2 HR	γ	AG
12/8/11	~~GAW-11~~ Daily Bkgd AG NJS	Lab	0633	15 min	γ	AG
12/9/11	GAW-11	Lab	0654	15 min	γ	AG
12/9/11	GAS-1102	Lab	0716	15 min	γ	AG
12/9/11	GAS-1101	Lab	0737	15 min	γ	AG
12/9/11	1111011-08	USA	0828	1 HR	γ	AG
12/9/11	1111011-02	USA	0932	1 HR	γ	AG
12/9/11	1111011-15	USA	1032	1 hr	γ	ICB
12/9/11	1111108-02	Eberline Serv.	1135	1 hr	γ	ICB
12/9/11	1111108-01	Eberline Serv.	1237	30 min	γ	ICB
12/9/11	1111108-07	Eberline Serv.	1326	1 hr	γ	ICB
12/9/11	1111108-11	Eberline Serv.	1435	1 hr	γ	ICB
12/9/11	1111108-15	Eberline Serv.	1537	1 hr	γ	ICB
12/9/11	1111108-17	Eberline Serv.	1644	1 hr	γ	ICB
12/9/11	1111120-09	UCOR	1748	2 hrs	γ	ICB
12/10/11	Daily Bkgd	Lab	0400	15 min	γ	ICB
12/10/11	GAS 1101	Lab	0438	15 min	γ	ICB
12/10/11	GAS 1102	Lab	0456	15 min	γ	ICB
12/10/11	1111045-02	Weston	0514	1 hr	γ	ICB
12/10/11	1111045-01	Weston	0614	30 min	γ	ICB
12/10/11	1111045-09	Weston	0645	1 hr	γ	ICB
12/10/11	1111116-02	Eberline Serv.	0746	1 hr	γ	ICB
12/10/11	1111116-01	Eberline Serv.	0847	30 min	γ	ICB
12/10/11	1111116-07	Eberline Serv.	0924	1 hr	γ	ICB
12/10/11	1111116-11	Eberline Serv.	1025	1 hr	γ	ICB
12/10/11	1111116-15	Eberline Serv.	1126	1 hr	γ	ICB
12/10/11	1111116-19	Eberline Serv.	1226	1 hr	γ	ICB
12/10/11	1111065-07	Weston	1349	1 hr	γ	AG
12/10/11	1111065-10	Weston	1454	1 HR	γ	AG
12/10/11	Chamber Bkgd	Lab	1756	12 hr	γ	AG
12/11/11	Daily Bkgd	Lab	1002	15 min	γ	AG
12/11/11	GAS-1102	Lab	1110	15 min	γ	AG
12/11/11	1111065-01	Weston	1131	30 min	γ	AG
12/11/11	1111065-02	Weston	1204	1 HR	γ	AG

SECTION VIII

ANALYTICAL DATA (GAMMA SPECTROSCOPY)

Eberline Services
Oak Ridge Laboratory
Analysis Sheet

11-11065
Gamma
Run 1

Work Order	11-11065
Analysis Code	Gamma
Run	1
Date Received	11/11/2011
Lab Deadline	12/5/2011
Client	Weston Solutions, Inc.
Project	0070138 U Mines
Report Level	4
Activity Units	pCi
Aliquot Units	g
Matrix	SO
Method	LANL ER-130 Modified
Instrument Type	Gamma Spectroscopy
Radiometric Tracer	
Radiometric Sol#	
Tracer Act (dpm/g)	
Carrier	
Carrier Conc (mg/ml)	

Internal Fraction	Sample Desc	Client ID	Login CPM	Sample Date	Sample Aliquot
01	LCS	LCS		11/11/11 00:00	1.0000E+00
02	MBL	BLANK		11/11/11 00:00	1.0000E+00
03	DUP	DY2-11-31-111109	46	11/09/11 08:35	3.8831E+02
04	DO	DY2-11-31-111109	46	11/09/11 08:35	3.8831E+02
05	TRG	DY2-17-31-111109	74	11/09/11 08:37	3.3577E+02
06	TRG	DY2-17-32-111109	60	11/09/11 08:37	3.5160E+02
07	TRG	DY2-32-31-111109	195	11/09/11 08:46	4.2181E+02
08	TRG	DY2-33-31-111109	172	11/09/11 08:51	4.1193E+02
09	TRG	DY2-41-31-111109	222	11/09/11 09:15	4.8802E+02
10	TRG	DY2-44-31-111109	199	11/09/11 09:10	5.2500E+02
11	TRG	DY2-48-31-111109	50	11/09/11 09:05	4.1530E+02
12	TRG	DY2-65-31-111109	46	11/09/11 09:31	3.3587E+02
13	TRG	DY2-77-31-111109	43	11/09/11 09:29	3.5342E+02
14	TRG	DY2-BKGD-E-31-111109	45	11/09/11 15:25	4.3903E+02
15	TRG	DY2-BKGD-N-31-111109	25	11/09/11 15:15	4.6278E+02
16	TRG	DY2-BKGD-S-31-111109	38	11/09/11 15:45	3.8941E+02
17	TRG	DY2-BKGD-W-31-111109	32	11/09/11 15:00	3.2311E+02
18	TRG	MD-01-31-111109	107	11/09/11 15:19	3.9989E+02

* SAF1 is used for Gross Alpha and all other radionuclides. SAF2 is used for Gross Beta only. ** Actual mass exceeded the calibration curve range. Results should be qualified as appropriate.

11-11065
Gamma
Run 1

Internal Fraction	Sample Desc	Tracer Aliquot (g)	Tracer Total ACT (dpm)	Radiometric Tracer (pCi)	Radiometric % Rec	Grav Carrier Added (ml)	Grav Filter Tare (g)	Grav Filter Final (g)	Grav Filter Net (g)	Grav % Rec	Mean % Rec	SAF 1*	SAF 2*
01	LCS				0.00								
02	MBL				0.00								
03	DUP				0.00								
04	DO				0.00								
05	TRG				0.00								
06	TRG				0.00								
07	TRG				0.00								
08	TRG				0.00								
09	TRG				0.00								
10	TRG				0.00								
11	TRG				0.00								
12	TRG				0.00								
13	TRG				0.00								
14	TRG				0.00								
15	TRG				0.00								
16	TRG				0.00								
17	TRG				0.00								
18	TRG				0.00								

* SAF1 is used for Gross Alpha and all other radionuclides. SAF2 is used for Gross Beta only. ** Actual mass exceeded the calibration curve range. Results should be qualified as appropriate.

11-11065
Gamma
Run 1

Internal Fraction	Sample Desc	Rough Prep Date	Rough Prep By	Prep Date	Prep By	Sep t0 Date/Time	Sep t0 By	Sep t1 Date/Time	Sep t1 By
01	LCS								
02	MBL								
03	DUP								
04	DO	11/14/11 08:50	KSALLINGS						
05	TRG	11/14/11 08:50	KSALLINGS						
06	TRG	11/14/11 08:50	KSALLINGS						
07	TRG	11/14/11 08:50	KSALLINGS						
08	TRG	11/14/11 08:50	KSALLINGS						
09	TRG	11/14/11 08:50	KSALLINGS						
10	TRG	11/14/11 08:50	KSALLINGS						
11	TRG	11/14/11 08:50	KSALLINGS						
12	TRG	11/14/11 08:50	KSALLINGS						
13	TRG	11/14/11 08:50	KSALLINGS						
14	TRG	11/14/11 08:50	KSALLINGS						
15	TRG	11/14/11 08:50	KSALLINGS						
16	TRG	11/14/11 08:50	KSALLINGS						
17	TRG	11/14/11 08:50	KSALLINGS						
18	TRG	11/14/11 08:50	KSALLINGS						

* SAF1 is used for Gross Alpha and all other radionuclides. SAF2 is used for Gross Beta only. ** Actual mass exceeded the calibration curve range. Results should be qualified as appropriate.

Eberline Services
Oak Ridge Laboratory

Preliminary Data Report & Analytical Calculations

Work Order: 11-11065-Gamma-1

Lab Fraction	Nuclide	Sample Desc	Client Identification	Activity Units	Results	Error Estimate	MDA	LSC Known	LCS %R	LCS Flag	RPD Flag	Sample Date	Sample Aliquot	Counting Date/Time	Identified
01	CO-60	LCS	LCS	pCi/g	1.37E+02	1.04E+01	1.28E+00	1.32E+02	103.96	OK		11/11/11 00:00	1.00E+00	12/11/11 11:31	YES
01	CS-137	LCS	LCS	pCi/g	8.63E+01	8.89E+00	1.07E+00	8.25E+01	104.62	OK		11/11/11 00:00	1.00E+00	12/11/11 11:31	YES
02	AC-228	MBL	BLANK	pCi/g	5.69E-02	1.20E-01	2.55E-01					11/11/11 00:00	1.00E+00	12/11/11 12:04	NO
02	BI-214	MBL	BLANK	pCi/g	-6.45E-02	8.81E-02	1.36E-01					11/11/11 00:00	1.00E+00	12/11/11 12:04	NO
02	K-40	MBL	BLANK	pCi/g	-2.92E-02	3.57E-01	7.14E-01					11/11/11 00:00	1.00E+00	12/11/11 12:04	NO
02	PA-234M	MBL	BLANK	pCi/g	-1.27E+00	2.83E+00	5.25E+00					11/11/11 00:00	1.00E+00	12/11/11 12:04	NO
02	PB-212	MBL	BLANK	pCi/g	9.08E-03	4.84E-02	8.35E-02					11/11/11 00:00	1.00E+00	12/11/11 12:04	NO
02	PB-214	MBL	BLANK	pCi/g	-7.73E-02	6.68E-02	9.61E-02					11/11/11 00:00	1.00E+00	12/11/11 12:04	NO
02	RA-226	MBL	BLANK	pCi/g	-6.45E-02	8.81E-02	1.36E-01					11/11/11 00:00	1.00E+00	12/11/11 12:04	NO
02	TH-234	MBL	BLANK	pCi/g	1.66E-01	4.74E-01	8.25E-01					11/11/11 00:00	1.00E+00	12/11/11 12:04	NO
02	TL-208	MBL	BLANK	pCi/g	9.14E-02	7.09E-02	1.59E-01					11/11/11 00:00	1.00E+00	12/11/11 12:04	NO
03	AC-228	DUP	DY2-11-31-111109	pCi/g	1.93E+00	3.63E-01	4.10E-01				NA	11/09/11 08:35	3.88E+02	12/10/11 13:08	YES
03	BI-214	DUP	DY2-11-31-111109	pCi/g	6.16E+00	5.37E-01	2.08E-01				NA	11/09/11 08:35	3.88E+02	12/10/11 13:08	YES
03	K-40	DUP	DY2-11-31-111109	pCi/g	2.60E+01	3.18E+00	9.43E-01				NA	11/09/11 08:35	3.88E+02	12/10/11 13:08	YES
03	PA-234M	DUP	DY2-11-31-111109	pCi/g	1.69E+01	9.73E+00	1.23E+01					11/09/11 08:35	3.88E+02	12/10/11 13:08	YES
03	PB-212	DUP	DY2-11-31-111109	pCi/g	2.31E+00	2.83E-01	1.86E-01					11/09/11 08:35	3.88E+02	12/10/11 13:08	YES
03	PB-214	DUP	DY2-11-31-111109	pCi/g	6.31E+00	5.34E-01	2.34E-01					11/09/11 08:35	3.88E+02	12/10/11 13:08	YES
03	RA-226	DUP	DY2-11-31-111109	pCi/g	6.16E+00	5.37E-01	2.08E-01					11/09/11 08:35	3.88E+02	12/10/11 13:08	YES
03	TH-234	DUP	DY2-11-31-111109	pCi/g	1.09E+01	2.66E+00	2.54E+00					11/09/11 08:35	3.88E+02	12/10/11 13:08	YES
03	TL-208	DUP	DY2-11-31-111109	pCi/g	1.62E+00	2.92E-01	2.99E-01					11/09/11 08:35	3.88E+02	12/10/11 13:08	YES
04	AC-228	DO	DY2-11-31-111109	pCi/g	2.18E+00	3.56E-01	3.88E-01					11/09/11 08:35	3.88E+02	12/10/11 14:13	YES
04	BI-214	DO	DY2-11-31-111109	pCi/g	6.45E+00	5.41E-01	2.16E-01					11/09/11 08:35	3.88E+02	12/10/11 14:13	YES
04	K-40	DO	DY2-11-31-111109	pCi/g	2.36E+01	3.09E+00	1.10E+00					11/09/11 08:35	3.88E+02	12/10/11 14:13	YES
04	PA-234M	DO	DY2-11-31-111109	pCi/g	8.76E+00	8.43E+00	1.10E+01					11/09/11 08:35	3.88E+02	12/10/11 14:13	YES
04	PB-212	DO	DY2-11-31-111109	pCi/g	7.78E-01	2.12E-01	1.86E-01					11/09/11 08:35	3.88E+02	12/10/11 14:13	YES
04	PB-214	DO	DY2-11-31-111109	pCi/g	6.61E+00	5.32E-01	2.41E-01					11/09/11 08:35	3.88E+02	12/10/11 14:13	YES
04	RA-226	DO	DY2-11-31-111109	pCi/g	6.45E+00	5.41E-01	2.16E-01					11/09/11 08:35	3.88E+02	12/10/11 14:13	YES
04	TH-234	DO	DY2-11-31-111109	pCi/g	9.73E+00	2.91E+00	2.67E+00					11/09/11 08:35	3.88E+02	12/10/11 14:13	YES
04	TL-208	DO	DY2-11-31-111109	pCi/g	1.58E+00	2.92E-01	3.30E-01					11/09/11 08:35	3.88E+02	12/10/11 14:13	YES
05	AC-228	TRG	DY2-17-31-111109	pCi/g	1.21E+00	8.97E-01	1.07E+00					11/09/11 08:37	3.36E+02	12/10/11 13:09	NO
05	BI-214	TRG	DY2-17-31-111109	pCi/g	3.09E+01	1.94E+00	4.05E-01					11/09/11 08:37	3.36E+02	12/10/11 13:09	YES
05	K-40	TRG	DY2-17-31-111109	pCi/g	3.04E+01	4.63E+00	2.01E+00					11/09/11 08:37	3.36E+02	12/10/11 13:09	YES
05	PA-234M	TRG	DY2-17-31-111109	pCi/g	2.30E+01	1.78E+01	2.24E+01					11/09/11 08:37	3.36E+02	12/10/11 13:09	YES
05	PB-212	TRG	DY2-17-31-111109	pCi/g	9.61E-01	2.00E-01	4.03E-01					11/09/11 08:37	3.36E+02	12/10/11 13:09	YES
05	PB-214	TRG	DY2-17-31-111109	pCi/g	3.33E+01	2.33E+00	4.66E-01					11/09/11 08:37	3.36E+02	12/10/11 13:09	YES
05	RA-226	TRG	DY2-17-31-111109	pCi/g	3.09E+01	1.94E+00	4.05E-01					11/09/11 08:37	3.36E+02	12/10/11 13:09	YES
05	TH-234	TRG	DY2-17-31-111109	pCi/g	1.99E+01	5.40E+00	5.21E+00					11/09/11 08:37	3.36E+02	12/10/11 13:09	YES
05	TL-208	TRG	DY2-17-31-111109	pCi/g	1.08E+00	2.60E-01	5.61E-01					11/09/11 08:37	3.36E+02	12/10/11 13:09	YES

Work Order: 11-11065-Gamma-1

Lab Fraction	Nuclide	Sample Desc	Client Identification	Activity Units	Results	Error Estimate	MDA	LSC Known	LCS %R	LCS Flag	RPD Flag	Sample Date	Sample Aliquot	Counting Date/Time	Identified
06	AC-228	TRG	DY2-17-32-111109	pCi/g	1.75E+00	7.46E-01	9.36E-01					11/09/11 08:37	3.52E+02	12/10/11 13:48	YES
06	BI-214	TRG	DY2-17-32-111109	pCi/g	3.34E+01	2.14E+00	4.44E-01					11/09/11 08:37	3.52E+02	12/10/11 13:48	YES
06	K-40	TRG	DY2-17-32-111109	pCi/g	2.64E+01	4.44E+00	2.34E+00					11/09/11 08:37	3.52E+02	12/10/11 13:48	YES
06	PA-234M	TRG	DY2-17-32-111109	pCi/g	1.72E+01	1.77E+01	3.18E+01					11/09/11 08:37	3.52E+02	12/10/11 13:48	NO
06	PB-212	TRG	DY2-17-32-111109	pCi/g	7.85E-01	3.26E-01	5.09E-01					11/09/11 08:37	3.52E+02	12/10/11 13:48	NO
06	PB-214	TRG	DY2-17-32-111109	pCi/g	3.43E+01	2.43E+00	4.64E-01					11/09/11 08:37	3.52E+02	12/10/11 13:48	YES
06	RA-226	TRG	DY2-17-32-111109	pCi/g	3.34E+01	2.14E+00	4.44E-01					11/09/11 08:37	3.52E+02	12/10/11 13:48	YES
06	TH-234	TRG	DY2-17-32-111109	pCi/g	1.78E+01	5.71E+00	6.03E+00					11/09/11 08:37	3.52E+02	12/10/11 13:48	YES
06	TL-208	TRG	DY2-17-32-111109	pCi/g	1.15E+00	2.66E-01	6.27E-01					11/09/11 08:37	3.52E+02	12/10/11 13:48	YES
07	AC-228	TRG	DY2-32-31-111109	pCi/g	2.73E+00	2.50E+00	3.10E+00					11/09/11 08:46	4.22E+02	12/10/11 13:49	NO
07	BI-214	TRG	DY2-32-31-111109	pCi/g	1.49E+02	9.00E+00	1.40E+00					11/09/11 08:46	4.22E+02	12/10/11 13:49	YES
07	K-40	TRG	DY2-32-31-111109	pCi/g	3.02E+01	7.91E+00	8.09E+00					11/09/11 08:46	4.22E+02	12/10/11 13:49	YES
07	PA-234M	TRG	DY2-32-31-111109	pCi/g	7.00E+01	6.06E+01	8.50E+01					11/09/11 08:46	4.22E+02	12/10/11 13:49	YES
07	PB-212	TRG	DY2-32-31-111109	pCi/g	1.21E+01	1.52E+00	1.64E+00					11/09/11 08:46	4.22E+02	12/10/11 13:49	NO
07	PB-214	TRG	DY2-32-31-111109	pCi/g	1.54E+02	1.26E+01	1.60E+00					11/09/11 08:46	4.22E+02	12/10/11 13:49	YES
07	RA-226	TRG	DY2-32-31-111109	pCi/g	1.49E+02	9.00E+00	1.40E+00					11/09/11 08:46	4.22E+02	12/10/11 13:49	YES
07	TH-234	TRG	DY2-32-31-111109	pCi/g	8.67E+01	1.41E+01	1.70E+01					11/09/11 08:46	4.22E+02	12/10/11 13:49	YES
07	TL-208	TRG	DY2-32-31-111109	pCi/g	5.03E-01	3.48E-01	2.12E+00					11/09/11 08:46	4.22E+02	12/10/11 13:49	YES
08	AC-228	TRG	DY2-33-31-111109	pCi/g	6.71E-01	7.55E-01	1.29E+00					11/09/11 08:51	4.12E+02	12/10/11 14:14	NO
08	BI-214	TRG	DY2-33-31-111109	pCi/g	1.11E+02	6.01E+00	6.17E-01					11/09/11 08:51	4.12E+02	12/10/11 14:14	YES
08	K-40	TRG	DY2-33-31-111109	pCi/g	2.97E+01	5.17E+00	3.45E+00					11/09/11 08:51	4.12E+02	12/10/11 14:14	YES
08	PA-234M	TRG	DY2-33-31-111109	pCi/g	6.95E+01	3.83E+01	3.55E+01					11/09/11 08:51	4.12E+02	12/10/11 14:14	YES
08	PB-212	TRG	DY2-33-31-111109	pCi/g	8.85E-01	4.46E-01	5.98E-01					11/09/11 08:51	4.12E+02	12/10/11 14:14	YES
08	PB-214	TRG	DY2-33-31-111109	pCi/g	1.15E+02	7.77E+00	7.54E-01					11/09/11 08:51	4.12E+02	12/10/11 14:14	YES
08	RA-226	TRG	DY2-33-31-111109	pCi/g	1.11E+02	6.01E+00	6.17E-01					11/09/11 08:51	4.12E+02	12/10/11 14:14	YES
08	TH-234	TRG	DY2-33-31-111109	pCi/g	5.92E+01	9.45E+00	8.63E+00					11/09/11 08:51	4.12E+02	12/10/11 14:14	YES
08	TL-208	TRG	DY2-33-31-111109	pCi/g	5.62E-01	6.20E-01	9.75E-01					11/09/11 08:51	4.12E+02	12/10/11 14:14	NO
09	AC-228	TRG	DY2-41-31-111109	pCi/g	1.26E+00	1.11E+00	1.51E+00					11/09/11 09:15	4.88E+02	12/10/11 14:54	NO
09	BI-214	TRG	DY2-41-31-111109	pCi/g	1.27E+02	6.98E+00	6.99E-01					11/09/11 09:15	4.88E+02	12/10/11 14:54	YES
09	K-40	TRG	DY2-41-31-111109	pCi/g	2.71E+01	4.74E+00	3.84E+00					11/09/11 09:15	4.88E+02	12/10/11 14:54	YES
09	PA-234M	TRG	DY2-41-31-111109	pCi/g	1.61E+02	4.82E+01	4.26E+01					11/09/11 09:15	4.88E+02	12/10/11 14:54	YES
09	PB-212	TRG	DY2-41-31-111109	pCi/g	2.48E+00	4.86E-01	7.21E-01					11/09/11 09:15	4.88E+02	12/10/11 14:54	NO
09	PB-214	TRG	DY2-41-31-111109	pCi/g	1.30E+02	8.85E+00	7.77E-01					11/09/11 09:15	4.88E+02	12/10/11 14:54	YES
09	RA-226	TRG	DY2-41-31-111109	pCi/g	1.27E+02	6.98E+00	6.99E-01					11/09/11 09:15	4.88E+02	12/10/11 14:54	YES
09	TH-234	TRG	DY2-41-31-111109	pCi/g	1.37E+02	1.67E+01	1.01E+01					11/09/11 09:15	4.88E+02	12/10/11 14:54	YES
09	TL-208	TRG	DY2-41-31-111109	pCi/g	7.02E-01	2.40E-01	1.06E+00					11/09/11 09:15	4.88E+02	12/10/11 14:54	YES
10	AC-228	TRG	DY2-44-31-111109	pCi/g	-3.09E-01	1.53E+00	2.61E+00					11/09/11 09:10	5.25E+02	12/10/11 14:54	NO
10	BI-214	TRG	DY2-44-31-111109	pCi/g	1.39E+02	8.31E+00	1.21E+00					11/09/11 09:10	5.25E+02	12/10/11 14:54	YES

Work Order: 11-11065-Gamma-1

Lab Fraction	Nuclide	Sample Desc	Client Identification	Activity Units	Results	Error Estimate	MDA	LSC Known	LCS %R	LCS Flag	RPD Flag	Sample Date	Sample Aliquot	Counting Date/Time	Identified
10	K-40	TRG	DY2-44-31-111109	pCi/g	2.72E+01	6.27E+00	6.96E+00					11/09/11 09:10	5.25E+02	12/10/11 14:54	YES
10	PA-234M	TRG	DY2-44-31-111109	pCi/g	4.62E+01	5.08E+01	7.53E+01					11/09/11 09:10	5.25E+02	12/10/11 14:54	YES
10	PB-212	TRG	DY2-44-31-111109	pCi/g	1.08E+01	1.34E+00	1.42E+00					11/09/11 09:10	5.25E+02	12/10/11 14:54	NO
10	PB-214	TRG	DY2-44-31-111109	pCi/g	1.37E+02	1.12E+01	1.40E+00					11/09/11 09:10	5.25E+02	12/10/11 14:54	YES
10	RA-226	TRG	DY2-44-31-111109	pCi/g	1.39E+02	8.31E+00	1.21E+00					11/09/11 09:10	5.25E+02	12/10/11 14:54	YES
10	TH-234	TRG	DY2-44-31-111109	pCi/g	5.64E+01	1.12E+01	1.39E+01					11/09/11 09:10	5.25E+02	12/10/11 14:54	YES
10	TL-208	TRG	DY2-44-31-111109	pCi/g	7.52E-01	3.18E-01	1.88E+00					11/09/11 09:10	5.25E+02	12/10/11 14:54	YES
11	AC-228	TRG	DY2-48-31-111109	pCi/g	1.16E+00	2.87E-01	4.12E-01					11/09/11 09:05	4.15E+02	12/10/11 15:23	YES
11	BI-214	TRG	DY2-48-31-111109	pCi/g	5.93E+00	4.86E-01	1.80E-01					11/09/11 09:05	4.15E+02	12/10/11 15:23	YES
11	K-40	TRG	DY2-48-31-111109	pCi/g	2.36E+01	2.88E+00	9.63E-01					11/09/11 09:05	4.15E+02	12/10/11 15:23	YES
11	PA-234M	TRG	DY2-48-31-111109	pCi/g	1.11E+01	7.45E+00	1.44E+01					11/09/11 09:05	4.15E+02	12/10/11 15:23	NO
11	PB-212	TRG	DY2-48-31-111109	pCi/g	1.41E+00	2.00E-01	1.75E-01					11/09/11 09:05	4.15E+02	12/10/11 15:23	YES
11	PB-214	TRG	DY2-48-31-111109	pCi/g	5.97E+00	4.73E-01	2.39E-01					11/09/11 09:05	4.15E+02	12/10/11 15:23	YES
11	RA-226	TRG	DY2-48-31-111109	pCi/g	5.93E+00	4.86E-01	1.80E-01					11/09/11 09:05	4.15E+02	12/10/11 15:23	YES
11	TH-234	TRG	DY2-48-31-111109	pCi/g	6.57E+00	2.72E+00	2.30E+00					11/09/11 09:05	4.15E+02	12/10/11 15:23	YES
11	TL-208	TRG	DY2-48-31-111109	pCi/g	1.16E+00	2.25E-01	2.82E-01					11/09/11 09:05	4.15E+02	12/10/11 15:23	YES
12	AC-228	TRG	DY2-65-31-111109	pCi/g	1.77E+00	5.26E-01	5.39E-01					11/09/11 09:31	3.36E+02	12/10/11 15:24	YES
12	BI-214	TRG	DY2-65-31-111109	pCi/g	1.02E+01	8.15E-01	2.64E-01					11/09/11 09:31	3.36E+02	12/10/11 15:24	YES
12	K-40	TRG	DY2-65-31-111109	pCi/g	2.85E+01	4.12E+00	1.45E+00					11/09/11 09:31	3.36E+02	12/10/11 15:24	YES
12	PA-234M	TRG	DY2-65-31-111109	pCi/g	2.59E+01	1.83E+01	1.70E+01					11/09/11 09:31	3.36E+02	12/10/11 15:24	YES
12	PB-212	TRG	DY2-65-31-111109	pCi/g	1.73E+00	2.70E-01	2.47E-01					11/09/11 09:31	3.36E+02	12/10/11 15:24	YES
12	PB-214	TRG	DY2-65-31-111109	pCi/g	1.06E+01	8.60E-01	3.08E-01					11/09/11 09:31	3.36E+02	12/10/11 15:24	YES
12	RA-226	TRG	DY2-65-31-111109	pCi/g	1.02E+01	8.15E-01	2.64E-01					11/09/11 09:31	3.36E+02	12/10/11 15:24	YES
12	TH-234	TRG	DY2-65-31-111109	pCi/g	6.43E+00	2.97E+00	3.36E+00					11/09/11 09:31	3.36E+02	12/10/11 15:24	YES
12	TL-208	TRG	DY2-65-31-111109	pCi/g	1.48E+00	2.81E-01	4.22E-01					11/09/11 09:31	3.36E+02	12/10/11 15:24	YES
13	AC-228	TRG	DY2-77-31-111109	pCi/g	1.22E+00	4.69E-01	5.62E-01					11/09/11 09:29	3.53E+02	12/11/11 11:13	YES
13	BI-214	TRG	DY2-77-31-111109	pCi/g	1.70E+01	1.11E+00	2.81E-01					11/09/11 09:29	3.53E+02	12/11/11 11:13	YES
13	K-40	TRG	DY2-77-31-111109	pCi/g	2.91E+01	3.79E+00	1.56E+00					11/09/11 09:29	3.53E+02	12/11/11 11:13	YES
13	PA-234M	TRG	DY2-77-31-111109	pCi/g	1.78E+01	1.49E+01	1.64E+01					11/09/11 09:29	3.53E+02	12/11/11 11:13	YES
13	PB-212	TRG	DY2-77-31-111109	pCi/g	8.00E-01	2.07E-01	3.17E-01					11/09/11 09:29	3.53E+02	12/11/11 11:13	YES
13	PB-214	TRG	DY2-77-31-111109	pCi/g	1.87E+01	1.30E+00	3.31E-01					11/09/11 09:29	3.53E+02	12/11/11 11:13	YES
13	RA-226	TRG	DY2-77-31-111109	pCi/g	1.70E+01	1.11E+00	2.81E-01					11/09/11 09:29	3.53E+02	12/11/11 11:13	YES
13	TH-234	TRG	DY2-77-31-111109	pCi/g	6.38E+00	3.20E+00	3.82E+00					11/09/11 09:29	3.53E+02	12/11/11 11:13	YES
13	TL-208	TRG	DY2-77-31-111109	pCi/g	8.04E-01	2.36E-01	4.63E-01					11/09/11 09:29	3.53E+02	12/11/11 11:13	YES
14	AC-228	TRG	DY2-BKGD-E-31-111109	pCi/g	1.03E+00	2.65E-01	3.44E-01					11/09/11 15:25	4.39E+02	12/11/11 11:14	YES
14	BI-214	TRG	DY2-BKGD-E-31-111109	pCi/g	1.98E+00	2.54E-01	1.58E-01					11/09/11 15:25	4.39E+02	12/11/11 11:14	YES
14	K-40	TRG	DY2-BKGD-E-31-111109	pCi/g	2.11E+01	2.99E+00	6.99E-01					11/09/11 15:25	4.39E+02	12/11/11 11:14	YES
14	PA-234M	TRG	DY2-BKGD-E-31-111109	pCi/g	-1.32E-01	5.70E+00	1.02E+01					11/09/11 15:25	4.39E+02	12/11/11 11:14	NO

Lab Fraction	Nuclide	Sample Desc	Client Identification	Activity Units	Results	Error Estimate	MDA	LSC Known	LCS %R	LCS Flag	RPD Flag	Sample Date	Sample Aliquot	Counting Date/Time	Identified
14	PB-212	TRG	DY2-BKGD-E-31-111109	pCi/g	1.17E+00	1.69E-01	1.33E-01					11/09/11 15:25	4.39E+02	12/11/11 11:14	YES
14	PB-214	TRG	DY2-BKGD-E-31-111109	pCi/g	1.94E+00	2.47E-01	1.68E-01					11/09/11 15:25	4.39E+02	12/11/11 11:14	YES
14	RA-226	TRG	DY2-BKGD-E-31-111109	pCi/g	1.98E+00	2.54E-01	1.58E-01					11/09/11 15:25	4.39E+02	12/11/11 11:14	YES
14	TH-234	TRG	DY2-BKGD-E-31-111109	pCi/g	2.83E-01	1.13E+00	1.96E+00					11/09/11 15:25	4.39E+02	12/11/11 11:14	NO
14	TL-208	TRG	DY2-BKGD-E-31-111109	pCi/g	8.21E-01	1.88E-01	2.61E-01					11/09/11 15:25	4.39E+02	12/11/11 11:14	YES
15	AC-228	TRG	DY2-BKGD-N-31-111109	pCi/g	1.37E+00	2.66E-01	3.26E-01					11/09/11 15:15	4.63E+02	12/11/11 11:15	YES
15	BI-214	TRG	DY2-BKGD-N-31-111109	pCi/g	3.32E+00	3.64E-01	1.79E-01					11/09/11 15:15	4.63E+02	12/11/11 11:15	YES
15	K-40	TRG	DY2-BKGD-N-31-111109	pCi/g	2.18E+01	3.01E+00	8.96E-01					11/09/11 15:15	4.63E+02	12/11/11 11:15	YES
15	PA-234M	TRG	DY2-BKGD-N-31-111109	pCi/g	-2.52E+00	6.70E+00	1.16E+01					11/09/11 15:15	4.63E+02	12/11/11 11:15	NO
15	PB-212	TRG	DY2-BKGD-N-31-111109	pCi/g	1.24E+00	1.90E-01	1.46E-01					11/09/11 15:15	4.63E+02	12/11/11 11:15	YES
15	PB-214	TRG	DY2-BKGD-N-31-111109	pCi/g	3.62E+00	3.31E-01	1.97E-01					11/09/11 15:15	4.63E+02	12/11/11 11:15	YES
15	RA-226	TRG	DY2-BKGD-N-31-111109	pCi/g	3.32E+00	3.64E-01	1.79E-01					11/09/11 15:15	4.63E+02	12/11/11 11:15	YES
15	TH-234	TRG	DY2-BKGD-N-31-111109	pCi/g	4.60E+00	2.03E+00	2.19E+00					11/09/11 15:15	4.63E+02	12/11/11 11:15	YES
15	TL-208	TRG	DY2-BKGD-N-31-111109	pCi/g	1.09E+00	2.19E-01	2.74E-01					11/09/11 15:15	4.63E+02	12/11/11 11:15	YES
16	AC-228	TRG	DY2-BKGD-S-31-111109	pCi/g	1.97E+00	3.04E-01	3.34E-01					11/09/11 15:45	3.89E+02	12/11/11 12:16	YES
16	BI-214	TRG	DY2-BKGD-S-31-111109	pCi/g	1.97E+00	2.71E-01	1.79E-01					11/09/11 15:45	3.89E+02	12/11/11 12:16	YES
16	K-40	TRG	DY2-BKGD-S-31-111109	pCi/g	2.61E+01	3.22E+00	7.55E-01					11/09/11 15:45	3.89E+02	12/11/11 12:16	YES
16	PA-234M	TRG	DY2-BKGD-S-31-111109	pCi/g	-6.44E-01	6.46E+00	1.14E+01					11/09/11 15:45	3.89E+02	12/11/11 12:16	NO
16	PB-212	TRG	DY2-BKGD-S-31-111109	pCi/g	2.07E+00	2.45E-01	1.51E-01					11/09/11 15:45	3.89E+02	12/11/11 12:16	YES
16	PB-214	TRG	DY2-BKGD-S-31-111109	pCi/g	2.40E+00	2.56E-01	1.91E-01					11/09/11 15:45	3.89E+02	12/11/11 12:16	YES
16	RA-226	TRG	DY2-BKGD-S-31-111109	pCi/g	1.97E+00	2.71E-01	1.79E-01					11/09/11 15:45	3.89E+02	12/11/11 12:16	YES
16	TH-234	TRG	DY2-BKGD-S-31-111109	pCi/g	2.32E+00	1.31E+00	2.30E+00					11/09/11 15:45	3.89E+02	12/11/11 12:16	NO
16	TL-208	TRG	DY2-BKGD-S-31-111109	pCi/g	1.85E+00	2.76E-01	2.51E-01					11/09/11 15:45	3.89E+02	12/11/11 12:16	YES
17	AC-228	TRG	DY2-BKGD-W-31-111109	pCi/g	2.40E+00	3.81E-01	4.45E-01					11/09/11 15:00	3.23E+02	12/11/11 12:18	YES
17	BI-214	TRG	DY2-BKGD-W-31-111109	pCi/g	2.37E+00	3.42E-01	2.34E-01					11/09/11 15:00	3.23E+02	12/11/11 12:18	YES
17	K-40	TRG	DY2-BKGD-W-31-111109	pCi/g	3.16E+01	4.36E+00	9.50E-01					11/09/11 15:00	3.23E+02	12/11/11 12:18	YES
17	PA-234M	TRG	DY2-BKGD-W-31-111109	pCi/g	-3.81E+00	8.23E+00	1.40E+01					11/09/11 15:00	3.23E+02	12/11/11 12:18	NO
17	PB-212	TRG	DY2-BKGD-W-31-111109	pCi/g	2.37E+00	2.99E-01	1.87E-01					11/09/11 15:00	3.23E+02	12/11/11 12:18	YES
17	PB-214	TRG	DY2-BKGD-W-31-111109	pCi/g	2.15E+00	2.97E-01	2.50E-01					11/09/11 15:00	3.23E+02	12/11/11 12:18	YES
17	RA-226	TRG	DY2-BKGD-W-31-111109	pCi/g	2.37E+00	3.42E-01	2.34E-01					11/09/11 15:00	3.23E+02	12/11/11 12:18	YES
17	TH-234	TRG	DY2-BKGD-W-31-111109	pCi/g	2.37E+00	1.58E+00	2.82E+00					11/09/11 15:00	3.23E+02	12/11/11 12:18	NO
17	TL-208	TRG	DY2-BKGD-W-31-111109	pCi/g	1.87E+00	3.22E-01	3.30E-01					11/09/11 15:00	3.23E+02	12/11/11 12:18	YES
18	AC-228	TRG	MD-01-31-111109	pCi/g	1.40E+00	9.28E-01	1.31E+00					11/09/11 15:19	4.00E+02	12/11/11 12:20	NO
18	BI-214	TRG	MD-01-31-111109	pCi/g	6.72E+01	3.94E+00	5.48E-01					11/09/11 15:19	4.00E+02	12/11/11 12:20	YES
18	K-40	TRG	MD-01-31-111109	pCi/g	2.88E+01	4.76E+00	3.07E+00					11/09/11 15:19	4.00E+02	12/11/11 12:20	YES
18	PA-234M	TRG	MD-01-31-111109	pCi/g	3.77E+01	2.73E+01	3.49E+01					11/09/11 15:19	4.00E+02	12/11/11 12:20	YES
18	PB-212	TRG	MD-01-31-111109	pCi/g	5.33E-01	3.94E-01	6.03E-01					11/09/11 15:19	4.00E+02	12/11/11 12:20	NO
18	PB-214	TRG	MD-01-31-111109	pCi/g	7.10E+01	4.91E+00	6.50E-01					11/09/11 15:19	4.00E+02	12/11/11 12:20	YES

Work Order: 11-11065-Gamma-1

Lab Fraction	Nuclide	Sample Desc	Client Identification	Activity Units	Results	Error Estimate	MDA	LSC Known	LCS %R	LCS Flag	RPD Flag	Sample Date	Sample Aliquot	Counting Date/Time	Identified
18	RA-226	TRG	MD-01-31-111109	pCi/g	6.72E+01	3.94E+00	5.48E-01					11/09/11 15:19	4.00E+02	12/11/11 12:20	YES
18	TH-234	TRG	MD-01-31-111109	pCi/g	4.38E+01	8.34E+00	7.63E+00					11/09/11 15:19	4.00E+02	12/11/11 12:20	YES
18	TL-208	TRG	MD-01-31-111109	pCi/g	1.09E+00	2.85E-01	8.27E-01					11/09/11 15:19	4.00E+02	12/11/11 12:20	YES

Count Room Report
Client: Weston Solutions, Inc.

11-11065-Gamma-1 (pCi/g) in SO
Tracer ID:

1hr soil

	Internal Fraction	Sample Desc	Client ID	Sample Date	Sample Aliquot	Tracer Aliquot (g)	Tracer ACT (dpm)	Radiometric Tracer (pCi)	Radiometric % Rec	SAF 1*	SAF 2*
	01	LCS	LCS	11/11/11 00:00	1.0000				0.00		
	02	MBL	BLANK	11/11/11 00:00	1.0000				0.00		
GE1	03	DUP	DY2-11-31-111109	11/09/11 08:35	388.3100				0.00		
GE1	04	DO	DY2-11-31-111109	11/09/11 08:35	388.3100				0.00		
	05	TRG	DY2-17-31-111109	11/09/11 08:37	335.7700				0.00		
	06	TRG	DY2-17-32-111109	11/09/11 08:37	351.6000				0.00		
	07	TRG	DY2-32-31-111109	11/09/11 08:46	421.8100				0.00		
	08	TRG	DY2-33-31-111109	11/09/11 08:51	411.9300				0.00		
	09	TRG	DY2-41-31-111109	11/09/11 09:15	488.0200				0.00		
	10	TRG	DY2-44-31-111109	11/09/11 09:10	525.0000				0.00		
	11	TRG	DY2-48-31-111109	11/09/11 09:05	415.3000				0.00		
	12	TRG	DY2-65-31-111109	11/09/11 09:31	335.8700				0.00		
	13	TRG	DY2-77-31-111109	11/09/11 09:29	353.4200				0.00		
	14	TRG	DY2-BKGD-E-31-111109	11/09/11 15:25	439.0300				0.00		
	15	TRG	DY2-BKGD-N-31-111109	11/09/11 15:15	462.7800				0.00		
	16	TRG	DY2-BKGD-S-31-111109	11/09/11 15:45	389.4100				0.00		
	17	TRG	DY2-BKGD-W-31-111109	11/09/11 15:00	323.1100				0.00		
	18	TRG	MD-01-31-111109	11/09/11 15:19	399.8900				0.00		

0023

Eberline Analytical
Oak Ridge Laboratory

Aliquot Worksheet

Work Order	Run	Analysis Code	Rpt Units	Lab Deadline	Technician
11-11065	1	Gamma	grams	12/5/2011	KSALLINGS

Lab Fraction	Weston Solutions, Inc. Client ID	Sample Type	Muffle Data Ratio Post/Pre	Dilution Data No of Dils	Dil Factor	Ratio	Aliquot Data Aliquot	Net Equiv	MS Aliquot Data Aliquot	Net Equiv	H-3 Solids Only Water Added (ml)	H3 Dist Aliq
01	LCS	LCS					1.0000E+00	1.0000E+00				
02	BLANK	MBL					1.0000E+00	1.0000E+00				
03	DY2-11-31-111109	DUP					3.8831E+02	3.8831E+02				
04	DY2-11-31-111109	DO					3.8831E+02	3.8831E+02				
05	DY2-17-31-111109	TRG					3.3577E+02	3.3577E+02				
06	DY2-17-32-111109	TRG					3.5160E+02	3.5160E+02				
07	DY2-32-31-111109	TRG					4.2181E+02	4.2181E+02				
08	DY2-33-31-111109	TRG					4.1193E+02	4.1193E+02				
09	DY2-41-31-111109	TRG					4.8802E+02	4.8802E+02				
10	DY2-44-31-111109	TRG					5.2500E+02	5.2500E+02				
11	DY2-48-31-111109	TRG					4.1530E+02	4.1530E+02				
12	DY2-65-31-111109	TRG					3.3587E+02	3.3587E+02				
13	DY2-77-31-111109	TRG					3.5342E+02	3.5342E+02				
14	DY2-BKGD-E-31-111109	TRG					4.3903E+02	4.3903E+02				
15	DY2-BKGD-N-31-111109	TRG					4.6278E+02	4.6278E+02				
16	DY2-BKGD-S-31-111109	TRG					3.8941E+02	3.8941E+02				
17	DY2-BKGD-W-31-111109	TRG					3.2311E+02	3.2311E+02				
18	MD-01-31-111109	TRG					3.9989E+02	3.9989E+02				

Comments	

Technician: Kenny Salej Date: 11/14/11

Eberline Services - Oak Ridge
Prep Logbook
Version 2.0 8/1999

Rough Sample Preparation Log Book

Work Order	Lab Deadline	Date Received in Prep	Date Sealed	Date Returned	Technician
11-11065	12/5/2011	11/13/2011	11/14/2011	11/15/2011	KSALLINGS

Eberline	Weston Solutions, Inc.	Tare (g)	Gross (g)		Net (g)		Percent		Gamma		Special
Fraction	Client ID	Pan Wt	Wet Wt.	Dry Wt.	Wet Wt.	Dry Wt.	Liquid	Solid	Dry Wt.	LEPS Wt.	Info
04	DY2-11-31-111109	13.6400	445.3400	410.7200	431.7000	397.0800	8.02%	91.98%			
05	DY2-17-31-111109	13.7000	390.4400	357.6300	376.7400	343.9300	8.71%	91.29%			
06	DY2-17-32-111109	13.8200	410.1500	376.2600	396.3300	362.4400	8.55%	91.45%			
07	DY2-32-31-111109	13.7900	467.1600	440.4000	453.3700	426.6100	5.90%	94.10%			
08	DY2-33-31-111109	13.6900	449.4800	431.4700	435.7900	417.7800	4.13%	95.87%			
09	DY2-41-31-111109	13.7200	524.5200	504.3300	510.8000	490.6100	3.95%	96.05%			
10	DY2-44-31-111109	13.6500	562.0300	544.1700	548.3800	530.5200	3.26%	96.74%			
11	DY2-48-31-111109	13.6600	460.9500	439.2100	447.2900	425.5500	4.86%	95.14%			
12	DY2-65-31-111109	13.6400	385.5300	352.4500	371.8900	338.8100	8.90%	91.10%			
13	DY2-77-31-111109	13.6600	416.2900	374.9300	402.6300	361.2700	10.27%	89.73%			
14	DY2-BKGD-E-31-111109	13.6600	487.6500	461.9200	473.9900	448.2600	5.43%	94.57%			
15	DY2-BKGD-N-31-111109	13.5900	515.6500	484.9400	502.0600	471.3500	6.12%	93.88%			
16	DY2-BKGD-S-31-111109	13.5200	449.6800	410.1700	436.1600	396.6500	9.06%	90.94%			
17	DY2-BKGD-W-31-111109	13.7100	376.0200	344.6400	362.3100	330.9300	8.66%	91.34%			
18	MD-01-31-111109	13.7000	446.5700	419.7300	432.8700	406.0300	6.20%	93.80%			

Comments	
Special Codes	H: Hot, O: Organic Hazard, P: PCB Hazard, R: Rush, T: Other (see comments)

Technician: Kenny Sally

Date: Analysis: Rough Prep Logbook

Analysis: Gamma Page No. 7816

Sample ID : 1111065-01 Acquisition date : 11-DEC-2011 11:31:50

AG 12/11/11

VAX/VMS Peak Search Report Generated 11-DEC-2011 12:02:30.22

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106501_GE4_GAS1102_172269.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : GAS-1002
Deposition Date :
Sample Date : 1-JAN-2010 00:00:00. Acquisition date : 11-DEC-2011 11:31:50
Sample ID : 1111065-01 Sample Quantity : 7.36000E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE4 Detector Geometry: GAS-1102
Elapsed live time: 0 00:30:00.00 Elapsed real time: 0 00:30:23.21 1.3%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	22.43	92410	35106	2.10	21.75	19	7	0.9		
0	32.36	1397	4068	2.33	31.69	30	5	14.7		
1	49.85	4781	10838	2.18	49.20	44	19	8.2	6.63E+02	TH-230
1	59.55	59409	8004	2.11	58.90	44	19	1.0		AM-241
0	67.96	1143	15286	4.97	67.32	64	10	40.8		TH-230
0	87.98	31379	14792	2.12	87.36	81	12	1.9		NP-237
										SN-126
										CD-109
0	122.18	7078	7238	2.09	121.57	117	10	5.1		CO-57
0	136.49	898	5070	2.03	135.90	132	8	28.3		CO-57
0	165.77	1323	4530	1.92	165.20	162	8	18.5		CE-139
0	391.85	511	2427	1.91	391.44	388	8	34.5		SN-113
0	501.73	193	1689	4.26	501.40	498	8	75.3		
0	510.74*	163	1727	3.69	510.41	506	8	89.6		
0	661.85	12749	1347	2.25	661.63	657	9	2.1		CS-137
0	898.26	382	1638	2.70	898.22	894	9	39.5		Y-88
0	905.39	81	901	3.20	905.35	904	5	114.1		
0	958.98	192	1743	4.11	958.98	955	9	80.1		
0	1173.47	10952	836	2.43	1173.62	1167	14	2.2		CO-60
0	1189.31	50	268	1.37	1189.48	1187	6	108.6		
0	1332.76	10178	203	2.54	1333.03	1326	14	2.1		CO-60
0	1503.02	67	73	12.37	1503.41	1494	22	69.0		
0	1696.06	22	22	3.97	1696.59	1691	11	92.9		
0	1780.11	17	11	3.66	1780.71	1776	9	88.2		
0	1836.43	229	31	2.41	1837.07	1830	14	16.8		Y-88
0	1993.41	32	30	20.86	1994.16	1977	30	105.9		
0	2140.16	17	12	3.02	2141.01	2134	15	96.8		
0	2206.05	22	6	7.30	2206.95	2202	11	60.4		
0	2506.41	41	4	2.14	2507.52	2503	8	35.5		
0	2616.04*	13	4	2.52	2617.24	2613	8	79.9		

AG 12/12/11

Sample ID : 1111065-01 Acquisition date : 11-DEC-2011 11:31:50

Total number of lines in spectrum	28	
Number of unidentified lines	12	
Number of lines tentatively identified by NID	16	57.14%

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CO-57	270.90D	6.14	1.091E+01	6.703E+01	0.709E+01	10.58	
Y-88	106.60D	101.	3.041E+00	3.066E+02	0.536E+02	17.50	
CD-109	464.00D	2.89	1.017E+03	2.934E+03	0.368E+03	12.56	
SN-113	115.10D	71.7	2.529E+00	1.814E+02	0.675E+02	37.21	
SN-126	1.00E+05Y	1.00	1.022E+02	1.022E+02	0.113E+02	11.02	
CS-137	30.17Y	1.05	8.254E+01	8.630E+01	0.889E+01	10.30	
CE-139	137.66D	35.6	2.528E+00	9.001E+01	1.870E+01	20.78	
NP-237	2.14E+06Y	1.00	2.998E+02	2.998E+02	0.327E+02	10.90	
			---	---			
	Total Activity :		1.520E+03	4.067E+03			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CO-60	5.27Y	1.29	1.061E+02	1.369E+02	0.104E+02	7.57	
TH-230	7.70E+04Y	1.00	3.989E+01	3.989E+01	0.494E+01	12.38	
			---	---			
	Total Activity :		1.460E+02	1.768E+02			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AM-241	432.20Y	1.00	2.102E+02	2.109E+02	0.177E+02	8.37	
			---	---			
	Total Activity :		2.102E+02	2.109E+02			

Grand Total Activity : 1.876E+03 4.455E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-01 Acquisition date : 11-DEC-2011 11:31:50

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CO-57	122.06	85.51*	1.560E+00	1.082E+01	6.648E+01	11.30	OK
	136.48	10.60	1.484E+00	1.164E+01	7.151E+01	30.17	OK
	Final Mean for 2 Valid Peaks = 6.703E+01+/- 7.093E+00 (10.58%)						
Y-88	898.02	93.40	2.732E-01	3.053E+00	3.078E+02	41.91	OK
	1836.01	99.38*	1.544E-01	3.038E+00	3.063E+02	19.26	OK
	Final Mean for 2 Valid Peaks = 3.066E+02+/- 5.365E+01 (17.50%)						
CD-109	88.03	3.72*	1.693E+00	1.017E+03	2.934E+03	12.56	OK
	Final Mean for 1 Valid Peaks = 2.934E+03+/- 3.684E+02 (12.56%)						
SN-113	255.12	1.93	9.553E-01	----- Line Not Found		-----	Absent
	391.69	64.90*	6.351E-01	2.529E+00	1.814E+02	37.21	OK
	Final Mean for 1 Valid Peaks = 1.814E+02+/- 6.750E+01 (37.21%)						
SN-126	87.57	37.00*	1.693E+00	1.022E+02	1.022E+02	11.02	OK
	Final Mean for 1 Valid Peaks = 1.022E+02+/- 1.125E+01 (11.02%)						
CS-137	661.65	85.12*	3.702E-01	8.254E+01	8.630E+01	10.30	OK
	Final Mean for 1 Valid Peaks = 8.630E+01+/- 8.885E+00 (10.30%)						
CE-139	165.85	80.35*	1.329E+00	2.528E+00	9.001E+01	20.78	OK
	Final Mean for 1 Valid Peaks = 9.001E+01+/- 1.870E+01 (20.78%)						
NP-237	86.50	12.60*	1.695E+00	2.998E+02	2.998E+02	10.90	OK
	Final Mean for 1 Valid Peaks = 2.998E+02+/- 3.266E+01 (10.90%)						

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CO-60	1173.22	100.00*	2.143E-01	1.043E+02	1.346E+02	11.27	OK
	1332.49	100.00	1.929E-01	1.076E+02	1.389E+02	10.21	OK
	Final Mean for 2 Valid Peaks = 1.369E+02+/- 1.036E+01 (7.57%)						
TH-230	48.44	16.90	1.447E+00	3.989E+01	3.989E+01	12.38	OK
	62.85	4.60	1.636E+00	----- Line Not Found		-----	Absent
	67.67	0.37*	1.667E+00	3.781E+02	3.781E+02	41.73	<<WM N-Sigma
	Final Mean for 1 Valid Peaks = 3.989E+01+/- 4.938E+00 (12.38%)						

Sample ID : 1111065-01 Acquisition date : 11-DEC-2011 11:31:50

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
AM-241	59.54	35.90*	1.606E+00	2.102E+02	2.109E+02	8.37	OK

Final Mean for 1 Valid Peaks = 2.109E+02+/- 1.766E+01 (8.37%)

Flag: "*" = Keyline

Sample ID : 1111065-01 Acquisition date : 11-DEC-2011 11:31:50

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
CO-57	6.703E+01	7.093E+00	2.952E+00	2.731E-01	22.708
CO-60	1.369E+02	1.036E+01	1.275E+00	1.313E-01	107.407
Y-88	3.066E+02	5.365E+01	3.086E+01	2.606E+00	9.936
CD-109	2.934E+03	3.684E+02	3.785E+01	4.446E+00	77.517
SN-113	1.814E+02	6.750E+01	7.555E+01	1.011E+01	2.401
SN-126	1.022E+02	1.125E+01	1.318E+00	1.329E-01	77.526
CS-137	8.630E+01	8.885E+00	1.071E+00	9.916E-02	80.612
CE-139	9.001E+01	1.870E+01	1.930E+01	1.655E+00	4.664
TH-230	3.989E+01	4.938E+00	1.506E+02	1.199E+01	0.265
NP-237	2.998E+02	3.266E+01	3.865E+00	3.847E-01	77.547
AM-241	2.109E+02	1.766E+01	1.483E+00	1.082E-01	142.194

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
NA-22	5.652E-01		6.132E-01	1.111E+00	1.071E-01	0.509
AL-26	-7.262E-02		1.832E-01	3.187E-01	2.717E-02	-0.228
K-40	1.005E+00		2.221E+00	4.115E+00	3.869E-01	0.244
TI-44	1.513E+00	+	6.315E-01	6.193E-01	4.942E-02	2.443
MN-54	-1.905E+00		3.258E+00	5.506E+00	6.725E-01	-0.346
ZN-65	4.002E+00		1.157E+01	1.983E+01	2.223E+00	0.202
SE-75	-1.775E+01		3.414E+01	5.513E+01	5.175E+00	-0.322
KR-85	6.822E+01		1.430E+02	2.069E+02	2.615E+01	0.330
NB-93M	3.581E+02		1.487E+02	3.210E+01	1.318E+01	11.155
NB-94	5.739E-01		7.234E-01	1.248E+00	1.603E-01	0.460
RU-106	2.459E+01		2.122E+01	3.440E+01	5.042E+00	0.715
AG-108M	1.246E-01		6.075E-01	1.050E+00	1.079E-01	0.119
AG-110M	1.466E+02		1.642E+01	1.358E+01	1.273E+00	10.802
TE123M	1.686E+00		2.099E+01	3.078E+01	2.677E+00	0.055
SB-125	-1.111E+00		2.589E+00	4.146E+00	5.517E-01	-0.268
I-129	-1.185E+02		1.662E+01	1.501E+00	1.989E-01	-78.960
BA-133	1.199E-01		7.524E-01	1.223E+00	1.893E-01	0.098
CS-134	-9.285E-01		1.040E+00	1.630E+00	1.787E-01	-0.570
CS-135	2.944E-01		2.116E+00	3.453E+00	3.220E-01	0.085
LA-138	-1.042E-02		3.302E-01	5.915E-01	5.430E-02	-0.018
CE-144	2.924E+01		1.514E+01	2.243E+01	2.030E+00	1.304
PM-144	-8.312E-01		2.014E+00	3.437E+00	4.932E-01	-0.242
PM-145	-9.158E+00		6.387E+00	3.090E+00	2.021E+00	-2.963
PM-146	1.264E+00		1.617E+00	2.627E+00	3.440E-01	0.481
EU-152	-3.106E-01		1.508E+00	2.666E+00	3.031E-01	-0.117
GD-153	6.029E+00		8.398E+00	1.391E+01	1.343E+00	0.433
EU-154	1.191E+00		1.198E+00	2.176E+00	2.098E-01	0.547
EU-155	1.604E+02	+	1.747E+01	4.628E+00	4.606E-01	34.646
HO-166M	-2.181E-01		9.656E-01	1.656E+00	1.671E-01	-0.132
HF-172	4.721E+01		7.157E+00	8.805E+00	8.061E-01	5.362
LU-173	3.179E-01		4.293E+00	6.998E+00	6.527E-01	0.045
LU-176	-1.308E-01		3.792E-01	6.129E-01	6.249E-02	-0.213

Sample ID : 1111065-01 Acquisition date : 11-DEC-2011 11:31:50

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
TA-182	7.460E+01		1.557E+02	2.678E+02	2.977E+01	0.279
BI-207	-7.203E-02		5.237E-01	8.404E-01	9.873E-02	-0.086
TL-208	1.668E+00		1.704E+00	2.778E+00	3.184E-01	0.600
BI-210M	-4.770E-01		7.469E-01	1.204E+00	1.121E-01	-0.396
PB-210	1.916E+02		2.127E+01	2.002E+01	1.667E+00	9.569
PB-211	9.000E+00		1.527E+01	2.486E+01	3.251E+00	0.362
BI-212	-3.503E-01		4.615E+00	7.934E+00	8.215E-01	-0.044
PB-212	6.421E-01		7.531E-01	1.237E+00	1.142E-01	0.519
BI-214	-9.520E-01		1.141E+00	1.792E+00	1.940E-01	-0.531
PB-214	5.235E-02		1.056E+00	1.714E+00	2.001E-01	0.031
RN-219	-5.950E-01		7.124E+00	1.094E+01	1.430E+00	-0.054
RA-223	8.585E+00		9.458E+00	1.550E+01	1.666E+00	0.554
RA-224	7.857E+00		8.550E+00	1.404E+01	1.298E+00	0.559
RA-226	6.541E+00		1.486E+01	1.452E+01	2.659E+01	0.451
TH-227	-1.422E+00		2.920E+00	4.728E+00	4.357E-01	-0.301
AC-228	-1.572E+00		3.228E+00	4.790E+00	6.345E-01	-0.328
PA-231	2.902E+00		1.540E+01	2.510E+01	2.526E+00	0.116
TH-231	9.117E+02		1.566E+02	2.196E+01	3.658E+00	41.517
PA-234	8.549E-02		1.714E+00	1.987E+00	1.804E-01	0.043
PA-234M	1.956E+01		8.487E+01	1.453E+02	1.827E+01	0.135
TH-234	3.854E+02		3.567E+01	2.125E+01	1.612E+00	18.134
U-235	1.955E-01		2.681E+00	3.936E+00	6.947E-01	0.050
AM-243	-2.200E-01		5.845E-01	8.588E-01	7.414E-02	-0.256
CM-243	-9.947E-02		2.574E+00	4.189E+00	3.906E-01	-0.024

Sample ID : 1111065-01 Acquisition date : 11-DEC-2011 11:31:50

Total number of lines in spectrum	28	
Number of unidentified lines	12	
Number of lines tentatively identified by NID	16	57.14%

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CO-57	270.90D	6.14	1.091E+01	6.703E+01	0.709E+01	10.58	
Y-88	106.60D	101.	3.041E+00	3.066E+02	0.536E+02	17.50	
CD-109	464.00D	2.89	1.017E+03	2.934E+03	0.368E+03	12.56	
SN-113	115.10D	71.7	2.529E+00	1.814E+02	0.675E+02	37.21	
SN-126	1.00E+05Y	1.00	1.022E+02	1.022E+02	0.113E+02	11.02	
CS-137	30.17Y	1.05	8.254E+01	8.630E+01	0.889E+01	10.30	
CE-139	137.66D	35.6	2.528E+00	9.001E+01	1.870E+01	20.78	
NP-237	2.14E+06Y	1.00	2.998E+02	2.998E+02	0.327E+02	10.90	
			---	---			
	Total Activity :		1.520E+03	4.067E+03			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CO-60	5.27Y	1.29	1.061E+02	1.369E+02	0.104E+02	7.57	
TH-230	7.70E+04Y	1.00	3.989E+01	3.989E+01	0.494E+01	12.38	
			---	---			
	Total Activity :		1.460E+02	1.768E+02			

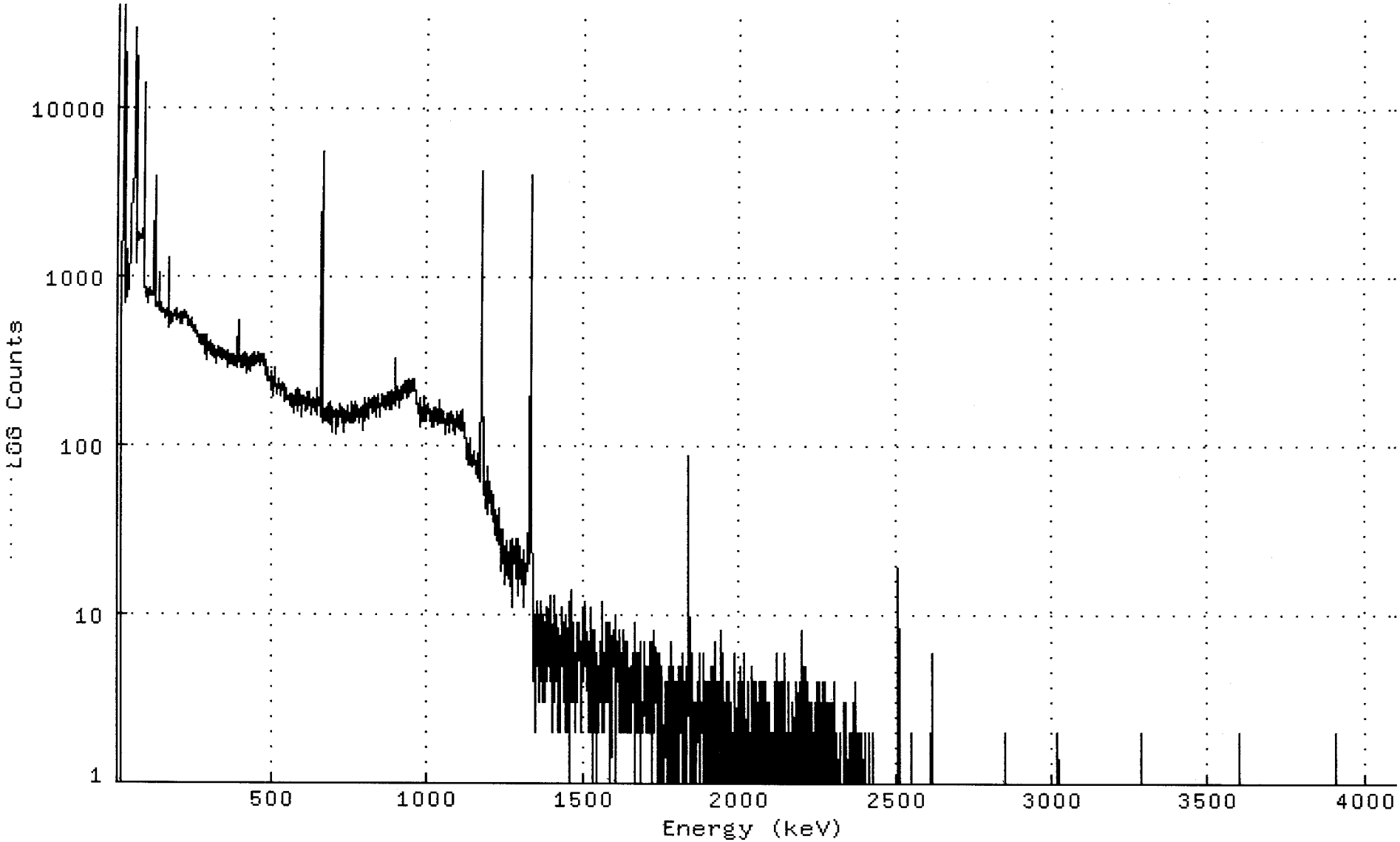
Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AM-241	432.20Y	1.00	2.102E+02	2.109E+02	0.177E+02	8.37	
			---	---			
	Total Activity :		2.102E+02	2.109E+02			

Grand Total Activity : 1.876E+03 4.455E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106501_GE4_GAS1102_172269.CNF;1
Title :
Sample Title: GAS-1002
Start Time: 11-DEC-2011 11:31 Sample Time: 1-JAN-2010 00:00: Energy Offset: 6.91748E-01
Real Time : 0 00:30:23.21 Sample ID : 1111065-01 Energy Slope : 9.99279E-01
Live Time : 0 00:30:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106501_GE4_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	19	1091	1459
17:	1746	1723	2702	11676	40138	36795	11223	13644
25:	11338	2914	889	686	780	846	1354	1416
33:	1087	762	866	997	1031	979	1010	1074
41:	1192	1343	1529	1672	1695	1969	2289	3015
49:	3474	3461	3415	3433	3586	3749	3777	4060
57:	5076	15453	28982	13636	1945	1180	1253	1425
65:	1527	1621	1668	1780	1713	1740	1637	1672
73:	1646	1734	1679	1625	1684	1653	1681	1690
81:	1734	1743	1883	1917	1997	3946	13566	13631
89:	3353	882	780	739	838	750	753	815
97:	674	755	799	774	742	806	840	762
105:	790	825	768	810	759	786	792	792
113:	787	783	761	817	779	788	751	1256
121:	3506	3854	1392	691	645	654	675	663
129:	653	679	662	643	649	715	848	1026
137:	810	655	622	616	686	626	608	610
145:	604	605	599	633	627	593	621	561
153:	597	599	603	555	621	583	582	589
161:	572	624	566	684	1251	1082	612	547
169:	487	599	556	583	542	518	548	545
177:	542	584	583	554	527	541	563	569
185:	597	619	593	594	569	625	544	561
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2073:	4	3	3	2	4	0	1	3
2081:	3	0	1	3	4	1	0	2
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3305:	0	0	0	0	0	0	0	0

3313:	0	0	0	1	0	0	0	0
3321:	1	0	0	0	0	0	0	0
3329:	0	0	0	0	0	0	0	0
3337:	0	0	0	0	0	0	0	0
3345:	0	0	0	0	1	0	0	0
3353:	0	0	0	0	0	0	0	0
3361:	0	0	0	1	0	0	0	0
3369:	0	0	0	1	0	0	0	0
3377:	1	0	0	0	0	0	0	0
3385:	0	0	0	0	0	0	0	0
3393:	0	0	0	0	0	0	0	0
3401:	0	0	0	0	0	0	0	0
3409:	1	0	0	0	0	0	1	0
3417:	0	0	0	0	0	0	0	0
3425:	0	0	0	0	0	0	0	0
3433:	0	0	0	0	0	0	0	0
3441:	0	0	0	0	0	0	0	0
3449:	0	0	0	0	0	0	0	0
3457:	1	0	0	0	1	0	0	0
3465:	0	0	0	0	0	0	0	0
3473:	0	0	0	0	0	0	0	0
3481:	0	0	0	0	0	0	0	0
3489:	0	0	0	0	0	0	0	1
3497:	0	0	0	0	0	0	0	0
3505:	1	0	0	0	0	0	0	0
3513:	0	0	0	0	0	0	0	0
3521:	1	1	0	1	0	0	0	0
3529:	0	0	0	0	0	0	0	0
3537:	1	0	0	0	0	0	0	0
3545:	0	0	1	0	0	0	0	0
3553:	0	1	0	0	0	0	0	0
3561:	0	0	0	0	0	0	0	0
3569:	0	0	0	0	0	0	0	0
3577:	0	0	0	0	0	0	1	0
3585:	0	0	0	0	0	0	0	0
3593:	0	0	0	0	0	0	2	0
3601:	0	0	0	0	0	0	0	0
3609:	0	0	1	1	0	0	0	0
3617:	0	0	0	0	0	0	0	0
3625:	0	0	0	0	0	0	0	0
3633:	1	0	0	0	0	0	0	0
3641:	0	0	0	0	0	0	0	0
3649:	0	0	0	1	0	0	0	0
3657:	0	0	0	0	0	0	0	0
3665:	0	0	0	0	0	0	0	0
3673:	0	0	0	0	0	0	0	0
3681:	0	0	0	1	0	0	0	0
3689:	0	0	0	0	0	0	0	0
3697:	0	0	0	0	0	0	0	0
3705:	0	0	0	0	0	0	0	0
3713:	0	0	0	0	0	0	0	0
3721:	0	0	0	0	0	0	0	0
3729:	0	0	0	0	0	0	0	0
3737:	0	0	0	0	0	0	0	0
3745:	0	0	0	0	0	0	0	0
3753:	0	0	0	0	0	0	0	0
3761:	0	0	0	1	0	0	0	0
3769:	0	0	0	0	0	1	0	0
3777:	0	0	0	0	0	1	0	0
3785:	0	0	0	0	0	0	0	0

3793:	0	0	0	0	0	0	0	0
3801:	0	0	0	0	1	0	0	0
3809:	0	0	0	0	0	0	0	0
3817:	1	0	0	0	0	0	0	0
3825:	0	0	0	0	0	1	0	0
3833:	0	0	0	0	0	0	0	0
3841:	0	0	0	0	0	0	0	0
3849:	0	1	0	0	0	0	0	0
3857:	0	0	0	0	0	0	0	0
3865:	0	0	0	0	0	0	0	0
3873:	0	0	0	0	0	0	0	0
3881:	0	0	0	0	0	0	0	0
3889:	0	0	0	0	0	1	1	0
3897:	0	0	0	0	0	0	0	0
3905:	2	0	0	0	0	0	0	0
3913:	0	0	0	0	0	0	0	0
3921:	0	0	0	0	0	0	0	0
3929:	0	0	0	0	0	0	0	0
3937:	0	0	0	0	0	0	0	0
3945:	0	1	0	0	0	0	0	0
3953:	0	0	0	0	0	0	0	0
3961:	0	0	0	0	0	0	0	0
3969:	0	0	0	0	0	0	0	1
3977:	1	0	0	0	0	0	0	0
3985:	0	0	0	0	0	0	0	0
3993:	0	0	0	0	0	0	0	0
4001:	0	0	0	0	0	0	0	0
4009:	0	1	0	0	0	0	0	0
4017:	0	0	0	0	0	0	1	1
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	0	0	0	0	0
4041:	0	0	0	0	0	0	0	0
4049:	0	0	0	0	0	0	0	0
4057:	0	0	0	0	0	0	0	0
4065:	0	0	1	0	0	0	0	0
4073:	0	0	0	0	0	0	0	0
4081:	0	0	0	0	0	0	0	0
4089:	0	0	0	0	0	0	1	0

Sample ID : 1111065-02 Acquisition date : 11-DEC-2011 12:04:24

AG
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VAX/VMS Peak Search Report Generated 11-DEC-2011 13:05:16.18

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106502_GE4_GAS1102_172272.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : BLANK
Deposition Date :
Sample Date : 11-DEC-2011 00:00:00 Acquisition date : 11-DEC-2011 12:04:24
Sample ID : 1111065-02 Sample Quantity : 7.83400E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE4 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:00.70 0.0%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.83*	38	70	1.70	46.17	42	9	95.0		PB-210
0	440.00	12	15	1.25	439.62	436	7	127.0		
0	555.83	42	10	8.89	555.54	548	15	46.5		
0	568.62	20	6	7.30	568.34	563	11	63.0		
0	576.46	11	5	1.24	576.18	574	5	85.8		
0	713.22	15	9	3.34	713.04	708	10	94.6		
0	730.49	8	8	2.61	730.33	725	8	137.1		
0	746.39	8	7	3.36	746.24	742	7	124.8		
0	784.41	20	7	7.59	784.28	778	13	70.4		
0	945.51	10	0	3.96	945.50	943	6	63.2		
0	976.61	6	1	1.89	976.62	974	6	103.9		
0	1123.17	7	0	1.92	1123.29	1120	7	75.6		
0	1270.33	9	0	2.91	1270.56	1267	7	66.7		

AG
12/12/11

Summary of Nuclide Activity
Sample ID : 1111065-02 Acquisition date : 11-DEC-2011 12:04:24

Total number of lines in spectrum	13	
Number of unidentified lines	8	
Number of lines tentatively identified by NID	5	38.46%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
PB-210	22.26Y	1.00	6.427E-01	6.427E-01	6.135E-01	95.45	
		Total Activity :	6.427E-01	6.427E-01			
		Grand Total Activity :	6.427E-01	6.427E-01			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-02
Acquisition date : 11-DEC-2011 12:04:24

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
PB-210	46.50	4.05*	1.407E+00	6.427E-01	6.427E-01	95.45	OK

Final Mean for 1 Valid Peaks = 6.427E-01+/- 6.135E-01 (95.45%)

Flag: "*" = Keyline

Sample ID : 1111065-02 Acquisition date : 11-DEC-2011 12:04:24

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PB-210	6.427E-01	6.135E-01	6.873E-01	5.722E-02	0.935

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	1.100E-01		2.198E-01	4.283E-01	5.556E-02	0.257
NA-22	9.537E-03		4.000E-02	7.642E-02	7.367E-03	0.125
NA-24	5.739E-02		6.306E-02	1.526E-01	1.400E-02	0.376
AL-26	-1.085E-02		1.853E-02	3.086E-02	2.631E-03	-0.352
K-40	-2.916E-02		3.574E-01	7.141E-01	6.713E-02	-0.041
AR-41	7.662E-01		3.021E+00	7.019E+00	6.661E-01	0.109
TI-44	-2.943E-02		1.772E-02	2.683E-02	2.141E-03	-1.097
SC-46	1.882E-02		2.632E-02	6.063E-02	7.978E-03	0.310
V-48	1.388E-02		3.334E-02	6.647E-02	8.463E-03	0.209
CR-51	7.112E-03		2.263E-01	3.992E-01	4.391E-02	0.018
MN-54	1.355E-02		3.147E-02	6.596E-02	8.054E-03	0.205
CO-56	2.236E-02		2.624E-02	6.094E-02	7.567E-03	0.367
CO-57	1.036E-02		1.706E-02	3.116E-02	2.872E-03	0.333
CO-58	-1.622E-02		3.154E-02	5.651E-02	6.672E-03	-0.287
FE-59	2.813E-02		6.440E-02	1.378E-01	1.649E-02	0.204
CO-60	4.271E-03		3.734E-02	7.600E-02	7.828E-03	0.056
ZN-65	-4.145E-03		5.533E-02	1.015E-01	1.137E-02	-0.041
GA-67	1.649E-02		5.542E-02	9.690E-02	1.092E-01	0.170
SE-75	4.605E-03		3.181E-02	5.684E-02	5.328E-03	0.081
RB-82	-1.065E-01		2.465E-01	3.845E-01	4.307E-02	-0.277
RB-83	-3.305E-02		6.205E-02	1.010E-01	1.828E-02	-0.327
KR-85	1.270E+01		8.470E+00	1.677E+01	2.120E+00	0.757
SR-85	5.583E-02		3.724E-02	7.374E-02	9.319E-03	0.757
Y-88	-3.680E-02		4.022E-02	5.980E-02	5.047E-03	-0.615
NB-93M	3.275E+00		1.710E+00	2.162E+00	8.877E-01	1.515
NB-94	2.171E-02		3.205E-02	6.963E-02	8.943E-03	0.312
NB-95	-8.798E-03		2.659E-02	4.997E-02	5.504E-03	-0.176
NB-95M	2.466E-03		8.939E-02	1.560E-01	1.437E-02	0.016
ZR-95	1.312E-02		5.143E-02	1.056E-01	1.221E-02	0.124
MO-99	1.457E-01		2.612E-01	4.993E-01	5.275E-02	0.292
RU-103	7.821E-03		2.773E-02	5.212E-02	8.883E-03	0.150
RU-106	-2.299E-01		3.393E-01	5.340E-01	7.814E-02	-0.431
AG-108M	2.102E-02		3.920E-02	6.259E-02	6.436E-03	0.336
CD-109	-4.978E-01		4.529E-01	7.176E-01	8.422E-02	-0.694
AG-110M	4.135E-03		2.837E-02	5.679E-02	5.326E-03	0.073
SN-113	6.258E-03		3.595E-02	6.519E-02	8.603E-03	0.096
TE123M	-1.253E-02		1.965E-02	3.228E-02	2.799E-03	-0.388
SB-124	-1.685E-02		3.536E-02	5.796E-02	6.374E-03	-0.291
I-125	9.338E-03		3.288E-01	5.807E-01	6.174E-02	0.016
SB-125	-3.117E-02		8.481E-02	1.427E-01	1.889E-02	-0.218
SB-126	2.203E-04		8.087E-02	1.099E-01	1.126E-02	0.002
SN-126	-5.633E-02		4.503E-02	7.049E-02	7.106E-03	-0.799

Sample ID : 1111065-02 Acquisition date : 11-DEC-2011 12:04:24

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
SB-127	-3.550E-02		9.392E-02	1.717E-01	1.656E-02	-0.207
I-129	-2.307E-02		5.183E-02	8.790E-02	1.165E-02	-0.262
I-131	6.203E-03		2.953E-02	5.350E-02	6.470E-03	0.116
TE-132	-2.828E-03		2.312E-02	4.000E-02	3.667E-03	-0.071
BA-133	3.190E-03		3.533E-02	6.351E-02	9.828E-03	0.050
I-133	2.749E-02		4.717E-02	9.181E-02	1.141E-02	0.299
CS-134	-1.500E-02		3.563E-02	5.895E-02	6.462E-03	-0.254
CS-135	1.123E-02		1.144E-01	2.043E-01	1.905E-02	0.055
I-135	-1.328E-01		3.799E-01	6.620E-01	6.451E-02	-0.201
CS-136	-2.096E-02		3.649E-02	6.489E-02	7.944E-03	-0.323
CS-137	2.321E-02		3.383E-02	7.141E-02	6.613E-03	0.325
LA-138	-3.024E-03		5.300E-02	1.080E-01	9.913E-03	-0.028
CE-139	1.382E-02		2.182E-02	3.971E-02	3.396E-03	0.348
BA-140	2.096E-02		1.082E-01	2.005E-01	6.875E-02	0.105
LA-140	-3.364E-02		3.508E-02	5.002E-02	4.516E-03	-0.672
CE-141	-5.030E-03		3.487E-02	5.857E-02	1.099E-02	-0.086
CE-143	-3.074E-02		6.327E-02	1.050E-01	1.025E-02	-0.293
CE-144	4.046E-02		1.347E-01	2.414E-01	2.185E-02	0.168
PM-144	6.015E-03		3.468E-02	6.540E-02	6.431E-03	0.092
PM-145	9.441E-03		9.579E-02	1.624E-01	1.061E-01	0.058
PM-146	-1.491E-02		6.037E-02	1.040E-01	1.361E-02	-0.143
ND-147	1.575E-02		2.131E-01	3.866E-01	4.799E-02	0.041
PM-149	6.412E-01		7.312E-01	1.410E+00	1.344E-01	0.455
EU-152	8.900E-03		2.166E-01	4.579E-01	5.204E-02	0.019
GD-153	3.959E-02		5.727E-02	1.064E-01	1.027E-02	0.372
EU-154	2.909E-02		1.131E-01	2.169E-01	2.091E-02	0.134
EU-155	-6.288E-02		5.149E-02	8.073E-02	8.033E-03	-0.779
EU-156	-3.069E-01		3.184E-01	5.018E-01	1.216E-01	-0.612
HO-166M	3.331E-02		5.953E-02	1.229E-01	1.240E-02	0.271
HF-172	5.126E-02		1.282E-01	2.311E-01	2.116E-02	0.222
LU-172	1.421E-02		5.764E-02	1.209E-01	1.391E-02	0.118
LU-173	-4.450E-02		9.191E-02	1.527E-01	1.424E-02	-0.291
HF-175	1.684E-02		2.497E-02	4.782E-02	5.446E-03	0.352
LU-176	-3.848E-03		2.347E-02	4.039E-02	4.118E-03	-0.095
TA-182	3.704E-02		9.335E-02	1.908E-01	2.121E-02	0.194
IR-192	1.803E-02		5.884E-02	1.079E-01	1.406E-02	0.167
HG-203	1.014E-02		2.497E-02	4.597E-02	4.391E-03	0.221
BI-207	4.620E-02	+	2.968E-02	5.471E-02	6.427E-03	0.844
TL-208	9.144E-02		7.089E-02	1.587E-01	1.818E-02	0.576
BI-210M	1.407E-02		4.318E-02	7.829E-02	7.294E-03	0.180
PB-211	1.166E-01		7.396E-01	1.357E+00	1.774E-01	0.086
BI-212	-6.728E-02		3.000E-01	4.898E-01	5.071E-02	-0.137
PB-212	9.079E-03		4.841E-02	8.345E-02	7.703E-03	0.109
BI-214	-6.446E-02		8.810E-02	1.355E-01	1.467E-02	-0.476
PB-214	-7.730E-02		6.679E-02	9.612E-02	1.122E-02	-0.804
RN-219	-1.342E-01		3.170E-01	5.326E-01	6.958E-02	-0.252
RA-223	-2.060E-01		5.561E-01	9.359E-01	1.006E-01	-0.220
RA-224	-1.245E-02		5.194E-01	9.020E-01	8.337E-02	-0.014

Sample ID : 1111065-02 Acquisition date : 11-DEC-2011 12:04:24

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
RA-225	7.884E-03		6.453E-02	1.035E-01	9.747E-03	0.076
RA-226	-3.016E-01		8.253E-01	1.027E+00	1.881E+00	-0.294
TH-227	5.774E-03		1.760E-01	3.073E-01	2.832E-02	0.019
AC-228	5.689E-02		1.204E-01	2.546E-01	3.372E-02	0.223
TH-230	-7.415E+00		4.529E+00	6.876E+00	5.474E-01	-1.078
PA-231	-4.195E-01		9.687E-01	1.614E+00	1.624E-01	-0.260
TH-231	-1.397E-01		2.804E-01	4.722E-01	7.867E-02	-0.296
PA-233	1.322E-02		5.590E-02	1.008E-01	2.337E-02	0.131
PA-234	-2.137E-02		6.972E-02	1.187E-01	1.078E-02	-0.180
PA-234M	-1.267E+00		2.830E+00	5.254E+00	6.606E-01	-0.241
TH-234	1.657E-01		4.737E-01	8.245E-01	6.254E-02	0.201
U-235	4.378E-03		1.557E-01	2.655E-01	4.686E-02	0.016
NP-237	-1.541E-01		1.263E-01	1.980E-01	1.970E-02	-0.778
NP-239	-6.149E-03		6.772E-02	1.179E-01	1.130E-02	-0.052
AM-241	-1.225E-02		4.635E-02	7.925E-02	5.781E-03	-0.155
AM-243	9.736E-03		2.352E-02	4.204E-02	3.629E-03	0.232
CM-243	4.564E-02		1.389E-01	2.531E-01	2.360E-02	0.180

Sample ID : 1111065-02 Acquisition date : 11-DEC-2011 12:04:24

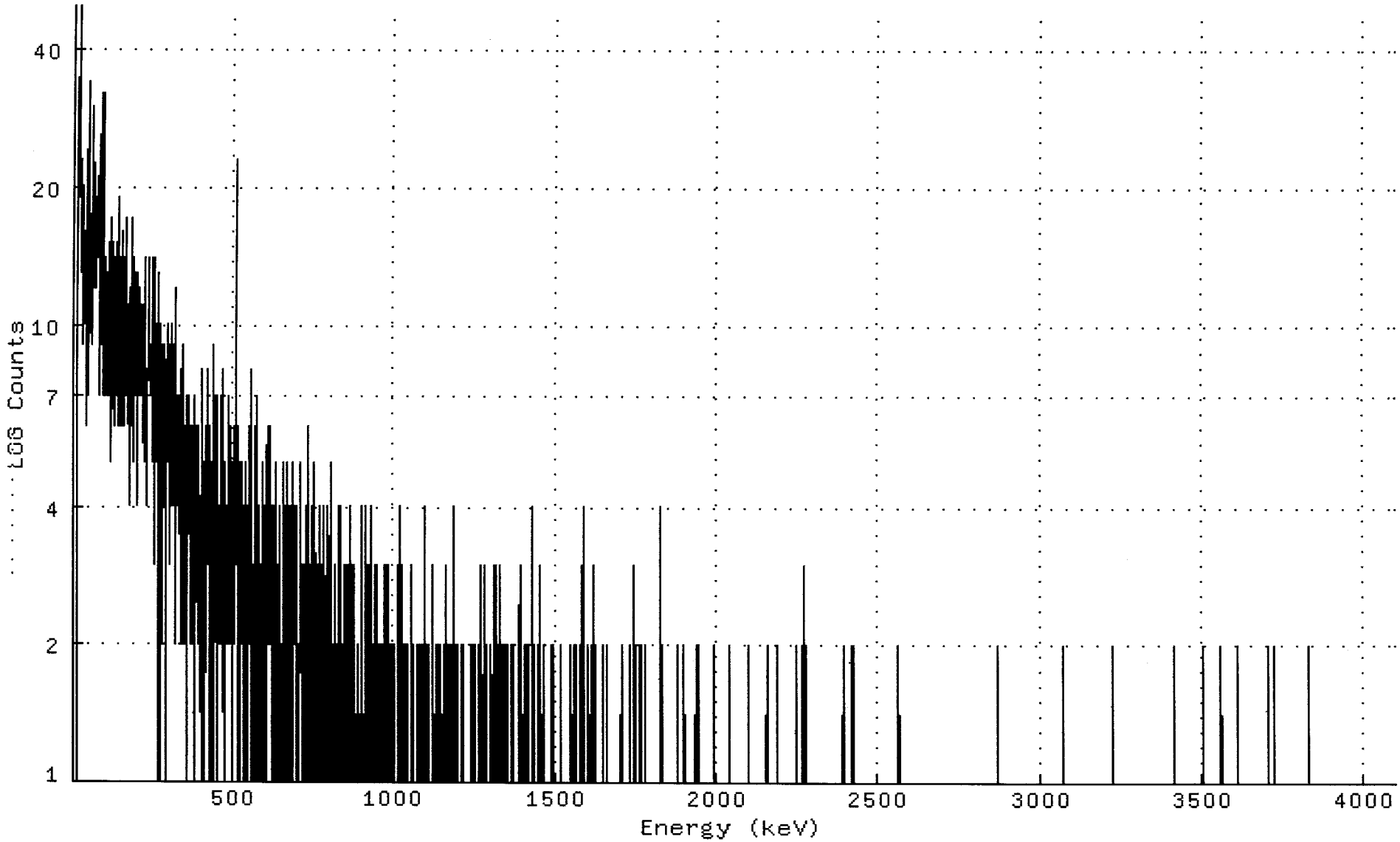
Total number of lines in spectrum	13	
Number of unidentified lines	8	
Number of lines tentatively identified by NID	5	38.46%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
PB-210	22.26Y	1.00	6.427E-01	6.427E-01	6.135E-01	95.45	
			---	---			
Total Activity :			6.427E-01	6.427E-01			
Grand Total Activity :			6.427E-01	6.427E-01			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106502_GE4_GAS1102_172272.CNF;1
Title :
Sample Title: BLANK
Start Time: 11-DEC-2011 12:04 Sample Time: 11-DEC-2011 00:00 Energy Offset: 6.91748E-01
Real Time : 0 01:00:00.70 Sample ID : 1111065-02 Energy Slope : 9.99279E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106502_GE4_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	0	24	50
17:	38	34	34	19	28	19	23	21
25:	21	14	13	18	20	9	16	13
33:	14	13	10	11	16	12	10	15
41:	6	8	15	9	17	34	20	17
49:	14	10	7	13	17	10	15	11
57:	15	20	9	11	21	28	30	17
65:	12	15	12	13	12	14	17	19
73:	12	15	19	14	21	16	17	15
81:	15	20	9	7	12	26	9	13
89:	15	16	14	32	32	21	8	9
97:	7	8	9	14	7	12	8	11
105:	13	9	12	7	7	8	12	12
113:	9	14	15	8	6	13	17	5
121:	10	17	12	13	10	9	15	7
129:	6	13	9	14	7	11	9	15
137:	7	11	12	12	6	12	19	14
145:	8	9	6	13	11	14	9	7
153:	10	14	16	6	12	6	14	6
161:	11	14	14	13	13	17	7	11
169:	9	11	10	10	7	9	9	4
177:	8	12	10	6	9	15	6	14
185:	14	17	15	6	11	14	10	11
193:	5	10	9	13	7	12	13	4
201:	7	7	13	9	10	12	7	8
209:	9	9	7	10	8	11	9	7
217:	8	6	9	7	11	6	6	5
225:	5	5	7	9	14	4	7	8
233:	7	8	4	14	11	9	8	10
241:	9	8	7	8	9	8	9	14
249:	8	7	6	5	9	8	14	4
257:	3	7	7	9	10	5	6	6
265:	6	1	13	2	8	3	9	8
273:	1	3	9	10	3	8	2	9
281:	6	5	4	7	8	7	6	9
289:	4	5	1	3	4	7	10	7
297:	9	6	5	5	6	7	9	3
305:	6	5	6	10	5	4	5	7
313:	9	5	5	7	4	4	8	12
321:	2	5	4	7	4	4	7	7
329:	5	7	4	5	4	4	6	2
337:	7	2	3	8	3	6	5	2
345:	9	4	5	2	3	6	3	6
353:	5	1	4	3	6	7	4	4
361:	4	5	7	5	6	2	6	5
369:	4	3	3	3	5	4	2	3
377:	6	5	1	3	7	2	2	3
385:	6	4	5	3	6	5	4	2
393:	4	6	6	3	2	4	4	2
401:	2	1	3	2	8	5	3	2
409:	5	3	1	1	3	2	6	5
417:	2	5	4	3	4	4	4	8
425:	4	3	3	1	6	3	2	5

433:	5	4	1	4	3	4	4	9
441:	3	0	4	4	7	4	3	3
449:	4	7	4	0	4	3	3	3
457:	2	3	4	4	4	7	5	2
465:	5	3	7	8	2	3	4	2
473:	0	5	2	2	4	4	3	2
481:	4	2	3	2	2	5	6	7
489:	3	2	2	3	2	6	2	5
497:	1	2	1	5	3	2	3	4
505:	2	6	3	3	6	16	23	5
513:	9	4	3	4	1	2	5	3
521:	2	5	1	0	4	3	5	5
529:	2	4	2	4	1	2	3	4
537:	3	1	2	5	1	3	4	4
545:	3	3	1	2	2	4	6	4
553:	3	3	2	4	3	8	8	2
561:	1	0	0	1	3	2	4	6
569:	2	1	2	5	0	2	3	3
577:	7	1	1	2	3	2	1	4
585:	1	3	1	0	0	1	2	2
593:	0	2	3	5	3	4	3	2
601:	1	4	4	4	3	3	1	5
609:	6	6	3	2	2	2	5	6
617:	3	5	2	3	3	0	2	2
625:	4	2	4	2	3	3	3	0
633:	0	0	5	3	1	1	1	1
641:	2	2	3	2	1	1	0	2
649:	4	1	2	1	1	1	1	1
657:	2	1	5	2	4	2	1	4
665:	3	2	2	4	1	2	2	5
673:	3	2	2	4	0	4	3	3
681:	2	1	4	3	1	2	2	2
689:	2	1	5	2	4	4	3	2
697:	2	2	4	2	2	4	1	2
705:	1	2	2	1	1	3	4	5
713:	4	2	2	2	0	1	3	3
721:	2	3	2	1	2	0	2	2
729:	3	4	3	0	1	1	0	2
737:	1	6	1	0	2	1	1	3
745:	3	4	3	0	1	1	3	2
753:	3	1	1	5	2	0	2	1
761:	3	0	1	1	1	3	1	1
769:	1	2	1	4	0	0	3	1
777:	1	0	2	3	2	3	0	4
785:	3	4	2	1	2	0	1	1
793:	3	0	3	1	2	4	3	1
801:	2	2	3	3	1	1	5	1
809:	3	0	1	1	2	0	1	3
817:	3	2	2	0	3	1	2	1
825:	0	2	1	3	4	0	1	2
833:	2	1	4	2	1	2	1	1
841:	0	1	1	1	2	1	2	3
849:	1	1	0	1	0	1	3	1
857:	0	2	0	0	3	1	0	1
865:	2	1	4	1	4	2	2	2
873:	3	0	1	1	2	1	1	3
881:	2	1	1	1	0	1	2	1
889:	1	2	1	2	0	1	1	0
897:	0	0	2	4	0	0	0	2
905:	1	1	0	1	1	1	2	4

913:	3	1	3	2	3	0	1	0
921:	1	2	1	2	2	3	2	0
929:	2	0	0	1	3	4	1	1
937:	2	1	2	1	3	0	0	3
945:	2	2	3	0	0	0	1	0
953:	2	0	1	1	1	1	1	0
961:	2	2	2	0	1	2	2	0
969:	2	0	3	0	0	1	0	3
977:	2	1	0	0	0	1	2	2
985:	0	3	2	0	1	2	1	1
993:	2	2	0	2	1	0	0	0
1001:	2	0	1	1	1	0	0	1
1009:	1	0	0	0	0	3	1	1
1017:	2	4	2	1	1	1	2	0
1025:	0	3	2	2	0	1	0	1
1033:	1	0	2	2	0	1	1	0
1041:	1	1	1	0	2	1	0	1
1049:	0	0	0	1	1	1	1	3
1057:	1	0	0	1	2	1	1	0
1065:	1	0	0	0	0	1	1	2
1073:	2	1	2	2	2	1	0	2
1081:	1	1	0	1	0	1	2	1
1089:	0	1	0	2	1	0	1	4
1097:	1	1	2	1	0	2	1	1
1105:	0	1	2	2	0	1	0	0
1113:	0	0	1	1	1	1	0	0
1121:	1	0	3	2	1	0	0	0
1129:	1	1	2	0	0	0	0	0
1137:	2	1	1	1	2	0	0	1
1145:	2	1	1	0	0	1	0	1
1153:	0	2	1	0	2	1	1	1
1161:	2	2	1	3	0	2	0	0
1169:	2	2	2	0	2	0	2	1
1177:	1	1	2	2	0	2	1	0
1185:	0	1	1	4	0	1	1	2
1193:	1	1	0	1	1	2	1	1
1201:	0	0	1	0	0	1	0	2
1209:	2	0	1	1	0	1	0	0
1217:	2	0	1	0	1	1	0	0
1225:	1	0	0	0	0	0	1	1
1233:	0	0	1	0	0	2	1	1
1241:	1	1	0	2	1	1	1	0
1249:	1	2	1	1	1	1	0	0
1257:	0	1	1	0	0	0	0	1
1265:	2	0	0	1	1	2	2	3
1273:	0	0	1	1	1	1	0	0
1281:	1	3	0	0	2	0	1	0
1289:	1	0	0	1	1	0	0	0
1297:	2	1	0	0	0	1	0	0
1305:	1	0	0	3	2	0	0	2
1313:	0	3	1	1	0	0	0	1
1321:	0	0	1	2	0	0	1	1
1329:	0	3	0	2	2	2	0	2
1337:	1	0	0	0	0	1	2	0
1345:	0	0	0	1	2	0	0	0
1353:	2	0	0	0	0	0	0	0
1361:	1	0	0	1	2	2	0	2
1369:	2	0	1	1	1	0	1	0
1377:	0	0	0	0	0	0	0	1
1385:	1	1	1	1	0	2	3	0

1393:	0	0	1	0	0	0	0	1
1401:	1	0	2	1	1	0	0	0
1409:	2	0	2	0	0	0	1	0
1417:	0	0	2	0	1	1	1	0
1425:	1	1	1	0	2	1	2	4
1433:	0	0	2	1	1	0	0	1
1441:	0	0	0	1	0	0	2	0
1449:	0	0	1	1	3	1	2	0
1457:	1	1	1	0	1	2	1	0
1465:	0	1	0	0	0	0	0	0
1473:	1	0	0	1	0	0	0	0
1481:	0	0	1	1	1	0	2	0
1489:	2	1	0	0	0	0	0	2
1497:	0	0	1	1	1	0	0	0
1505:	1	0	0	0	0	1	0	0
1513:	0	0	1	0	0	1	0	2
1521:	0	0	0	1	1	1	0	0
1529:	1	0	1	0	1	0	0	0
1537:	0	0	1	1	0	1	0	1
1545:	1	0	0	2	0	1	0	1
1553:	1	1	0	1	2	0	1	0
1561:	2	1	0	0	2	0	0	0
1569:	0	0	0	0	1	1	1	0
1577:	2	0	0	1	0	0	1	3
1585:	1	0	0	1	4	0	0	0
1593:	0	0	0	0	0	0	1	0
1601:	1	1	0	2	0	0	0	0
1609:	1	0	0	1	0	2	0	1
1617:	0	1	0	3	1	0	0	2
1625:	0	0	1	0	1	1	0	1
1633:	1	0	0	0	0	0	0	0
1641:	1	0	1	0	0	0	2	0
1649:	0	1	0	1	0	0	0	0
1657:	0	0	2	0	0	0	1	0
1665:	0	0	0	0	0	1	0	0
1673:	1	0	0	1	0	0	0	0
1681:	0	0	0	1	1	0	0	0
1689:	0	0	0	1	0	0	0	0
1697:	0	1	0	0	0	0	0	0
1705:	2	1	0	1	0	1	0	0
1713:	0	1	0	1	0	0	0	1
1721:	0	0	0	0	0	1	0	0
1729:	1	2	1	0	0	0	0	1
1737:	1	0	0	1	0	3	0	0
1745:	0	1	2	0	0	0	0	0
1753:	0	1	0	0	1	0	1	1
1761:	0	2	1	0	1	2	0	0
1769:	0	0	0	1	1	0	1	0
1777:	0	1	2	1	1	0	0	0
1785:	0	0	1	1	1	0	0	0
1793:	0	0	0	1	0	0	0	1
1801:	0	1	0	1	1	0	0	0
1809:	0	0	0	0	0	0	0	0
1817:	0	1	0	0	1	0	0	0
1825:	0	0	0	0	4	0	1	2
1833:	0	0	0	0	0	0	1	1
1841:	1	0	0	1	0	0	0	0
1849:	1	0	0	0	1	0	0	0
1857:	1	0	0	0	0	0	0	0
1865:	0	0	0	0	0	1	0	0

1873:	0	0	0	0	1	0	0	2
1881:	0	0	0	1	1	0	0	0
1889:	0	1	0	0	0	1	1	1
1897:	1	2	0	2	0	0	1	0
1905:	0	0	0	0	0	0	0	1
1913:	0	1	0	0	1	0	0	0
1921:	0	0	0	0	0	0	1	0
1929:	0	1	1	1	1	0	1	2
1937:	1	0	0	0	1	0	2	0
1945:	1	1	0	0	1	0	0	0
1953:	0	0	1	0	0	1	0	0
1961:	0	0	1	0	0	0	0	0
1969:	0	0	1	0	0	0	0	1
1977:	0	1	1	0	0	1	0	0
1985:	0	0	1	0	0	1	2	1
1993:	0	0	0	1	0	1	0	0
2001:	0	0	1	0	0	1	0	0
2009:	0	0	0	0	0	0	0	0
2017:	0	0	0	0	0	0	0	0
2025:	0	0	0	0	0	1	1	0
2033:	0	0	0	0	0	0	0	0
2041:	2	0	1	0	0	1	0	0
2049:	0	0	0	0	0	1	1	0
2057:	0	0	0	0	0	0	0	0
2065:	1	0	0	0	0	0	0	1
2073:	0	0	0	0	0	0	0	1
2081:	0	0	1	0	0	0	0	1
2089:	0	0	1	0	0	0	0	1
2097:	2	0	0	0	0	0	0	0
2105:	1	1	1	0	0	0	1	0
2113:	0	1	0	0	0	0	0	0
2121:	0	1	0	0	0	0	0	0
2129:	0	0	1	1	0	0	0	0
2137:	0	0	0	0	1	0	0	0
2145:	0	0	0	0	0	0	0	0
2153:	0	1	0	2	0	0	0	0
2161:	0	0	0	1	1	0	1	0
2169:	1	0	0	0	0	0	0	1
2177:	0	0	0	1	1	0	1	0
2185:	0	0	0	1	2	0	0	0
2193:	0	0	0	0	1	1	0	0
2201:	1	1	0	0	0	0	0	0
2209:	0	0	1	0	0	0	0	0
2217:	1	0	0	0	0	0	0	0
2225:	1	0	0	0	1	1	0	0
2233:	0	0	0	0	0	0	0	1
2241:	1	0	0	0	0	0	0	2
2249:	1	0	0	0	1	0	0	0
2257:	0	0	0	1	0	0	0	0
2265:	0	2	0	0	0	0	3	0
2273:	0	0	2	0	0	1	0	0
2281:	0	1	0	0	0	0	0	1
2289:	1	0	0	0	0	0	1	0
2297:	0	0	0	0	0	0	0	0
2305:	0	0	0	0	0	1	0	0
2313:	0	0	0	0	0	0	0	0
2321:	0	0	0	0	1	1	0	0
2329:	1	0	0	0	0	1	1	1
2337:	1	0	1	1	0	0	0	0
2345:	0	0	0	0	0	0	1	1

2353:	0	0	0	0	0	0	1	0
2361:	0	0	0	0	0	0	1	0
2369:	0	0	0	0	0	0	0	1
2377:	1	0	0	0	0	0	0	0
2385:	0	0	0	0	0	0	0	0
2393:	2	0	0	1	1	1	0	0
2401:	0	1	1	0	0	0	0	0
2409:	0	0	0	0	0	0	0	0
2417:	0	1	0	0	2	0	0	0
2425:	0	2	0	1	0	0	0	1
2433:	1	0	0	0	1	0	0	0
2441:	0	1	0	0	0	0	0	0
2449:	0	0	0	0	0	0	0	0
2457:	1	0	0	1	1	1	0	0
2465:	0	0	0	0	0	1	1	0
2473:	0	0	0	0	0	0	1	0
2481:	1	0	0	0	0	1	0	0
2489:	0	0	0	0	0	0	0	0
2497:	0	0	0	1	0	0	0	0
2505:	0	0	0	0	0	1	0	0
2513:	1	0	0	0	1	0	0	0
2521:	0	0	0	1	0	0	0	0
2529:	0	0	0	0	0	0	0	0
2537:	0	0	0	1	0	0	1	0
2545:	0	0	0	0	0	0	0	1
2553:	1	0	0	0	0	0	0	1
2561:	1	0	0	2	0	0	0	0
2569:	0	0	1	0	1	0	0	0
2577:	0	0	0	0	0	0	0	0
2585:	0	0	0	1	1	0	0	1
2593:	0	0	0	0	0	0	0	0
2601:	0	1	0	1	0	0	0	1
2609:	1	0	0	0	0	0	1	0
2617:	0	1	0	0	1	1	0	0
2625:	0	0	0	0	0	0	1	0
2633:	0	0	0	0	0	1	0	0
2641:	0	0	0	0	0	0	0	1
2649:	0	0	0	1	0	0	0	0
2657:	0	1	0	0	0	0	0	0
2665:	1	0	0	0	0	0	0	1
2673:	0	0	0	0	0	1	0	0
2681:	0	0	0	0	0	0	0	0
2689:	0	0	0	0	0	0	0	0
2697:	0	0	0	1	0	1	0	0
2705:	0	0	1	0	0	1	0	0
2713:	0	0	1	0	0	0	0	0
2721:	0	0	0	0	0	0	0	0
2729:	0	0	0	0	0	0	1	0
2737:	0	0	0	1	0	0	0	0
2745:	0	0	1	0	0	0	0	0
2753:	0	0	0	0	0	0	0	0
2761:	0	0	0	0	0	0	0	1
2769:	1	0	0	0	0	0	0	0
2777:	0	0	1	0	0	0	1	0
2785:	0	0	0	1	0	0	0	1
2793:	0	0	0	0	0	1	0	0
2801:	0	0	0	0	0	0	0	0
2809:	1	0	0	0	0	0	0	0
2817:	0	1	0	0	1	0	0	0
2825:	0	0	0	0	0	0	0	0

2833:	0	0	0	1	0	0	0	0
2841:	0	0	0	0	0	0	0	0
2849:	1	0	0	1	0	0	0	0
2857:	0	0	1	0	0	0	1	0
2865:	1	0	0	0	1	2	0	0
2873:	0	0	0	0	0	1	0	0
2881:	1	0	0	0	0	0	0	0
2889:	0	0	0	0	0	0	0	0
2897:	0	0	0	0	0	0	0	0
2905:	0	0	0	0	1	0	0	0
2913:	0	0	0	0	0	0	1	0
2921:	0	0	0	0	1	0	0	1
2929:	1	0	0	0	0	1	0	0
2937:	0	0	0	0	0	0	0	0
2945:	0	0	0	1	0	0	1	0
2953:	0	0	1	0	0	0	0	0
2961:	0	1	0	0	0	0	0	0
2969:	0	0	0	1	0	0	0	0
2977:	1	0	0	0	1	0	0	0
2985:	0	0	1	0	0	0	0	0
2993:	1	0	0	0	0	0	0	0
3001:	0	0	0	0	0	0	0	0
3009:	0	0	0	0	0	0	0	1
3017:	0	0	0	0	0	1	0	0
3025:	0	1	0	0	0	0	1	1
3033:	0	0	1	0	0	1	0	0
3041:	1	0	0	1	0	0	0	0
3049:	0	0	0	0	0	0	0	0
3057:	0	0	0	0	0	0	0	0
3065:	0	0	0	0	2	0	0	0
3073:	0	0	0	0	0	0	1	0
3081:	0	0	0	0	0	0	0	0
3089:	0	0	0	0	0	1	1	0
3097:	0	1	0	0	0	0	0	1
3105:	0	0	0	0	0	1	0	0
3113:	0	0	1	0	0	0	0	0
3121:	0	1	0	0	0	0	0	0
3129:	0	1	0	0	0	0	0	0
3137:	0	0	0	0	0	0	0	0
3145:	0	0	0	0	0	0	0	0
3153:	0	1	0	0	0	0	0	0
3161:	0	0	1	0	0	0	1	0
3169:	0	0	0	0	0	0	0	0
3177:	0	0	0	0	0	0	1	0
3185:	0	0	0	0	0	1	0	0
3193:	0	0	1	0	0	0	0	1
3201:	1	0	0	1	0	0	0	0
3209:	0	0	0	1	0	0	1	0
3217:	0	0	0	0	0	0	0	2
3225:	0	1	0	0	0	0	0	0
3233:	0	1	0	0	0	0	0	0
3241:	0	0	0	0	1	0	0	0
3249:	0	1	1	0	0	0	0	0
3257:	0	0	0	0	0	0	0	0
3265:	0	0	0	1	0	0	0	0
3273:	0	0	0	0	0	0	1	0
3281:	0	0	0	0	0	1	0	1
3289:	0	0	1	0	0	0	0	0
3297:	0	0	0	0	1	0	1	0
3305:	1	0	0	0	0	0	0	0

3313:	0	0	0	0	0	0	0	0
3321:	0	0	1	0	0	0	1	0
3329:	0	0	1	0	0	0	0	0
3337:	0	0	0	0	0	0	0	0
3345:	0	0	0	0	0	0	0	0
3353:	0	0	0	0	0	0	0	0
3361:	0	1	0	0	0	0	0	0
3369:	0	0	0	0	0	0	0	0
3377:	0	0	0	0	0	0	0	0
3385:	0	0	0	0	0	0	0	0
3393:	0	0	0	0	0	0	0	1
3401:	0	0	1	0	0	0	0	0
3409:	1	0	0	0	0	0	2	0
3417:	1	0	0	0	0	1	0	0
3425:	0	0	0	0	0	0	1	0
3433:	0	0	1	0	0	0	0	0
3441:	0	0	0	0	0	0	0	0
3449:	0	0	0	0	0	0	1	0
3457:	0	0	0	0	0	0	0	0
3465:	0	0	0	1	0	0	0	0
3473:	0	0	0	0	0	0	0	0
3481:	0	0	0	0	0	0	0	0
3489:	0	0	0	0	0	0	0	0
3497:	0	1	0	0	1	0	0	2
3505:	0	0	0	0	0	0	0	0
3513:	0	0	0	0	0	0	0	0
3521:	0	0	0	0	0	0	0	0
3529:	0	0	0	0	0	0	0	0
3537:	0	0	0	0	1	0	0	0
3545:	0	0	0	0	0	0	0	0
3553:	0	0	0	0	0	0	2	0
3561:	0	0	0	0	0	0	0	0
3569:	0	0	0	0	0	0	0	0
3577:	0	0	0	0	0	0	0	0
3585:	1	0	0	0	0	0	0	0
3593:	0	0	0	0	0	0	0	0
3601:	0	0	0	0	0	1	0	0
3609:	0	0	2	1	0	0	0	0
3617:	0	0	0	0	0	0	0	0
3625:	0	0	0	0	0	0	0	0
3633:	1	1	0	0	0	0	0	1
3641:	0	0	0	0	0	0	0	0
3649:	0	0	0	0	1	0	0	1
3657:	0	0	1	0	0	0	0	0
3665:	0	0	0	0	1	1	0	0
3673:	1	1	0	0	0	0	0	0
3681:	1	0	1	0	0	0	0	0
3689:	0	0	0	0	0	0	0	0
3697:	0	1	0	0	0	0	0	0
3705:	2	0	0	1	0	0	0	0
3713:	0	1	0	0	0	0	0	0
3721:	0	2	0	0	0	0	0	0
3729:	0	0	0	0	0	0	0	0
3737:	0	0	0	0	0	1	0	1
3745:	0	0	0	0	0	0	0	0
3753:	0	0	0	0	0	0	0	0
3761:	0	0	0	0	1	0	1	1
3769:	0	0	0	1	0	0	0	0
3777:	0	0	0	0	0	0	1	0
3785:	0	0	0	1	0	0	0	0

3793:	1	0	0	0	0	1	0	0
3801:	0	0	0	0	0	1	0	0
3809:	0	0	0	0	1	0	0	0
3817:	0	0	0	0	0	0	0	0
3825:	0	1	0	1	0	2	1	0
3833:	0	0	0	0	0	0	1	0
3841:	1	0	0	0	0	0	0	0
3849:	0	0	0	0	1	0	0	0
3857:	1	0	0	0	0	0	0	0
3865:	0	0	0	0	0	0	0	0
3873:	0	0	0	0	0	0	0	0
3881:	0	0	0	1	0	0	0	0
3889:	0	0	0	0	0	0	0	0
3897:	0	0	0	1	1	0	0	0
3905:	0	0	0	0	0	0	0	0
3913:	0	1	1	0	0	0	0	0
3921:	0	0	0	0	0	1	1	0
3929:	1	0	0	0	0	0	0	0
3937:	0	0	0	0	0	0	0	0
3945:	0	0	0	0	0	0	0	0
3953:	1	0	0	0	0	0	0	0
3961:	0	0	0	0	0	0	0	0
3969:	0	0	0	0	0	0	1	0
3977:	0	0	0	0	0	0	0	0
3985:	0	0	0	0	0	0	0	0
3993:	0	1	0	0	0	0	0	0
4001:	0	0	0	0	0	0	0	0
4009:	0	1	0	0	0	0	0	0
4017:	0	0	0	0	0	0	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	0	0	0	0	0
4041:	0	0	1	0	0	0	0	0
4049:	0	0	0	0	0	0	0	0
4057:	1	0	0	0	0	0	0	0
4065:	0	0	0	0	0	0	0	1
4073:	0	1	0	0	0	0	0	0
4081:	0	0	0	0	0	0	0	0
4089:	0	1	0	0	0	1	1	0

Sample ID : 1111065-03 Acquisition date : 10-DEC-2011 13:08:36

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VAX/VMS Peak Search Report Generated 10-DEC-2011 14:09:36.04

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106503_GE1_GAS1102_172246.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-11-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 10-DEC-2011 13:08:36
Sample ID : 1111065-03 Sample Quantity : 3.88310E+02 gram
Sample type : SOIL Sample Geometry : 0
Detector name : GE1 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:02.15 0.1%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.21*	306	1000	1.96	45.84	42	7	36.5		PB-210
0	53.73	100	900	1.66	53.36	52	5	92.5		
0	63.28*	615	1554	1.64	62.91	59	7	23.0		TH-234
0	76.76*	2659	2670	2.93	76.40	72	11	8.5		
2	84.49*	243	960	1.41	84.12	82	15	37.0	1.67E+01	
2	87.66	488	897	1.48	87.29	82	15	19.5		NP-237
										SN-126
										CD-109
2	90.24*	253	1054	1.74	89.87	82	15	44.0		
2	93.21	869	964	1.74	92.85	82	15	13.4		
0	144.51*	137	1272	1.46	144.16	140	10	99.3		CE-141
0	153.80	131	865	2.20	153.45	150	7	76.6		
0	186.20*	799	986	1.43	185.86	181	9	16.0		RA-226
1	236.49	98	232	1.75	236.16	235	12	43.5	3.25E+01	
1	239.19*	1065	373	1.75	238.85	235	12	8.2		PB-212
1	242.31	623	353	1.76	241.97	235	12	14.8		RA-224
0	258.04	89	413	3.78	257.71	255	7	78.7		
0	271.41	189	646	2.84	271.09	266	11	54.0		LU-173
0	295.64*	999	618	1.73	295.31	291	9	11.0		PB-214
0	323.07	50	249	2.19	322.75	320	6	103.7		RA-223
0	328.54	75	265	1.30	328.22	326	6	72.1		
0	338.85*	208	405	2.06	338.53	335	9	37.8		AC-228
3	352.33*	1966	176	1.60	352.01	346	16	5.0	2.42E+00	PB-214
3	356.75	85	228	2.25	356.44	346	16	82.1		
0	486.32	51	159	3.74	486.04	482	8	89.7		
0	499.01	28	110	2.68	498.73	496	6	123.0		
0	511.67*	69	262	1.91	511.39	505	11	99.5		
0	583.51*	327	231	2.02	583.24	577	12	21.7		TL-208
5	609.76*	1485	73	1.75	609.50	603	17	5.5	3.97E+00	BI-214
5	616.13	51	102	2.98	615.87	603	17	92.0		
1	666.25	59	89	1.88	666.00	662	8	55.9	1.45E+01	
0	703.48	37	133	1.09	703.25	701	8	113.9		
0	728.54	71	110	1.73	728.30	724	9	58.3		BI-212
0	755.66	36	112	3.09	755.43	752	10	115.2		
0	768.96	146	165	2.16	768.74	763	13	40.1		
0	785.78	50	91	2.85	785.56	783	7	69.3		

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Sample ID : 1111065-03 Acquisition date : 10-DEC-2011 13:08:36

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	806.00	49	127	1.82	805.78	800	11	94.3		
0	840.04	50	181	4.91	839.83	834	15	122.1		
0	911.96*	203	91	2.10	911.77	908	10	23.0		AC-228
0	921.19	20	29	2.88	920.99	919	5	92.1		
0	934.88	109	121	2.25	934.69	930	12	45.4		
0	964.45	51	82	2.05	964.27	959	8	67.1		
0	969.47	95	101	2.34	969.28	967	8	41.5		AC-228
0	1001.66*	54	56	1.94	1001.48	998	8	56.7		PA-234M
0	1052.14	34	49	5.65	1051.97	1048	8	78.5		
0	1120.89	293	132	2.22	1120.74	1117	11	19.1		BI-214
0	1238.38	106	124	2.12	1238.25	1232	11	45.0		
0	1282.59	54	83	2.80	1282.47	1277	14	75.6		
0	1378.52	65	74	2.30	1378.42	1373	12	57.0		
0	1402.81	21	23	1.23	1402.72	1400	6	83.4		
0	1408.85	38	34	1.77	1408.76	1406	7	60.4		
4	1461.22*	722	23	2.19	1461.14	1455	32	7.8	1.63E+00	K-40
4	1467.08	16	21	2.21	1467.00	1455	32	113.5		
4	1473.11	13	30	3.24	1473.03	1455	32	168.8		
0	1509.70	50	26	2.49	1509.63	1505	10	46.8		
0	1550.35	12	13	1.62	1550.29	1547	8	115.9		
0	1559.68	26	17	1.35	1559.62	1555	10	72.3		
0	1594.99	21	21	3.52	1594.93	1591	9	93.5		
0	1603.36	16	14	1.70	1603.31	1600	8	93.2		
0	1621.64	22	13	1.46	1621.59	1618	9	74.6		BI-212
0	1633.77	33	6	10.17	1633.73	1627	15	50.0		
0	1662.12*	36	24	2.52	1662.09	1655	14	66.5		
0	1692.87	19	9	4.36	1692.84	1689	9	73.1		
0	1730.12	74	27	3.35	1730.09	1725	14	36.9		
0	1765.18*	230	25	2.63	1765.16	1760	13	16.1		BI-214
0	1796.87	6	3	1.49	1796.86	1795	5	129.3		
0	1837.91	11	11	5.94	1837.91	1831	11	131.4		
0	1848.32	44	15	2.30	1848.32	1843	12	45.9		
3	1950.94	7	0	3.10	1950.97	1949	11	56.5	2.23E+00	
3	1954.24	10	0	3.16	1954.26	1949	11	87.7		
0	2041.67	5	1	1.66	2041.71	2039	5	113.8		
0	2102.76	11	12	2.94	2102.82	2097	10	130.8		
0	2119.34	15	9	4.00	2119.40	2115	9	88.7		
0	2148.62	19	3	7.91	2148.68	2143	12	59.0		
0	2204.40	49	17	2.68	2204.47	2200	11	43.4		BI-214
0	2287.10	10	2	4.33	2287.19	2283	8	79.7		
0	2292.77	9	4	2.12	2292.86	2291	5	93.5		
0	2321.90	5	3	1.17	2322.00	2319	6	141.4		
0	2448.75	27	11	4.38	2448.88	2442	16	69.6		
0	2614.43*	92	7	2.42	2614.59	2610	12	24.2		TL-208
0	3197.72	6	0	1.33	3198.00	3195	6	81.6		

Sample ID : 1111065-03 Acquisition date : 10-DEC-2011 13:08:36

Total number of lines in spectrum 79
Number of unidentified lines 41
Number of lines tentatively identified by NID 38 48.10%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/gram	Wtd Mean Decay Corr pCi/gram	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.604E+01	2.604E+01	0.318E+01	12.20	
TL-208	1.41E+10Y	1.00	1.619E+00	1.619E+00	0.292E+00	18.05	
PB-210	22.26Y	1.00	5.595E+00	5.610E+00	2.105E+00	37.52	
BI-212	1.41E+10Y	1.00	1.547E+00	1.547E+00	0.765E+00	49.42	
PB-212	1.41E+10Y	1.00	2.308E+00	2.308E+00	0.283E+00	12.24	
BI-214	1602.00Y	1.00	6.163E+00	6.164E+00	0.537E+00	8.71	
PB-214	1602.00Y	1.00	6.314E+00	6.314E+00	0.534E+00	8.46	
RA-223	3.28E+04Y	1.00	1.533E+00	1.533E+00	1.596E+00	104.13	
RA-224	1.41E+10Y	1.00	1.534E+01	1.534E+01	0.266E+01	17.36	
RA-226	1602.00Y	1.00	2.041E+01	2.041E+01	3.753E+01	183.85	
AC-228	1.41E+10Y	1.00	1.929E+00	1.929E+00	0.363E+00	18.80	
PA-234M	4.47E+09Y	1.00	1.693E+01	1.693E+01	0.973E+01	57.44	
TH-234	4.47E+09Y	1.00	1.085E+01	1.085E+01	0.266E+01	24.49	
			---	---			
	Total Activity :		1.166E+02	1.166E+02			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/gram	Wtd Mean Decay Corr pCi/gram	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	8.645E+00	9.063E+00	2.091E+00	23.08	
SN-126	1.00E+05Y	1.00	8.689E-01	8.689E-01	1.936E-01	22.28	
CE-141	32.50D	1.96	2.112E-01	4.140E-01	4.244E-01	102.50	
NP-237	2.14E+06Y	1.00	2.549E+00	2.549E+00	0.567E+00	22.22	
			---	---			
	Total Activity :		1.227E+01	1.289E+01			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/gram	Wtd Mean Decay Corr pCi/gram	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
LU-173	1.37Y	1.04	9.393E-01	9.813E-01	5.371E-01	54.73	
			---	---			
	Total Activity :		9.393E-01	9.813E-01			

Grand Total Activity : 1.298E+02 1.305E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-03 Acquisition date : 10-DEC-2011 13:08:36

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/gram	Decay Corr pCi/gram	2-Sigma %Error	Status
K-40	1460.81	10.67*	5.027E-01	2.604E+01	2.604E+01	12.20	OK
Final Mean for 1 Valid Peaks = 2.604E+01+/- 3.176E+00 (12.20%)							
TL-208	583.14	30.22*	1.029E+00	2.031E+00	2.031E+00	23.95	OK
	860.37	4.48	7.505E-01	----- Line Not Found		-----	Absent
	2614.66	35.85	3.563E-01	1.386E+00	1.386E+00	26.38	OK
Final Mean for 2 Valid Peaks = 1.619E+00+/- 2.923E-01 (18.05%)							
PB-210	46.50	4.05*	2.613E+00	5.595E+00	5.610E+00	37.52	OK
Final Mean for 1 Valid Peaks = 5.610E+00+/- 2.105E+00 (37.52%)							
BI-212	727.17	11.80*	8.597E-01	1.362E+00	1.362E+00	59.15	OK
	1620.62	2.75	4.684E-01	3.227E+00	3.227E+00	75.19	OK
Final Mean for 2 Valid Peaks = 1.547E+00+/- 7.647E-01 (49.42%)							
PB-212	238.63	44.60*	2.000E+00	2.308E+00	2.308E+00	12.24	OK
	300.09	3.41	1.716E+00	----- Line Not Found		-----	Absent
Final Mean for 1 Valid Peaks = 2.308E+00+/- 2.825E-01 (12.24%)							
BI-214	609.31	46.30*	9.927E-01	6.248E+00	6.248E+00	11.51	OK
	1120.29	15.10	6.104E-01	6.136E+00	6.136E+00	21.16	OK
	1764.49	15.80	4.432E-01	6.341E+00	6.342E+00	18.46	OK
	2204.22	4.98	3.885E-01	4.865E+00	4.865E+00	44.43	OK
Final Mean for 4 Valid Peaks = 6.164E+00+/- 5.369E-01 (8.71%)							
PB-214	295.21	19.19	1.736E+00	5.798E+00	5.798E+00	14.28	OK
	351.92	37.19*	1.529E+00	6.681E+00	6.682E+00	10.46	OK
Final Mean for 2 Valid Peaks = 6.314E+00+/- 5.339E-01 (8.46%)							
RA-223	323.87	3.88*	1.626E+00	1.533E+00	1.533E+00	104.13	OK
Final Mean for 1 Valid Peaks = 1.533E+00+/- 1.596E+00 (104.13%)							
RA-224	240.98	3.95*	1.987E+00	1.534E+01	1.534E+01	17.36	OK
Final Mean for 1 Valid Peaks = 1.534E+01+/- 2.663E+00 (17.36%)							
RA-226	186.21	3.28*	2.308E+00	2.041E+01	2.041E+01	183.85	OK
Final Mean for 1 Valid Peaks = 2.041E+01+/- 3.753E+01 (183.85%)							
AC-228	338.32	11.40	1.575E+00	2.241E+00	2.241E+00	38.86	OK

Sample ID : 1111065-03 Acquisition date : 10-DEC-2011 13:08:36

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/gram	Decay Corr pCi/gram	2-Sigma %Error	Status
	911.07	27.70*	7.170E-01	1.981E+00	1.981E+00	24.65	OK
	969.11	16.60	6.829E-01	1.628E+00	1.628E+00	42.44	OK
Final Mean for 3 Valid Peaks = 1.929E+00+/- 3.626E-01 (18.80%)							
PA-234M	1001.03	0.92*	6.658E-01	1.693E+01	1.693E+01	57.44	OK
Final Mean for 1 Valid Peaks = 1.693E+01+/- 9.727E+00 (57.44%)							
TH-234	63.29	3.80*	2.884E+00	1.085E+01	1.085E+01	24.49	OK
Final Mean for 1 Valid Peaks = 1.085E+01+/- 2.658E+00 (24.49%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/gram	Decay Corr pCi/gram	2-Sigma %Error	Status
CD-109	88.03	3.72*	2.931E+00	8.645E+00	9.063E+00	23.08	OK
Final Mean for 1 Valid Peaks = 9.063E+00+/- 2.091E+00 (23.08%)							
SN-126	87.57	37.00*	2.932E+00	8.689E-01	8.689E-01	22.28	OK
Final Mean for 1 Valid Peaks = 8.689E-01+/- 1.936E-01 (22.28%)							
CE-141	145.44	48.40*	2.589E+00	2.112E-01	4.140E-01	102.50	OK
Final Mean for 1 Valid Peaks = 4.140E-01+/- 4.244E-01 (102.50%)							
NP-237	86.50	12.60*	2.935E+00	2.549E+00	2.549E+00	22.22	OK
Final Mean for 1 Valid Peaks = 2.549E+00+/- 5.666E-01 (22.22%)							

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/gram	Decay Corr pCi/gram	2-Sigma %Error	Status
LU-173	100.72	5.24	2.881E+00	----- Line Not Found		-----	Absent
	272.11	21.20*	1.836E+00	9.393E-01	9.813E-01	54.73	OK
Final Mean for 1 Valid Peaks = 9.813E-01+/- 5.371E-01 (54.73%)							

Flag: "*" = Keyline

Sample ID : 1111065-03 Acquisition date : 10-DEC-2011 13:08:36

---- Identified Nuclides ----

Nuclide	Activity (pCi/gram)	Act error	MDA (pCi/gram)	MDA error	Act/MDA
K-40	2.604E+01	3.176E+00	9.430E-01	7.996E-02	27.617
CD-109	9.063E+00	2.091E+00	2.654E+00	3.082E-01	3.415
SN-126	8.689E-01	1.936E-01	2.544E-01	2.529E-02	3.416
CE-141	4.140E-01	4.244E-01	3.560E-01	8.903E-02	1.163
LU-173	9.813E-01	5.371E-01	4.378E-01	3.558E-02	2.241
TL-208	1.619E+00	2.923E-01	2.991E-01	2.766E-02	5.413
PB-210	5.610E+00	2.105E+00	2.197E+00	1.696E-01	2.553
BI-212	1.547E+00	7.647E-01	8.774E-01	8.019E-02	1.764
PB-212	2.308E+00	2.825E-01	1.861E-01	1.524E-02	12.397
BI-214	6.164E+00	5.369E-01	2.076E-01	1.931E-02	29.686
PB-214	6.314E+00	5.339E-01	2.341E-01	1.936E-02	26.975
RA-223	1.533E+00	1.596E+00	2.136E+00	1.762E-01	0.718
RA-224	1.534E+01	2.663E+00	2.116E+00	1.733E-01	7.249
RA-226	2.041E+01	3.753E+01	2.766E+00	5.065E+00	7.380
AC-228	1.929E+00	3.626E-01	4.099E-01	3.258E-02	4.705
PA-234M	1.693E+01	9.727E+00	1.232E+01	9.987E-01	1.374
TH-234	1.085E+01	2.658E+00	2.544E+00	1.885E-01	4.267
NP-237	2.549E+00	5.666E-01	7.460E-01	7.321E-02	3.417

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/gram)	K.L. Ided	Act error	MDA (pCi/gram)	MDA error	Act/MDA
BE-7	-3.175E-01		8.160E-01	1.268E+00	1.118E-01	-0.250
NA-22	-8.682E-03		7.660E-02	1.181E-01	9.662E-03	-0.074
AL-26	1.561E-02		3.568E-02	7.513E-02	6.001E-03	0.208
TI-44	2.624E-02		7.949E-02	1.080E-01	8.464E-03	0.243
SC-46	8.840E-02		8.291E-02	1.568E-01	1.255E-02	0.564
V-48	-2.171E-01		2.575E-01	4.184E-01	3.381E-02	-0.519
CR-51	1.524E-02		1.274E+00	1.888E+00	1.646E-01	0.008
MN-54	4.198E-02		7.790E-02	1.286E-01	1.091E-02	0.326
CO-56	-4.364E-02		9.647E-02	1.448E-01	1.214E-02	-0.301
CO-57	-5.015E-02		6.219E-02	9.904E-02	9.560E-03	-0.506
CO-58	1.093E-03		9.035E-02	1.432E-01	1.244E-02	0.008
FE-59	-1.470E-01		2.059E-01	3.364E-01	3.000E-02	-0.437
CO-60	3.962E-02		7.275E-02	1.329E-01	1.087E-02	0.298
ZN-65	1.272E-01		1.739E-01	2.922E-01	2.395E-02	0.435
SE-75	3.594E-02		1.246E-01	1.656E-01	1.360E-02	0.217
RB-82	-8.725E-02		1.172E+00	1.844E+00	1.639E-01	-0.047
RB-83	8.392E-02		1.520E-01	2.534E-01	4.020E-02	0.331
KR-85	3.490E+01		1.499E+01	2.677E+01	2.411E+00	1.304
SR-85	2.127E-01		9.131E-02	1.631E-01	1.469E-02	1.304
Y-88	6.091E-02		5.858E-02	1.241E-01	9.858E-03	0.491
NB-93M	-6.177E+00		1.579E+00	6.156E-02	1.370E-02	-100.338
NB-94	1.268E-03		5.892E-02	1.044E-01	8.533E-03	0.012
NB-95	2.755E-01		1.479E-01	2.613E-01	2.340E-02	1.054
ZR-95	2.111E-01	+	2.442E-01	2.819E-01	2.774E-02	0.749
RU-103	2.547E-02		1.027E-01	1.682E-01	2.413E-02	0.151

Sample ID : 1111065-03 Acquisition date : 10-DEC-2011 13:08:36

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/gram)	K.L. Ided	Act error	MDA (pCi/gram)	MDA error	Act/MDA
RU-106	-3.456E-01		6.376E-01	9.641E-01	1.332E-01	-0.358
AG-108M	1.732E-02		7.495E-02	1.209E-01	1.107E-02	0.143
AG-110M	2.039E-02		7.115E-02	1.161E-01	1.084E-02	0.176
SN-113	1.091E-01		9.717E-02	1.800E-01	1.528E-02	0.606
TE123M	-3.786E-02		8.613E-02	1.268E-01	1.050E-02	-0.299
SB-124	4.156E-02		9.070E-02	1.495E-01	1.389E-02	0.278
I-125	9.301E-03		1.154E+00	1.948E+00	1.767E-01	0.005
SB-125	1.565E-01		1.816E-01	3.345E-01	2.897E-02	0.468
SB-126	3.955E-01		7.437E-01	1.227E+00	1.125E-01	0.322
I-129	-1.793E-01		1.076E-01	1.687E-01	1.771E-02	-1.063
I-131	4.638E-01		1.001E+00	1.652E+00	1.365E-01	0.281
BA-133	1.809E-01	+	1.505E-01	2.114E-01	2.743E-02	0.856
CS-134	1.675E-02		6.694E-02	1.084E-01	1.010E-02	0.155
CS-135	4.940E-01		3.703E-01	5.847E-01	4.759E-02	0.845
CS-136	-1.159E-01		4.568E-01	6.971E-01	5.878E-02	-0.166
CS-137	-1.676E-02		7.489E-02	1.165E-01	1.090E-02	-0.144
LA-138	-3.336E-02		9.991E-02	1.688E-01	1.387E-02	-0.198
CE-139	-1.607E-03		7.914E-02	1.286E-01	1.028E-02	-0.012
BA-140	-1.128E+00		1.241E+00	1.982E+00	6.593E-01	-0.569
LA-140	4.215E-01		4.181E-01	6.808E-01	5.585E-02	0.619
CE-144	-4.454E-01		5.555E-01	8.829E-01	8.160E-02	-0.505
PM-144	4.687E-02		6.666E-02	1.124E-01	1.041E-02	0.417
PM-145	-1.481E-01		2.618E-01	4.019E-01	2.617E-01	-0.368
PM-146	8.443E-03		1.253E-01	2.239E-01	1.941E-02	0.038
ND-147	-8.298E-01		2.891E+00	5.052E+00	4.587E-01	-0.164
EU-152	9.528E-01	+	5.850E-01	1.009E+00	1.068E-01	0.944
GD-153	-3.594E-01		2.533E-01	3.947E-01	3.862E-02	-0.911
EU-154	-2.405E-02		2.122E-01	3.270E-01	2.676E-02	-0.074
EU-155	1.052E+00	+	2.338E-01	3.999E-01	3.925E-02	2.631
EU-156	2.540E-02		2.759E+00	4.363E+00	9.973E-01	0.006
HO-166M	1.702E-02		1.208E-01	1.938E-01	1.783E-02	0.088
HF-172	-3.382E-01		4.723E-01	7.544E-01	7.177E-02	-0.448
LU-172	3.018E+00		2.822E+00	5.380E+00	4.401E-01	0.561
HF-175	-9.231E-03		1.157E-01	1.479E-01	1.223E-02	-0.062
LU-176	1.381E-02		5.520E-02	9.020E-02	7.401E-03	0.153
TA-182	3.217E+00	+	6.807E-01	1.004E+00	8.219E-02	3.204
IR-192	-1.461E-01		1.498E-01	2.515E-01	2.203E-02	-0.581
HG-203	1.516E-01		1.230E-01	1.936E-01	1.618E-02	0.783
BI-207	3.722E-02		5.863E-02	1.071E-01	9.870E-03	0.347
BI-210M	7.693E-03		1.438E-01	1.875E-01	1.529E-02	0.041
PB-211	-1.098E+00		1.824E+00	3.147E+00	2.616E-01	-0.349
RN-219	4.208E-01		7.843E-01	1.427E+00	1.183E-01	0.295
RA-225	3.172E-01		7.765E-01	1.226E+00	1.026E-01	0.259
TH-227	8.170E-01	+	3.634E-01	9.644E-01	7.897E-02	0.847
TH-230	-7.233E+00		1.820E+01	2.744E+01	2.144E+00	-0.264
PA-231	2.467E+00		2.570E+00	4.008E+00	3.284E-01	0.616
TH-231	1.121E+00		6.409E-01	1.097E+00	1.341E-01	1.022
PA-233	-6.237E-03		2.977E-01	4.799E-01	1.070E-01	-0.013

Sample ID : 1111065-03 Acquisition date : 10-DEC-2011 13:08:36

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/gram)	K.L. Ided	Act error	MDA (pCi/gram)	MDA error	Act/MDA
PA-234	4.332E-01		2.642E-01	4.462E-01	4.161E-02	0.971
U-235	9.689E-01	+	9.781E-01	8.906E-01	1.570E-01	1.088
AM-241	2.449E-01		1.966E-01	2.768E-01	1.961E-02	0.885
AM-243	1.047E+00		1.571E-01	2.191E-01	1.865E-02	4.780
CM-243	2.528E-01		4.329E-01	6.610E-01	5.357E-02	0.382

Sample ID : 1111065-03 Acquisition date : 10-DEC-2011 13:08:36

Total number of lines in spectrum 79
Number of unidentified lines 41
Number of lines tentatively identified by NID 38 48.10%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/gram	Wtd Mean Decay Corr pCi/gram	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.604E+01	2.604E+01	0.318E+01	12.20	
TL-208	1.41E+10Y	1.00	1.619E+00	1.619E+00	0.292E+00	18.05	
PB-210	22.26Y	1.00	5.595E+00	5.610E+00	2.105E+00	37.52	
BI-212	1.41E+10Y	1.00	1.547E+00	1.547E+00	0.765E+00	49.42	
PB-212	1.41E+10Y	1.00	2.308E+00	2.308E+00	0.283E+00	12.24	
BI-214	1602.00Y	1.00	6.163E+00	6.164E+00	0.537E+00	8.71	
PB-214	1602.00Y	1.00	6.314E+00	6.314E+00	0.534E+00	8.46	
RA-223	3.28E+04Y	1.00	1.533E+00	1.533E+00	1.596E+00	104.13	
RA-224	1.41E+10Y	1.00	1.534E+01	1.534E+01	0.266E+01	17.36	
RA-226	1602.00Y	1.00	2.041E+01	2.041E+01	3.753E+01	183.85	
AC-228	1.41E+10Y	1.00	1.929E+00	1.929E+00	0.363E+00	18.80	
PA-234M	4.47E+09Y	1.00	1.693E+01	1.693E+01	0.973E+01	57.44	
TH-234	4.47E+09Y	1.00	1.085E+01	1.085E+01	0.266E+01	24.49	
			---	---			
	Total Activity :		1.166E+02	1.166E+02			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/gram	Wtd Mean Decay Corr pCi/gram	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	8.645E+00	9.063E+00	2.091E+00	23.08	
SN-126	1.00E+05Y	1.00	8.689E-01	8.689E-01	1.936E-01	22.28	
CE-141	32.50D	1.96	2.112E-01	4.140E-01	4.244E-01	102.50	
NP-237	2.14E+06Y	1.00	2.549E+00	2.549E+00	0.567E+00	22.22	
			---	---			
	Total Activity :		1.227E+01	1.289E+01			

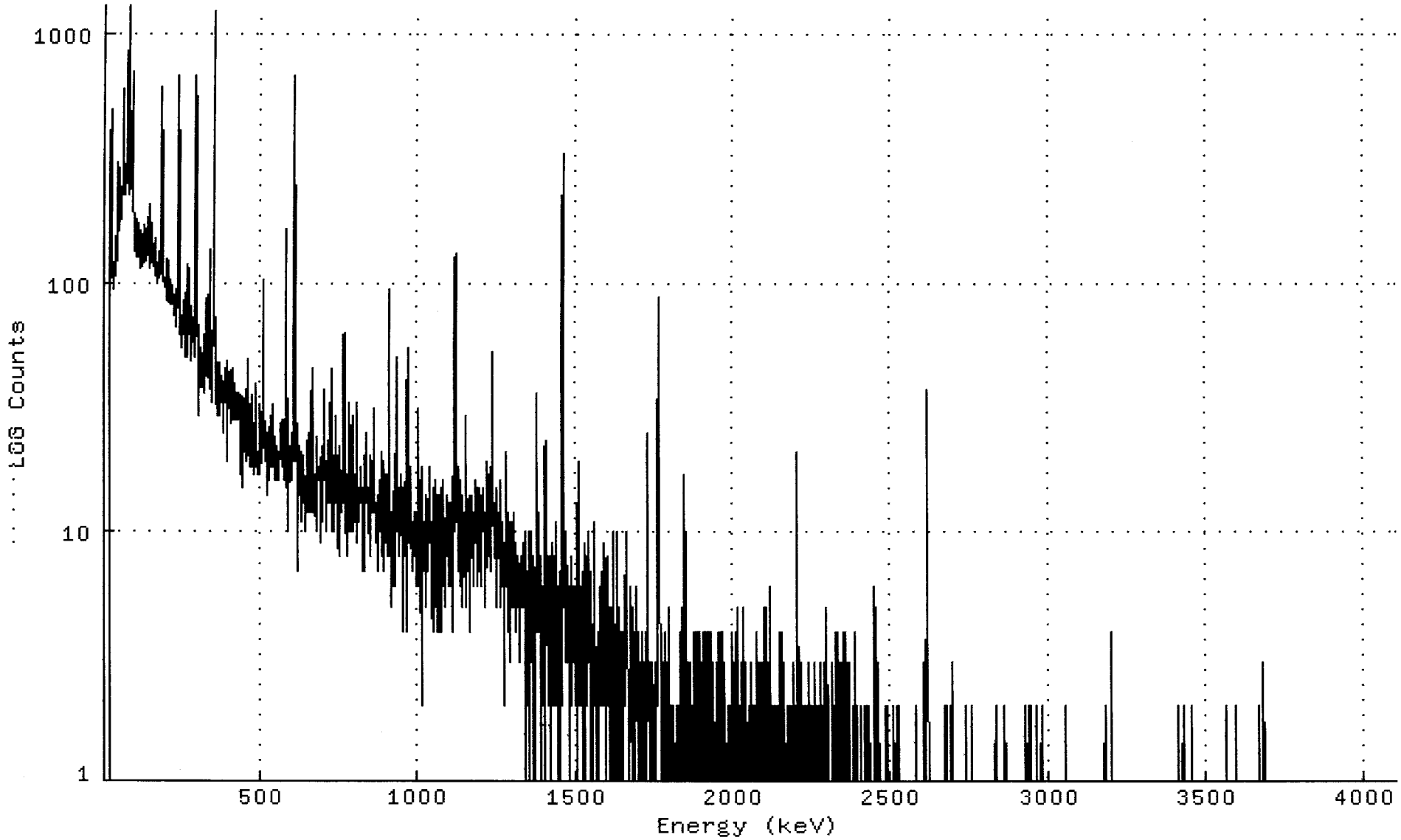
Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/gram	Wtd Mean Decay Corr pCi/gram	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
LU-173	1.37Y	1.04	9.393E-01	9.813E-01	5.371E-01	54.73	
			---	---			
	Total Activity :		9.393E-01	9.813E-01			

Grand Total Activity : 1.298E+02 1.305E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106503_GE1_GAS1102_172246.CNF;1
Title :
Sample Title: DY2-11-31-111109
Start Time: 10-DEC-2011 13:08 Sample Time: 9-NOV-2011 00:00: Energy Offset: 3.84457E-01
Real Time : 0 01:00:02.15 Sample ID : 1111065-03 Energy Slope : 9.99792E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106503_GE1_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	0	0	0
17:	0	0	96	185	170	333	494	387
25:	147	126	103	106	101	99	93	119
33:	110	104	105	123	114	117	115	152
41:	122	122	159	168	176	301	276	160
49:	164	183	175	170	242	221	190	177
57:	193	219	223	249	244	330	599	401
65:	223	223	250	290	237	286	260	248
73:	272	504	840	527	1304	591	282	273
81:	276	225	244	413	284	243	485	408
89:	223	372	290	444	691	276	218	162
97:	185	172	181	168	137	125	163	137
105:	159	178	143	125	173	151	146	137
113:	151	131	160	140	135	114	135	117
121:	116	132	123	130	154	139	119	130
129:	170	167	143	159	156	121	156	143
137:	164	136	133	127	130	130	162	204
145:	137	138	154	124	113	137	120	148
153:	147	157	171	116	129	143	120	118
161:	124	125	149	137	106	109	117	120
169:	115	115	114	99	107	104	111	132
177:	104	106	115	108	125	130	125	130
185:	242	607	272	117	100	106	115	113
193:	97	104	102	97	95	103	98	91
201:	84	109	89	123	95	105	83	97
209:	122	112	93	95	86	81	90	81
217:	85	91	81	88	96	91	73	86
225:	87	77	88	84	94	73	66	79
233:	68	73	83	125	82	377	674	159
241:	218	406	205	68	62	65	70	56
249:	54	73	56	62	74	63	62	80
257:	76	78	91	65	50	63	58	55
265:	56	55	50	56	89	117	112	84
273:	72	69	70	61	62	80	60	68
281:	69	48	51	65	72	57	68	58
289:	63	56	57	50	51	124	669	454
297:	78	69	78	82	60	60	41	52
305:	67	36	29	53	54	42	38	42
313:	46	48	51	42	52	42	38	45
321:	42	52	62	62	36	47	48	86
329:	58	56	45	47	53	53	41	57
337:	59	135	128	61	44	55	37	50
345:	43	35	49	33	64	62	409	1214
353:	430	58	55	72	62	48	46	34
361:	33	31	41	35	43	41	47	29
369:	31	47	33	29	32	40	41	42
377:	39	34	35	42	25	37	32	36
385:	31	35	45	33	43	36	44	41
393:	40	48	30	36	19	37	43	33
401:	37	41	31	35	43	27	33	36
409:	44	41	28	40	45	29	32	30
417:	31	32	32	28	39	29	29	28
425:	36	36	36	35	36	29	32	28

433:	28	29	33	17	30	25	30	35
441:	34	23	19	15	25	33	34	21
449:	23	26	26	32	19	24	23	37
457:	33	20	33	32	20	34	49	39
465:	29	25	27	23	32	21	18	35
473:	18	26	22	20	23	27	25	26
481:	26	17	20	35	28	34	39	19
489:	18	19	20	20	21	18	17	19
497:	22	26	22	32	17	20	22	27
505:	30	26	21	22	23	68	102	53
513:	40	19	20	19	21	22	19	22
521:	25	19	23	14	23	17	26	19
529:	20	16	21	21	26	29	20	18
537:	19	20	18	30	21	32	30	17
545:	16	23	20	17	24	23	21	20
553:	17	16	22	17	19	21	21	21
561:	18	16	23	20	26	21	25	27
569:	21	28	25	20	18	22	19	17
577:	16	20	17	27	29	58	162	128
585:	29	15	27	34	10	17	19	15
593:	16	17	16	16	22	16	16	24
601:	20	19	17	25	21	19	28	109
609:	660	670	90	24	32	27	20	19
617:	27	14	7	15	17	14	17	17
625:	14	22	20	15	13	14	21	12
633:	11	19	16	15	16	14	13	20
641:	15	12	12	14	13	10	12	23
649:	22	12	17	14	14	17	18	12
657:	25	15	17	13	16	12	25	16
665:	30	45	12	15	15	16	19	15
673:	16	17	13	17	13	10	14	24
681:	15	21	18	18	17	16	17	16
689:	18	16	12	15	9	18	18	22
697:	15	16	12	11	20	17	37	19
705:	21	24	16	16	19	17	10	15
713:	15	23	13	14	19	13	15	33
721:	18	15	17	13	13	17	31	45
729:	19	19	14	10	10	13	18	14
737:	20	13	16	13	20	14	29	17
745:	17	11	20	14	10	9	8	9
753:	13	17	18	22	14	13	13	17
761:	12	15	16	13	14	27	25	60
769:	63	24	13	15	21	12	8	13
777:	17	15	11	14	10	16	10	21
785:	33	30	24	10	13	13	17	11
793:	10	19	29	21	14	13	11	12
801:	11	13	17	11	19	33	23	9
809:	15	12	11	13	15	14	12	13
817:	17	13	14	18	16	16	14	15
825:	15	15	7	8	13	12	8	16
833:	20	7	16	21	15	23	21	25
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857:	13	13	12	31	23	12	12	13
865:	12	13	9	13	9	10	10	14
873:	10	12	7	11	13	11	12	13
881:	10	16	11	10	8	20	15	21
889:	9	8	19	9	12	7	12	11
897:	9	14	17	14	10	8	16	8
905:	12	14	17	8	15	28	91	94

913:	24	8	12	11	9	5	6	12
921:	12	13	6	6	11	13	16	6
929:	16	9	16	16	26	50	43	16
937:	12	10	12	12	8	9	15	12
945:	14	10	17	10	14	10	9	4
953:	9	12	15	11	12	8	11	10
961:	9	15	17	22	31	18	4	31
969:	53	54	17	13	15	9	18	11
977:	16	12	13	9	8	9	7	10
985:	11	9	12	10	10	11	9	8
993:	12	9	11	7	6	8	13	11
1001:	25	31	10	12	6	8	16	12
1009:	11	14	11	2	8	18	11	13
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1073:	6	13	15	6	4	9	13	14
1081:	11	7	16	8	8	7	5	6
1089:	10	8	10	9	13	11	14	10
1097:	8	6	8	9	10	13	13	8
1105:	10	10	6	11	5	10	10	4
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1121:	131	54	14	12	14	11	18	8
1129:	8	10	12	7	10	16	11	11
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1145:	7	9	12	11	11	12	11	10
1153:	5	13	29	18	10	12	11	7
1161:	8	12	9	14	10	13	4	10
1169:	9	9	12	10	14	10	6	10
1177:	8	10	9	12	10	16	9	15
1185:	15	9	12	11	6	9	11	13
1193:	15	7	8	15	8	10	11	9
1201:	13	6	13	12	14	11	13	15
1209:	13	10	13	10	6	8	7	12
1217:	5	10	11	12	10	19	10	12
1225:	14	17	13	8	11	7	12	11
1233:	11	11	18	15	19	51	53	20
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1249:	6	15	11	15	10	11	9	8
1257:	12	8	12	5	9	5	6	16
1265:	6	8	7	11	6	6	6	8
1273:	8	9	8	5	2	6	10	11
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1289:	7	9	7	9	5	11	3	10
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1305:	6	5	10	7	5	8	9	9
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1337:	5	9	5	6	5	3	10	1
1345:	7	7	2	2	5	5	1	10
1353:	5	6	7	4	10	7	5	7
1361:	9	3	5	5	7	8	4	1
1369:	3	7	4	1	3	6	4	13
1377:	20	36	26	8	4	8	4	7
1385:	12	10	4	7	1	8	2	4

1393:	2	4	3	5	6	3	2	5
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1409:	23	8	4	8	3	8	2	4
1417:	7	8	4	7	1	6	6	2
1425:	7	8	9	2	6	8	3	8
1433:	6	2	5	11	5	2	2	7
1441:	6	5	6	6	3	1	5	7
1449:	5	5	1	6	3	3	4	6
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1465:	8	5	10	4	6	3	3	9
1473:	6	4	5	5	3	4	3	1
1481:	1	6	2	1	8	3	3	2
1489:	6	3	5	3	3	3	6	6
1497:	6	4	4	4	5	2	8	1
1505:	1	4	3	9	19	16	9	7
1513:	6	2	6	5	5	4	2	6
1521:	3	7	3	4	0	4	5	0
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1545:	2	0	2	3	4	7	3	3
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1561:	3	2	4	3	0	0	2	2
1569:	2	1	4	3	2	2	2	4
1577:	2	4	5	6	2	3	7	5
1585:	3	2	4	6	7	4	2	5
1593:	9	7	7	5	3	4	0	4
1601:	2	3	8	5	3	3	2	1
1609:	2	5	2	5	1	1	2	5
1617:	3	1	4	6	5	10	3	3
1625:	1	1	1	0	3	6	10	2
1633:	2	3	1	1	2	2	1	5
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1649:	3	4	2	0	3	2	3	2
1657:	4	5	2	5	9	10	5	4
1665:	5	4	2	1	1	1	2	1
1673:	2	2	2	3	4	6	3	2
1681:	1	2	1	5	2	4	3	1
1689:	1	4	3	6	5	4	2	3
1697:	0	2	3	0	4	1	0	1
1705:	3	2	1	1	2	1	1	1
1713:	4	2	1	2	0	3	2	1
1721:	2	2	4	1	1	3	2	12
1729:	18	22	25	7	3	1	2	1
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1745:	1	1	1	1	2	0	2	3
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1777:	0	2	2	2	3	2	1	1
1785:	2	4	2	2	1	1	1	1
1793:	3	2	0	5	3	1	0	1
1801:	1	2	1	0	2	2	1	2
1809:	2	0	1	1	1	0	1	0
1817:	0	2	2	1	1	1	2	2
1825:	2	1	0	2	0	1	1	0
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1841:	0	2	1	1	0	6	16	17
1849:	6	5	1	3	2	1	1	1
1857:	1	3	3	0	3	0	2	1
1865:	1	0	0	2	2	2	1	1

1873:	1	4	3	1	4	0	1	4
1881:	3	4	2	1	0	3	4	0
1889:	1	2	4	4	1	3	2	0
1897:	1	1	1	3	1	0	2	4
1905:	2	1	0	2	1	0	4	2
1913:	2	1	1	1	3	2	4	4
1921:	1	4	1	0	2	2	3	3
1929:	1	1	2	4	2	1	2	1
1937:	1	1	3	1	0	1	1	1
1945:	1	2	2	0	0	1	3	1
1953:	1	4	1	4	2	1	0	0
1961:	2	4	1	1	1	1	4	2
1969:	0	2	0	3	2	0	2	0
1977:	0	1	1	1	1	0	1	0
1985:	0	0	2	0	2	2	2	0
1993:	1	2	4	1	1	2	3	0
2001:	2	3	2	1	0	1	2	0
2009:	3	2	4	1	0	5	1	1
2017:	2	4	0	2	0	2	0	0
2025:	2	3	3	3	1	2	1	2
2033:	5	0	0	0	1	1	0	1
2041:	2	3	0	0	0	1	1	0
2049:	1	1	0	1	0	2	1	0
2057:	3	1	1	1	1	0	0	0
2065:	1	2	2	0	1	0	0	1
2073:	1	0	2	4	2	2	2	2
2081:	3	3	0	2	3	0	3	1
2089:	0	0	1	3	1	0	1	0
2097:	0	1	1	2	3	5	5	2
2105:	4	0	5	0	0	3	0	0
2113:	0	2	0	1	4	6	3	6
2121:	3	1	0	2	0	0	0	0
2129:	0	2	0	2	2	1	0	2
2137:	2	0	2	2	0	0	0	1
2145:	1	3	4	3	2	2	1	1
2153:	4	0	1	0	1	1	0	1
2161:	3	0	2	1	0	0	1	1
2169:	0	1	1	1	0	1	2	0
2177:	0	1	2	0	2	0	0	0
2185:	0	0	2	1	1	1	3	2
2193:	2	0	1	2	1	0	2	0
2201:	1	2	12	17	21	6	2	2
2209:	1	2	2	1	2	1	1	1
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2225:	0	1	1	2	2	1	1	2
2233:	1	1	0	0	1	0	0	3
2241:	1	0	0	0	2	0	2	1
2249:	1	2	0	2	0	0	3	0
2257:	1	3	1	1	0	1	1	2
2265:	0	1	1	1	2	2	2	2
2273:	2	1	3	1	0	0	1	1
2281:	1	0	0	0	2	2	3	3
2289:	2	0	1	3	5	3	1	1
2297:	3	2	2	1	1	2	0	0
2305:	1	1	1	0	0	0	3	2
2313:	0	2	2	1	1	1	0	2
2321:	1	4	1	0	1	1	1	2
2329:	2	2	4	1	0	1	3	1
2337:	1	1	0	1	2	3	2	1
2345:	1	3	0	3	4	2	2	0

2353:	1	0	4	2	0	0	1	3
2361:	0	0	1	1	2	1	1	3
2369:	0	1	0	1	0	1	1	0
2377:	0	1	0	2	0	0	4	1
2385:	1	0	1	1	2	1	2	2
2393:	0	0	1	1	0	0	1	0
2401:	0	1	2	2	1	1	1	0
2409:	0	1	0	1	1	2	1	1
2417:	0	2	0	1	2	0	0	0
2425:	0	1	0	2	0	2	0	0
2433:	0	1	0	0	0	1	0	1
2441:	1	1	1	0	3	6	6	5
2449:	5	2	1	1	1	2	2	1
2457:	1	0	1	3	2	1	1	0
2465:	0	0	0	1	0	0	0	0
2473:	1	0	1	1	0	0	1	1
2481:	0	1	1	1	2	2	1	1
2489:	1	1	1	1	0	0	1	1
2497:	1	0	1	1	0	0	0	1
2505:	1	0	2	0	0	1	0	1
2513:	0	1	0	2	2	0	1	0
2521:	0	0	2	0	1	0	0	0
2529:	0	1	0	0	1	0	0	0
2537:	1	0	1	1	0	0	1	0
2545:	1	1	1	0	1	0	1	0
2553:	0	1	0	1	0	0	0	1
2561:	0	0	0	0	1	1	0	0
2569:	0	0	0	0	1	0	1	0
2577:	0	1	0	1	2	0	0	0
2585:	1	0	0	0	1	1	0	0
2593:	0	0	0	0	0	0	0	0
2601:	0	1	2	0	3	0	0	1
2609:	0	0	2	0	14	28	37	14
2617:	3	3	1	1	1	1	0	0
2625:	0	0	0	0	0	1	0	0
2633:	0	0	0	0	0	0	1	0
2641:	0	0	0	0	0	0	1	0
2649:	0	0	0	0	0	0	0	1
2657:	1	1	1	0	1	0	0	1
2665:	0	0	0	1	1	2	0	0
2673:	2	0	0	2	0	1	1	0
2681:	0	0	1	0	0	0	2	0
2689:	0	1	1	1	1	0	3	0
2697:	1	0	0	1	0	0	0	0
2705:	1	0	0	1	0	0	0	0
2713:	1	0	0	0	0	0	0	0
2721:	0	0	0	0	0	1	0	0
2729:	1	0	1	0	0	0	1	2
2737:	0	0	0	1	0	0	0	0
2745:	0	1	0	0	1	1	0	1
2753:	0	0	0	2	0	1	0	0
2761:	0	0	0	0	0	0	0	0
2769:	0	1	0	0	1	0	0	0
2777:	0	0	0	1	0	0	0	0
2785:	1	1	0	0	0	0	0	0
2793:	0	0	0	0	1	1	0	0
2801:	1	0	0	0	0	0	0	0
2809:	0	0	0	0	0	0	0	0
2817:	0	0	0	0	1	1	0	0
2825:	0	0	0	0	0	0	0	2

2833:	0	1	0	1	0	0	0	0
2841:	0	0	0	0	0	0	0	0
2849:	0	0	0	0	0	0	1	1
2857:	0	1	0	0	2	0	1	0
2865:	0	0	0	0	0	0	1	0
2873:	1	0	0	1	0	1	0	0
2881:	0	0	0	0	0	1	0	1
2889:	0	0	0	0	0	0	0	0
2897:	0	0	0	0	0	0	1	0
2905:	0	0	0	0	0	1	0	0
2913:	0	0	0	0	0	0	0	1
2921:	0	0	0	1	0	1	0	2
2929:	0	0	1	0	0	0	0	0
2937:	0	0	2	0	2	1	0	0
2945:	0	0	0	1	0	0	1	0
2953:	0	0	0	0	0	0	1	0
2961:	0	2	1	0	0	1	0	0
2969:	1	0	0	0	0	0	0	0
2977:	2	0	0	1	0	0	0	0
2985:	0	0	0	0	0	0	0	0
2993:	1	0	0	0	0	0	1	1
3001:	0	0	0	0	0	0	0	1
3009:	0	0	0	0	0	0	0	0
3017:	1	0	0	0	1	0	0	0
3025:	0	0	0	0	1	0	0	0
3033:	0	0	0	1	0	1	1	0
3041:	0	0	0	0	0	0	0	0
3049:	0	0	2	1	0	1	0	1
3057:	0	0	0	0	0	1	0	0
3065:	0	1	1	0	0	0	0	1
3073:	0	1	0	0	1	1	0	0
3081:	0	0	1	0	1	0	1	0
3089:	0	0	0	0	0	0	0	0
3097:	0	0	0	0	0	0	0	0
3105:	0	0	1	0	0	0	0	0
3113:	0	0	0	0	0	0	0	0
3121:	0	1	0	1	0	0	0	1
3129:	0	0	0	0	0	0	0	0
3137:	0	0	0	0	1	1	1	0
3145:	0	1	0	1	0	1	0	0
3153:	0	0	0	0	0	0	0	0
3161:	0	0	0	0	0	0	0	0
3169:	0	1	1	0	0	0	0	0
3177:	2	0	0	0	0	0	0	0
3185:	0	0	0	0	0	0	0	1
3193:	0	0	0	0	1	4	1	0
3201:	0	1	0	0	0	0	0	0
3209:	0	1	0	0	0	0	1	1
3217:	0	1	0	0	0	0	0	0
3225:	0	1	0	0	0	1	0	0
3233:	0	0	0	0	0	0	0	0
3241:	0	1	1	0	0	0	0	0
3249:	1	0	0	0	0	1	0	0
3257:	0	0	0	0	0	0	0	0
3265:	0	0	0	0	0	0	0	0
3273:	0	0	0	0	0	0	0	0
3281:	0	0	0	0	0	0	0	1
3289:	1	0	0	0	0	0	0	0
3297:	0	0	0	0	0	0	0	0
3305:	0	1	0	0	0	0	0	0

3313:	0	0	0	0	0	0	0	0
3321:	1	0	1	0	0	0	0	0
3329:	0	1	0	0	0	0	1	0
3337:	0	0	0	0	1	0	0	0
3345:	0	0	0	0	0	0	0	0
3353:	0	1	1	0	0	1	0	0
3361:	0	0	0	0	1	1	1	0
3369:	0	1	0	0	0	1	0	0
3377:	0	1	0	0	0	0	0	0
3385:	0	0	0	0	0	0	0	0
3393:	0	0	0	0	1	0	0	0
3401:	1	0	1	1	0	1	0	0
3409:	0	1	0	2	0	0	0	0
3417:	0	1	0	0	1	1	0	0
3425:	0	2	0	0	1	0	0	0
3433:	0	0	0	0	0	0	0	0
3441:	0	0	0	0	0	1	0	0
3449:	0	0	0	0	2	0	0	0
3457:	0	0	0	0	0	0	0	1
3465:	0	0	1	0	0	0	0	0
3473:	0	0	0	1	0	0	1	0
3481:	0	1	0	0	0	0	1	0
3489:	0	0	0	0	0	0	1	0
3497:	0	0	1	0	0	0	0	0
3505:	0	0	0	1	0	0	0	0
3513:	0	0	0	0	0	0	0	0
3521:	1	0	0	0	0	0	0	0
3529:	0	1	0	0	1	0	0	0
3537:	1	0	0	0	0	0	0	0
3545:	0	0	1	0	0	0	0	0
3553:	0	0	0	0	0	0	0	0
3561:	0	0	0	2	0	0	0	0
3569:	0	1	0	0	0	0	1	1
3577:	1	0	1	0	0	0	0	0
3585:	0	0	0	0	0	0	0	0
3593:	0	2	0	0	0	0	1	0
3601:	0	0	0	0	0	0	0	0
3609:	0	0	0	0	1	0	0	0
3617:	0	0	0	0	0	0	0	0
3625:	0	0	0	0	0	0	0	0
3633:	0	0	0	0	0	0	1	0
3641:	1	0	0	0	0	0	0	0
3649:	0	1	0	1	1	0	0	0
3657:	1	0	0	0	0	0	1	0
3665:	0	2	0	0	0	0	0	0
3673:	1	0	0	1	0	0	0	3
3681:	0	0	0	0	1	0	0	0
3689:	0	0	0	0	0	0	0	0
3697:	1	0	0	0	0	0	1	0
3705:	0	0	0	0	0	1	1	0
3713:	1	0	1	1	1	0	0	0
3721:	0	0	0	0	0	1	0	0
3729:	0	0	0	1	0	0	0	0
3737:	0	0	0	1	0	0	0	0
3745:	1	0	0	0	0	0	0	0
3753:	0	0	0	1	0	0	0	0
3761:	0	0	1	0	0	0	0	0
3769:	0	0	1	0	0	0	0	0
3777:	0	0	0	0	0	0	0	0
3785:	1	0	0	0	0	0	0	0

3793:	0	0	0	0	0	0	0	0
3801:	0	1	0	0	0	1	0	0
3809:	0	0	0	0	0	0	0	0
3817:	0	0	0	0	0	0	1	0
3825:	0	0	0	0	0	0	0	0
3833:	0	0	0	0	0	0	0	0
3841:	0	0	0	0	0	0	0	0
3849:	0	0	0	0	0	0	0	0
3857:	0	0	0	0	0	0	1	0
3865:	1	0	0	1	0	0	0	0
3873:	0	0	0	1	0	1	1	0
3881:	1	0	0	1	0	1	0	0
3889:	0	0	0	0	0	0	0	0
3897:	1	0	0	0	0	0	0	0
3905:	0	1	0	0	1	0	0	0
3913:	0	0	0	0	0	0	0	0
3921:	0	0	0	0	0	0	1	0
3929:	0	0	0	0	1	0	0	1
3937:	0	0	0	0	0	0	0	0
3945:	0	1	0	0	0	0	0	0
3953:	0	0	1	0	0	0	0	0
3961:	0	0	0	0	0	0	0	0
3969:	0	0	0	0	0	0	0	0
3977:	0	0	0	0	0	0	0	0
3985:	0	1	0	0	0	0	0	0
3993:	0	0	0	0	1	0	0	0
4001:	1	0	0	0	0	1	0	0
4009:	1	0	0	0	0	0	0	0
4017:	0	0	1	0	0	0	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	0	0	0	0	0
4041:	0	0	1	1	0	1	0	0
4049:	0	0	0	0	0	0	0	0
4057:	0	0	0	0	0	0	1	0
4065:	0	0	0	0	0	0	0	0
4073:	0	0	0	0	0	0	0	0
4081:	0	0	0	0	0	0	0	1
4089:	0	0	0	0	0	0	0	0

Sample ID : 1111065-04 Acquisition date : 10-DEC-2011 14:13:16

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VAX/VMS Peak Search Report Generated 10-DEC-2011 15:14:09.25

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106504_GE1_GAS1102_172253.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-11-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 10-DEC-2011 14:13:16
Sample ID : 1111065-04 Sample Quantity : 3.88310E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE1 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:02.17 0.1%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.28*	242	1087	1.91	45.91	44	7	47.2		PB-210
0	63.15*	552	1861	1.45	62.78	58	8	28.7		TH-234
0	76.63*	2251	2518	3.01	76.26	72	9	9.1		
0	87.08	137	1233	1.08	86.72	86	4	73.2		NP-237
										SN-126
										CD-109
0	93.10	847	1713	1.63	92.74	90	8	18.8		
0	129.74	139	863	1.36	129.38	126	7	72.5		
0	144.68*	83	732	1.77	144.33	142	6	105.3		CE-141
0	155.57	77	769	1.34	155.21	152	6	116.7		
1	183.50	54	195	1.39	183.15	182	10	67.6	5.76E+00	
1	186.47*	793	500	1.66	186.13	182	10	11.2		RA-226
10	238.75*	349	444	2.77	238.41	235	12	26.7	7.09E+01	PB-212
10	242.40	675	407	1.88	242.07	235	12	14.4		RA-224
0	270.62	146	552	2.39	270.29	265	9	60.5		LU-173
3	291.86	44	200	1.93	291.54	290	15	94.2	1.88E+00	
3	295.63*	1149	254	1.56	295.31	290	15	7.3		PB-214
3	300.32	97	359	2.19	300.00	290	15	68.3		PB-212
0	338.92*	220	398	2.07	338.61	334	9	35.7		AC-228
0	352.29*	1927	503	1.41	351.98	347	10	6.3		PB-214
0	409.44	42	202	1.91	409.14	407	6	113.3		
0	463.26	67	237	1.65	462.97	458	10	89.2		
0	512.16*	167	251	2.66	511.88	506	14	45.4		
0	538.35	36	116	3.55	538.08	536	7	103.8		
0	583.65*	316	249	2.06	583.39	577	12	23.0		TL-208
3	609.72*	1520	94	1.70	609.46	598	21	5.5	2.50E+00	BI-214
3	613.64	59	105	2.46	613.39	598	21	114.8		
0	727.96	58	137	2.20	727.73	723	9	77.9		BI-212
0	768.29	162	129	2.38	768.07	764	10	30.5		
5	786.56	67	82	3.12	786.34	781	21	57.9	2.14E+00	
5	794.58	34	84	3.13	794.36	781	21	107.8		
4	835.68	17	39	1.66	835.47	834	11	103.6	4.50E+00	MN-54
4	839.55	35	94	2.61	839.34	834	11	101.4		
0	861.18	35	91	2.39	860.98	856	9	104.8		TL-208
0	911.55*	225	96	2.07	911.35	907	10	21.2		AC-228
0	935.41	87	97	1.92	935.22	930	11	49.0		

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Sample ID : 1111065-04 Acquisition date : 10-DEC-2011 14:13:16

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	964.61	34	96	2.44	964.42	961	14	96.6	1.50E+00	
2	969.46	121	67	2.03	969.27	961	14	28.5		AC-228
0	1001.33*	28	56	1.57	1001.15	998	6	95.8		PA-234M
1	1100.36	22	55	2.28	1100.21	1097	12	118.0	1.44E+00	
1	1105.95	21	53	2.28	1105.79	1097	12	126.0		
0	1120.99	294	122	2.20	1120.84	1116	11	18.8		BI-214
0	1133.96	34	42	4.93	1133.81	1130	8	75.1		
0	1156.33	31	80	1.83	1156.18	1151	9	111.5		
0	1238.96	117	78	2.65	1238.83	1234	8	32.0		
3	1285.12	13	32	2.15	1285.00	1276	22	156.7	4.58E+00	
3	1294.40	22	35	2.86	1294.29	1276	22	104.0		
2	1377.55	61	42	2.64	1377.45	1356	33	45.7	2.20E+00	
2	1385.83	16	30	2.64	1385.73	1356	33	113.7		
1	1402.31	37	33	2.41	1402.22	1398	15	57.8	3.12E+00	
1	1408.25	48	30	2.41	1408.16	1398	15	47.9		
0	1461.29*	655	60	2.06	1461.21	1456	11	9.1		K-40
0	1510.40	33	38	2.12	1510.33	1506	11	77.9		
0	1527.65	13	13	1.65	1527.58	1525	7	106.0		
0	1582.17	20	25	4.26	1582.11	1577	10	101.9		
0	1709.80	12	13	3.53	1709.77	1704	9	125.7		
0	1730.69	60	11	2.49	1730.67	1726	12	34.6		
0	1765.04*	250	21	2.48	1765.02	1759	12	14.7		BI-214
1	1843.13	9	5	2.57	1843.12	1841	16	88.2	2.47E+00	
1	1848.23	37	14	2.57	1848.23	1841	16	44.5		
0	1874.70	6	3	2.69	1874.71	1871	6	120.2		
0	1973.65	8	2	3.45	1973.68	1970	7	86.6		
0	2072.33	9	5	3.65	2072.37	2068	9	119.1		
0	2106.17	11	12	4.42	2106.22	2100	9	128.3		
0	2119.05	15	9	1.79	2119.10	2115	6	82.1		
4	2204.36	63	6	2.94	2204.44	2199	19	29.6	3.60E+00	BI-214
4	2208.27	9	9	3.58	2208.35	2199	19	213.0		
4	2211.65	8	9	3.26	2211.73	2199	19	168.6		
0	2283.86	8	2	2.62	2283.96	2280	8	94.7		
0	2484.72	7	0	2.98	2484.86	2481	7	75.6		
0	2614.59*	89	10	2.08	2614.75	2611	9	25.1		TL-208
0	3197.55	6	0	1.98	3197.83	3195	6	81.6		

Sample ID : 1111065-04 Acquisition date : 10-DEC-2011 14:13:16

Total number of lines in spectrum	70	
Number of unidentified lines	32	
Number of lines tentatively identified by NID	38	54.29%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.360E+01	2.360E+01	0.309E+01	13.08	
TL-208	1.41E+10Y	1.00	1.576E+00	1.576E+00	0.292E+00	18.50	
PB-210	22.26Y	1.00	4.417E+00	4.429E+00	2.126E+00	48.00	
BI-212	1.41E+10Y	1.00	1.104E+00	1.104E+00	0.867E+00	78.53	
PB-212	1.41E+10Y	1.00	7.781E-01	7.781E-01	2.120E-01	27.25	
BI-214	1602.00Y	1.00	6.448E+00	6.449E+00	0.541E+00	8.40	
PB-214	1602.00Y	1.00	6.606E+00	6.606E+00	0.532E+00	8.05	
RA-224	1.41E+10Y	1.00	1.661E+01	1.661E+01	0.283E+01	17.04	
RA-226	1602.00Y	1.00	2.025E+01	2.025E+01	3.715E+01	183.49	
AC-228	1.41E+10Y	1.00	2.177E+00	2.177E+00	0.356E+00	16.34	
PA-234M	4.47E+09Y	1.00	8.761E+00	8.761E+00	8.430E+00	96.23	
TH-234	4.47E+09Y	1.00	9.730E+00	9.730E+00	2.907E+00	29.88	
			---	---			
	Total Activity :		1.021E+02	1.021E+02			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
MN-54	312.70D	1.07	4.244E-02	4.552E-02	4.736E-02	104.06	
LU-173	1.37Y	1.04	7.229E-01	7.552E-01	4.621E-01	61.18	
			---	---			
	Total Activity :		7.653E-01	8.007E-01			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	2.438E+00	2.556E+00	1.898E+00	74.25	
SN-126	1.00E+05Y	1.00	2.450E-01	2.450E-01	1.813E-01	74.00	
CE-141	32.50D	1.96	1.287E-01	2.525E-01	2.736E-01	108.35	
NP-237	2.14E+06Y	1.00	7.189E-01	7.189E-01	5.319E-01	73.99	
			---	---			
	Total Activity :		3.530E+00	3.772E+00			

Grand Total Activity : 1.063E+02 1.066E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-04 Acquisition date : 10-DEC-2011 14:13:16

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	5.027E-01	2.360E+01	2.360E+01	13.08	OK
	Final Mean for 1 Valid Peaks = 2.360E+01+/- 3.087E+00 (13.08%)						
TL-208	583.14	30.22*	1.029E+00	1.967E+00	1.967E+00	25.10	OK
	860.37	4.48	7.505E-01	2.005E+00	2.005E+00	105.18	OK
	2614.66	35.85	3.563E-01	1.348E+00	1.348E+00	27.23	OK
	Final Mean for 3 Valid Peaks = 1.576E+00+/- 2.916E-01 (18.50%)						
PB-210	46.50	4.05*	2.613E+00	4.417E+00	4.429E+00	48.00	OK
	Final Mean for 1 Valid Peaks = 4.429E+00+/- 2.126E+00 (48.00%)						
BI-212	727.17	11.80*	8.597E-01	1.104E+00	1.104E+00	78.53	OK
	1620.62	2.75	4.684E-01	----- Line Not Found		-----	Absent
	Final Mean for 1 Valid Peaks = 1.104E+00+/- 8.669E-01 (78.53%)						
PB-212	238.63	44.60*	2.000E+00	7.555E-01	7.555E-01	28.19	OK
	300.09	3.41	1.716E+00	3.201E+00	3.201E+00	68.89	OK
	Final Mean for 2 Valid Peaks = 7.781E-01+/- 2.120E-01 (27.25%)						
BI-214	609.31	46.30*	9.927E-01	6.395E+00	6.396E+00	11.53	OK
	1120.29	15.10	6.104E-01	6.159E+00	6.159E+00	20.92	OK
	1764.49	15.80	4.432E-01	6.896E+00	6.896E+00	17.23	OK
	2204.22	4.98	3.885E-01	6.276E+00	6.277E+00	31.11	OK
	Final Mean for 4 Valid Peaks = 6.449E+00+/- 5.414E-01 (8.40%)						
PB-214	295.21	19.19	1.736E+00	6.668E+00	6.668E+00	11.63	OK
	351.92	37.19*	1.529E+00	6.551E+00	6.551E+00	11.15	OK
	Final Mean for 2 Valid Peaks = 6.606E+00+/- 5.318E-01 (8.05%)						
RA-224	240.98	3.95*	1.987E+00	1.661E+01	1.661E+01	17.04	OK
	Final Mean for 1 Valid Peaks = 1.661E+01+/- 2.830E+00 (17.04%)						
RA-226	186.21	3.28*	2.308E+00	2.025E+01	2.025E+01	183.49	OK
	Final Mean for 1 Valid Peaks = 2.025E+01+/- 3.715E+01 (183.49%)						
AC-228	338.32	11.40	1.575E+00	2.369E+00	2.369E+00	36.82	OK
	911.07	27.70*	7.170E-01	2.193E+00	2.193E+00	22.95	OK
	969.11	16.60	6.829E-01	2.058E+00	2.058E+00	29.90	OK
	Final Mean for 3 Valid Peaks = 2.177E+00+/- 3.557E-01 (16.34%)						

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Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
PA-234M	1001.03	0.92*	6.658E-01	8.761E+00	8.761E+00	96.23	OK
Final Mean for 1 Valid Peaks = 8.761E+00+/- 8.430E+00 (96.23%)							
TH-234	63.29	3.80*	2.884E+00	9.730E+00	9.730E+00	29.88	OK
Final Mean for 1 Valid Peaks = 9.730E+00+/- 2.907E+00 (29.88%)							

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
MN-54	834.83	99.97*	7.689E-01	4.244E-02	4.552E-02	104.06	OK
Final Mean for 1 Valid Peaks = 4.552E-02+/- 4.736E-02 (104.06%)							
LU-173	100.72	5.24	2.881E+00	----- Line Not Found -----			Absent
	272.11	21.20*	1.836E+00	7.229E-01	7.552E-01	61.18	OK
Final Mean for 1 Valid Peaks = 7.552E-01+/- 4.621E-01 (61.18%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CD-109	88.03	3.72*	2.931E+00	2.438E+00	2.556E+00	74.25	OK
Final Mean for 1 Valid Peaks = 2.556E+00+/- 1.898E+00 (74.25%)							
SN-126	87.57	37.00*	2.932E+00	2.450E-01	2.450E-01	74.00	OK
Final Mean for 1 Valid Peaks = 2.450E-01+/- 1.813E-01 (74.00%)							
CE-141	145.44	48.40*	2.589E+00	1.287E-01	2.525E-01	108.35	OK
Final Mean for 1 Valid Peaks = 2.525E-01+/- 2.736E-01 (108.35%)							
NP-237	86.50	12.60*	2.935E+00	7.189E-01	7.189E-01	73.99	OK
Final Mean for 1 Valid Peaks = 7.189E-01+/- 5.319E-01 (73.99%)							

Flag: "*" = Keyline

Sample ID : 1111065-04 Acquisition date : 10-DEC-2011 14:13:16

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.360E+01	3.087E+00	1.095E+00	9.282E-02	21.556
MN-54	4.552E-02	4.736E-02	1.280E-01	1.086E-02	0.356
CD-109	2.556E+00	1.898E+00	3.208E+00	3.726E-01	0.797
SN-126	2.450E-01	1.813E-01	3.152E-01	3.133E-02	0.777
CE-141	2.525E-01	2.736E-01	3.578E-01	8.955E-02	0.706
LU-173	7.552E-01	4.621E-01	4.556E-01	3.703E-02	1.657
TL-208	1.576E+00	2.916E-01	3.300E-01	3.052E-02	4.777
PB-210	4.429E+00	2.126E+00	2.216E+00	1.710E-01	1.999
BI-212	1.104E+00	8.669E-01	8.590E-01	7.851E-02	1.285
PB-212	7.781E-01	2.120E-01	1.861E-01	1.524E-02	4.180
BI-214	6.449E+00	5.414E-01	2.156E-01	2.005E-02	29.915
PB-214	6.606E+00	5.318E-01	2.410E-01	1.993E-02	27.411
RA-224	1.661E+01	2.830E+00	2.116E+00	1.733E-01	7.851
RA-226	2.025E+01	3.715E+01	2.741E+00	5.020E+00	7.385
AC-228	2.177E+00	3.557E-01	3.880E-01	3.083E-02	5.612
PA-234M	8.761E+00	8.430E+00	1.100E+01	8.918E-01	0.796
TH-234	9.730E+00	2.907E+00	2.672E+00	1.980E-01	3.642
NP-237	7.189E-01	5.319E-01	8.202E-01	8.050E-02	0.876

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	8.677E-02		7.377E-01	1.320E+00	1.164E-01	0.066
NA-22	7.359E-03		7.670E-02	1.217E-01	9.958E-03	0.060
AL-26	-1.786E-02		4.090E-02	6.904E-02	5.514E-03	-0.259
TI-44	3.698E-03		8.669E-02	1.165E-01	9.125E-03	0.032
SC-46	5.275E-03		8.630E-02	1.521E-01	1.218E-02	0.035
V-48	3.059E-02		2.422E-01	4.322E-01	3.493E-02	0.071
CR-51	-9.622E-01		1.218E+00	1.873E+00	1.633E-01	-0.514
CO-56	7.497E-02		8.457E-02	1.461E-01	1.225E-02	0.513
CO-57	4.017E-02		6.809E-02	1.050E-01	1.014E-02	0.382
CO-58	-2.019E-02		8.807E-02	1.523E-01	1.323E-02	-0.133
FE-59	2.001E-01	+	2.369E-01	3.659E-01	3.263E-02	0.547
CO-60	2.143E-02		7.428E-02	1.327E-01	1.085E-02	0.161
ZN-65	-2.707E-02		1.764E-01	2.699E-01	2.212E-02	-0.100
SE-75	1.468E-02		1.123E-01	1.683E-01	1.382E-02	0.087
RB-82	2.053E-02		1.476E+00	1.858E+00	1.652E-01	0.011
RB-83	3.324E-03		1.432E-01	2.308E-01	3.662E-02	0.014
KR-85	4.712E+01		1.468E+01	2.831E+01	2.550E+00	1.665
SR-85	2.872E-01		8.948E-02	1.726E-01	1.554E-02	1.665
Y-88	2.766E-02		5.172E-02	1.041E-01	8.267E-03	0.266
NB-93M	-9.584E+00		2.353E+00	6.156E-02	1.370E-02	-155.685
NB-94	-8.963E-03		5.847E-02	1.021E-01	8.350E-03	-0.088
NB-95	3.390E-01		1.530E-01	2.733E-01	2.448E-02	1.240
ZR-95	4.911E-03		1.603E-01	2.828E-01	2.783E-02	0.017
RU-103	3.413E-02		9.974E-02	1.805E-01	2.590E-02	0.189
RU-106	-1.069E-01		6.082E-01	9.566E-01	1.322E-01	-0.112

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
AG-108M	-5.967E-02		7.519E-02	1.098E-01	1.005E-02	-0.544
AG-110M	4.101E-03		6.572E-02	1.169E-01	1.091E-02	0.035
SN-113	7.352E-02		9.887E-02	1.807E-01	1.533E-02	0.407
TE123M	6.156E-02		8.309E-02	1.280E-01	1.060E-02	0.481
SB-124	2.686E-02		8.393E-02	1.512E-01	1.405E-02	0.178
I-125	-3.385E-01		1.190E+00	1.987E+00	1.803E-01	-0.170
SB-125	-1.462E-01		1.727E-01	2.935E-01	2.542E-02	-0.498
SB-126	-1.393E-02		7.507E-01	1.184E+00	1.085E-01	-0.012
I-129	-2.882E-01		1.185E-01	1.770E-01	1.859E-02	-1.628
I-131	8.210E-02		8.936E-01	1.601E+00	1.323E-01	0.051
BA-133	3.739E-01		1.199E-01	2.002E-01	2.598E-02	1.868
CS-134	2.039E-02		6.048E-02	1.090E-01	1.015E-02	0.187
CS-135	3.086E-01		3.642E-01	6.053E-01	4.927E-02	0.510
CS-136	3.620E-01		4.469E-01	8.344E-01	7.036E-02	0.434
CS-137	-8.289E-02		7.432E-02	1.204E-01	1.127E-02	-0.688
LA-138	5.560E-02		9.145E-02	1.740E-01	1.430E-02	0.320
CE-139	3.243E-02		7.821E-02	1.289E-01	1.030E-02	0.252
BA-140	1.409E+00	+	1.537E+00	2.085E+00	6.938E-01	0.675
LA-140	-3.417E-01		3.468E-01	5.225E-01	4.286E-02	-0.654
CE-144	-6.039E-02		5.328E-01	8.006E-01	7.399E-02	-0.075
PM-144	2.996E-02		6.141E-02	1.120E-01	1.038E-02	0.267
PM-145	-2.234E-01		2.849E-01	4.002E-01	2.606E-01	-0.558
PM-146	-7.100E-02		1.401E-01	2.162E-01	1.874E-02	-0.328
ND-147	4.859E-01		2.939E+00	5.057E+00	4.592E-01	0.096
EU-152	1.206E+00	+	5.930E-01	1.079E+00	1.143E-01	1.117
GD-153	-3.885E-01		2.419E-01	3.728E-01	3.648E-02	-1.042
EU-154	2.306E-02		2.127E-01	3.379E-01	2.766E-02	0.068
EU-155	2.967E-01	+	2.195E-01	3.925E-01	3.852E-02	0.756
EU-156	-5.263E-01		2.595E+00	4.495E+00	1.027E+00	-0.117
HO-166M	2.920E-02		1.095E-01	1.967E-01	1.810E-02	0.148
HF-172	-1.050E-01		5.014E-01	7.512E-01	7.147E-02	-0.140
LU-172	-8.261E-01		3.278E+00	4.971E+00	4.066E-01	-0.166
HF-175	1.238E-02		1.095E-01	1.426E-01	1.179E-02	0.087
LU-176	-3.724E-03		6.312E-02	9.305E-02	7.636E-03	-0.040
TA-182	3.229E+00	+	6.755E-01	1.012E+00	8.281E-02	3.192
IR-192	4.028E-03		1.515E-01	2.435E-01	2.133E-02	0.017
HG-203	-6.407E-02		1.191E-01	1.869E-01	1.562E-02	-0.343
BI-207	5.199E-02		5.328E-02	9.980E-02	9.195E-03	0.521
BI-210M	-3.382E-02		1.306E-01	1.911E-01	1.559E-02	-0.177
PB-211	3.068E-01		2.177E+00	3.501E+00	2.911E-01	0.088
RN-219	8.243E-01		9.067E-01	1.596E+00	1.323E-01	0.516
RA-223	9.035E-01		1.402E+00	2.328E+00	1.920E-01	0.388
RA-225	5.196E-01		7.871E-01	1.252E+00	1.048E-01	0.415
TH-227	2.187E+00		6.130E-01	9.936E-01	8.136E-02	2.201
TH-230	5.739E+00		1.932E+01	2.965E+01	2.317E+00	0.194
PA-231	3.504E+00		2.620E+00	4.148E+00	3.399E-01	0.845
TH-231	1.115E+00		7.157E-01	1.218E+00	1.489E-01	0.915
PA-233	-8.512E-02		3.191E-01	5.057E-01	1.128E-01	-0.168

Sample ID : 1111065-04 Acquisition date : 10-DEC-2011 14:13:16

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PA-234	4.887E-01	+	3.577E-01	4.236E-01	3.950E-02	1.154
U-235	5.903E-01	+	6.310E-01	8.505E-01	1.500E-01	0.694
AM-241	3.100E-01		1.736E-01	2.774E-01	1.965E-02	1.117
AM-243	1.045E+00		1.531E-01	2.212E-01	1.883E-02	4.726
CM-243	-9.033E-02		4.511E-01	6.601E-01	5.350E-02	-0.137

Sample ID : 1111065-04 Acquisition date : 10-DEC-2011 14:13:16

Total number of lines in spectrum	70	
Number of unidentified lines	32	
Number of lines tentatively identified by NID	38	54.29%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.360E+01	2.360E+01	0.309E+01	13.08	
TL-208	1.41E+10Y	1.00	1.576E+00	1.576E+00	0.292E+00	18.50	
PB-210	22.26Y	1.00	4.417E+00	4.429E+00	2.126E+00	48.00	
BI-212	1.41E+10Y	1.00	1.104E+00	1.104E+00	0.867E+00	78.53	
PB-212	1.41E+10Y	1.00	7.781E-01	7.781E-01	2.120E-01	27.25	
BI-214	1602.00Y	1.00	6.448E+00	6.449E+00	0.541E+00	8.40	
PB-214	1602.00Y	1.00	6.606E+00	6.606E+00	0.532E+00	8.05	
RA-224	1.41E+10Y	1.00	1.661E+01	1.661E+01	0.283E+01	17.04	
RA-226	1602.00Y	1.00	2.025E+01	2.025E+01	3.715E+01	183.49	
AC-228	1.41E+10Y	1.00	2.177E+00	2.177E+00	0.356E+00	16.34	
PA-234M	4.47E+09Y	1.00	8.761E+00	8.761E+00	8.430E+00	96.23	
TH-234	4.47E+09Y	1.00	9.730E+00	9.730E+00	2.907E+00	29.88	
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	Total Activity :		1.021E+02	1.021E+02			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
MN-54	312.70D	1.07	4.244E-02	4.552E-02	4.736E-02	104.06	
LU-173	1.37Y	1.04	7.229E-01	7.552E-01	4.621E-01	61.18	
			---	---			
	Total Activity :		7.653E-01	8.007E-01			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	2.438E+00	2.556E+00	1.898E+00	74.25	
SN-126	1.00E+05Y	1.00	2.450E-01	2.450E-01	1.813E-01	74.00	
CE-141	32.50D	1.96	1.287E-01	2.525E-01	2.736E-01	108.35	
NP-237	2.14E+06Y	1.00	7.189E-01	7.189E-01	5.319E-01	73.99	
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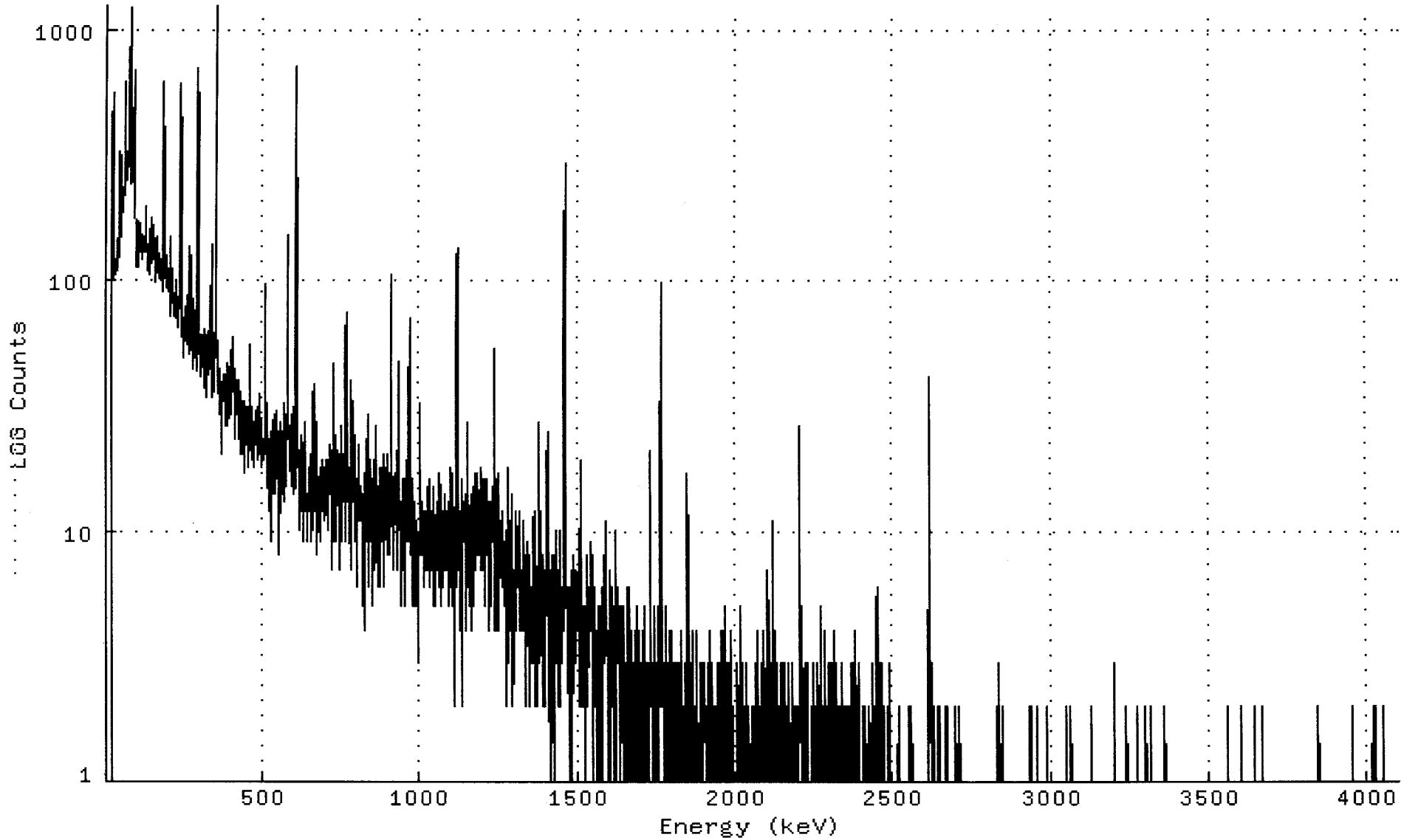
	Total Activity :		3.530E+00	3.772E+00			

Grand Total Activity : 1.063E+02 1.066E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106504_GE1_GAS1102_172253.CNF;1
Title :
Sample Title: DY2-11-31-111109
Start Time: 10-DEC-2011 14:13 Sample Time: 9-NOV-2011 00:00: Energy Offset: 3.84457E-01
Real Time : 0 01:00:02.17 Sample ID : 1111065-04 Energy Slope : 9.99792E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106504_GE1_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	0	0	0
17:	0	0	146	290	302	390	559	442
25:	246	133	138	101	121	112	105	120
33:	107	121	108	123	113	110	145	139
41:	131	127	125	123	161	326	303	168
49:	148	156	200	180	234	198	194	192
57:	186	213	216	247	273	268	618	426
65:	251	280	320	300	274	264	301	281
73:	282	498	839	558	1205	581	284	254
81:	287	243	244	373	281	244	482	367
89:	277	362	231	479	682	311	196	154
97:	145	164	174	143	113	134	113	140
105:	139	169	129	152	168	159	129	130
113:	165	140	145	135	121	132	132	130
121:	149	130	147	134	132	133	129	143
129:	195	142	136	124	109	111	130	120
137:	138	114	128	131	130	104	143	176
145:	147	138	117	134	151	120	147	128
153:	139	165	138	141	135	108	141	145
161:	97	123	120	149	107	111	111	125
169:	109	126	114	102	117	101	108	99
177:	120	101	114	111	105	89	138	97
185:	213	615	271	117	108	111	104	101
193:	119	125	113	93	105	98	104	111
201:	90	111	94	98	94	100	72	97
209:	149	113	110	99	96	93	86	88
217:	71	88	82	73	84	85	79	100
225:	92	70	91	70	75	64	85	78
233:	66	65	90	125	120	378	602	185
241:	212	440	193	86	72	59	70	66
249:	58	49	66	54	59	64	59	70
257:	69	70	86	59	57	67	66	55
265:	58	51	53	55	100	137	116	76
273:	52	80	69	57	68	84	59	44
281:	59	67	59	64	49	59	76	59
289:	57	43	70	63	58	134	697	446
297:	72	51	70	100	65	55	60	46
305:	57	45	41	60	56	49	48	51
313:	45	46	63	40	57	45	39	34
321:	52	41	48	50	60	47	42	60
329:	50	42	62	44	51	50	48	47
337:	64	139	130	56	44	44	34	37
345:	52	44	48	46	48	80	387	1255
353:	416	49	58	57	52	35	35	42
361:	35	44	34	30	44	29	36	35
369:	31	34	39	39	20	30	35	40
377:	40	39	42	34	42	31	26	37
385:	31	28	46	26	46	43	38	45
393:	39	38	45	28	43	36	29	50
401:	50	52	41	46	46	39	37	36
409:	59	52	37	23	39	42	31	43
417:	34	29	32	40	31	31	32	40
425:	26	29	31	26	20	27	31	36

433:	22	29	33	20	32	29	24	30
441:	26	33	17	28	31	23	25	22
449:	29	31	29	30	18	20	23	31
457:	30	19	20	34	33	37	55	35
465:	21	31	19	27	21	24	24	27
473:	18	26	22	24	25	28	27	30
481:	22	28	29	19	22	24	30	31
489:	19	35	20	34	20	23	32	25
497:	18	23	24	21	18	21	20	22
505:	23	21	19	21	42	73	96	61
513:	39	27	25	27	24	19	18	12
521:	16	21	23	21	17	20	24	18
529:	20	9	23	27	25	22	15	14
537:	26	29	25	25	19	14	22	30
545:	21	19	19	18	16	20	17	25
553:	21	19	19	8	17	17	24	17
561:	21	27	23	14	14	18	21	24
569:	21	19	14	32	13	17	21	24
577:	15	19	29	23	29	41	152	151
585:	42	23	26	20	24	18	24	18
593:	16	21	15	29	25	22	20	19
601:	24	31	23	14	15	20	30	130
609:	711	661	100	35	19	40	18	23
617:	19	12	17	15	17	10	17	12
625:	17	14	19	24	21	19	15	9
633:	19	12	12	20	16	19	17	27
641:	13	13	14	14	12	13	9	16
649:	13	12	13	15	18	12	16	20
657:	9	20	18	19	21	24	10	13
665:	34	38	17	18	19	20	12	14
673:	14	14	8	14	27	10	15	16
681:	14	13	12	12	18	12	9	17
689:	12	12	17	16	18	19	17	17
697:	18	13	18	16	11	16	19	18
705:	13	13	13	10	19	12	17	19
713:	16	18	22	14	21	17	20	19
721:	12	15	21	7	11	27	46	42
729:	17	15	9	17	10	14	14	12
737:	24	9	17	19	14	15	21	18
745:	12	20	15	19	7	12	26	16
753:	9	18	15	21	13	15	16	20
761:	13	13	14	9	17	28	42	59
769:	74	18	13	18	13	15	15	10
777:	10	12	18	11	7	15	15	16
785:	24	40	27	19	19	13	20	13
793:	19	14	24	17	18	9	16	16
801:	6	13	11	10	13	22	19	16
809:	17	11	15	14	13	15	11	12
817:	10	12	14	10	10	9	5	14
825:	11	12	17	4	17	16	12	18
833:	18	9	23	18	6	16	29	19
841:	13	10	19	11	9	14	17	15
849:	12	5	11	12	16	8	11	12
857:	10	7	17	22	26	15	8	9
865:	9	6	13	15	10	10	6	18
873:	6	9	13	8	17	9	12	9
881:	12	14	18	9	9	13	14	20
889:	6	14	13	14	18	13	12	13
897:	11	20	8	16	11	16	15	11
905:	17	9	8	13	16	35	105	87

913:	21	17	16	9	12	7	8	10
921:	11	12	12	12	14	17	8	21
929:	8	13	9	7	14	47	34	18
937:	11	13	13	5	10	13	6	9
945:	12	7	9	10	11	16	11	16
953:	11	13	13	5	16	10	17	19
961:	11	15	16	30	24	23	9	29
969:	70	42	15	8	13	8	10	9
977:	11	5	16	7	12	12	8	5
985:	13	8	5	9	9	10	7	11
993:	9	3	6	8	8	8	10	9
1001:	32	23	8	13	9	8	8	12
1009:	9	9	13	6	10	12	9	10
1017:	9	7	12	10	10	7	9	9
1025:	11	11	15	11	7	7	9	16
1033:	11	11	6	12	10	9	8	7
1041:	9	12	5	8	12	14	15	9
1049:	10	10	9	10	5	11	13	12
1057:	10	8	8	6	10	8	9	6
1065:	17	14	12	5	11	8	10	7
1073:	6	12	8	8	8	11	11	7
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1089:	10	5	9	7	9	13	10	8
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1105:	9	17	11	5	10	7	12	9
1113:	2	11	14	14	6	14	34	123
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1137:	2	9	12	9	13	9	11	12
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1153:	6	14	23	27	6	7	5	9
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1169:	8	10	5	15	12	6	11	13
1177:	7	10	13	17	17	12	11	8
1185:	12	11	12	8	10	12	8	9
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1201:	7	15	11	16	10	11	5	16
1209:	16	6	9	8	9	9	14	15
1217:	16	4	11	10	11	12	13	13
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1233:	14	13	9	15	20	53	49	32
1241:	4	8	16	4	9	10	11	4
1249:	6	6	17	6	6	8	11	9
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1265:	12	7	5	5	6	7	9	9
1273:	6	10	9	2	6	6	13	12
1281:	16	18	12	3	11	5	9	8
1289:	9	4	11	8	14	11	13	2
1297:	3	7	7	3	5	5	4	10
1305:	12	10	4	8	7	7	6	6
1313:	9	9	12	4	8	11	8	8
1321:	5	4	6	5	4	7	4	7
1329:	7	9	4	11	4	7	5	7
1337:	8	2	6	8	4	4	9	6
1345:	2	6	8	2	4	7	3	4
1353:	3	5	6	5	4	4	3	4
1361:	3	11	12	5	9	2	9	6
1369:	4	2	2	6	7	5	4	13
1377:	25	27	23	5	3	4	5	6
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1393:	5	2	5	4	7	3	5	6
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1409:	13	11	3	1	7	5	3	6
1417:	1	2	2	4	8	7	2	5
1425:	6	6	8	1	4	3	5	4
1433:	10	5	5	4	2	5	7	5
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1449:	3	6	6	6	4	6	8	4
1457:	6	8	33	122	294	178	53	8
1465:	10	6	4	5	5	6	5	5
1473:	1	5	4	2	6	1	1	4
1481:	4	7	4	1	5	4	4	5
1489:	5	8	4	6	6	3	7	4
1497:	5	4	4	5	5	6	8	5
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1513:	2	3	2	3	5	4	5	4
1521:	3	4	5	1	1	3	8	5
1529:	4	2	3	2	4	4	3	3
1537:	5	6	4	6	9	6	8	9
1545:	2	3	8	1	2	5	6	6
1553:	2	3	4	3	3	4	4	3
1561:	1	3	2	3	3	5	3	2
1569:	1	2	5	2	0	1	3	1
1577:	2	3	2	6	2	8	7	6
1585:	5	4	3	10	4	7	4	11
1593:	5	2	2	1	1	4	4	3
1601:	1	5	0	7	2	4	6	4
1609:	3	2	3	5	3	1	3	3
1617:	3	3	1	5	6	10	2	5
1625:	6	3	5	3	5	5	4	3
1633:	1	2	1	4	2	5	2	3
1641:	4	2	0	1	5	4	2	2
1649:	2	0	2	3	3	1	2	2
1657:	6	0	5	2	6	2	4	1
1665:	2	5	2	3	4	3	0	0
1673:	1	2	0	3	2	2	1	2
1681:	3	3	4	3	4	4	1	2
1689:	5	3	2	2	2	4	3	1
1697:	1	0	0	0	2	3	1	3
1705:	2	1	2	4	4	5	4	0
1713:	2	1	1	3	2	2	0	1
1721:	0	3	2	3	2	1	4	2
1729:	12	21	15	5	4	2	2	2
1737:	0	1	3	2	5	1	3	3
1745:	2	0	2	2	0	3	3	2
1753:	5	4	1	1	4	3	3	2
1761:	3	5	14	77	98	53	8	2
1769:	8	0	1	2	1	1	3	0
1777:	1	0	1	5	2	2	1	3
1785:	2	1	1	1	0	4	3	3
1793:	0	3	4	0	1	1	3	3
1801:	1	1	3	0	1	1	0	0
1809:	1	3	1	2	2	3	1	3
1817:	0	0	2	3	0	2	2	3
1825:	1	0	4	1	1	2	0	1
1833:	0	2	2	1	2	2	3	1
1841:	1	1	5	3	0	1	5	17
1849:	8	5	1	3	1	1	1	2
1857:	3	2	1	2	0	4	1	1
1865:	1	1	1	0	1	2	0	1

1873:	3	1	4	0	0	0	0	1
1881:	1	0	1	0	3	0	2	0
1889:	3	1	2	3	3	1	1	0
1897:	3	3	2	2	2	2	1	2
1905:	2	0	0	0	2	2	1	2
1913:	3	0	2	2	2	2	1	4
1921:	0	2	2	1	1	3	1	2
1929:	0	1	2	1	0	2	0	2
1937:	1	1	1	1	2	3	2	1
1945:	1	1	0	0	3	1	2	1
1953:	0	2	1	2	4	0	4	1
1961:	2	2	2	1	0	5	2	0
1969:	1	0	1	2	2	3	2	0
1977:	0	0	2	3	1	4	2	1
1985:	1	3	1	1	2	0	1	0
1993:	0	1	1	1	1	1	0	1
2001:	2	1	0	0	1	3	2	2
2009:	2	1	1	1	0	5	2	1
2017:	4	1	1	3	0	1	2	1
2025:	1	1	1	0	2	1	2	1
2033:	2	3	0	0	0	2	0	2
2041:	0	0	0	0	1	0	0	0
2049:	2	2	1	2	1	1	0	1
2057:	1	1	2	1	1	3	2	1
2065:	2	0	2	1	3	0	3	4
2073:	1	1	1	0	0	2	0	3
2081:	3	0	0	1	1	1	2	0
2089:	1	4	2	0	1	1	1	0
2097:	0	1	4	2	1	1	7	4
2105:	2	3	3	0	0	0	1	1
2113:	0	3	1	1	2	11	9	0
2121:	2	3	0	0	4	0	0	1
2129:	0	0	0	0	3	0	0	0
2137:	2	0	0	3	1	1	1	1
2145:	0	1	0	1	1	3	2	0
2153:	1	3	0	1	1	2	0	0
2161:	2	2	1	2	0	2	0	0
2169:	3	1	1	1	1	1	1	2
2177:	3	1	0	0	1	0	2	1
2185:	1	1	0	0	2	2	0	1
2193:	0	1	1	0	2	1	0	1
2201:	2	5	8	18	26	5	1	5
2209:	2	2	1	4	2	2	2	2
2217:	0	2	0	3	0	0	2	0
2225:	1	3	2	2	1	0	0	1
2233:	0	1	0	0	1	1	2	0
2241:	0	0	1	3	0	1	2	0
2249:	1	1	0	2	0	1	2	0
2257:	1	0	2	3	2	1	1	2
2265:	1	1	4	1	2	5	1	1
2273:	1	2	1	2	2	1	0	0
2281:	1	2	0	4	1	2	0	1
2289:	0	2	0	1	1	2	3	0
2297:	0	1	3	1	1	3	1	3
2305:	0	1	1	0	0	0	2	3
2313:	0	2	4	2	0	1	1	0
2321:	3	1	0	0	2	1	2	0
2329:	0	0	0	2	1	1	2	3
2337:	2	0	1	2	0	1	2	1
2345:	2	1	2	1	1	1	0	0

2353:	1	0	0	2	2	2	1	2
2361:	2	1	0	1	1	1	0	1
2369:	1	3	3	1	1	0	3	0
2377:	1	1	4	1	0	3	2	1
2385:	2	1	0	2	0	3	2	0
2393:	1	0	1	1	1	1	1	1
2401:	0	1	0	1	2	2	0	1
2409:	0	0	1	2	0	1	0	1
2417:	0	1	2	1	1	0	0	1
2425:	1	1	0	0	1	1	3	0
2433:	1	0	1	0	0	2	2	1
2441:	2	1	1	0	0	2	4	5
2449:	6	0	2	0	2	0	3	0
2457:	0	1	0	0	2	0	0	0
2465:	3	2	0	0	0	1	2	0
2473:	1	1	0	1	0	0	0	0
2481:	0	0	1	2	1	3	0	0
2489:	0	0	1	1	0	1	0	0
2497:	0	0	0	0	1	0	0	0
2505:	0	0	1	0	1	1	1	0
2513:	0	0	1	2	0	0	0	0
2521:	1	1	0	0	1	0	0	0
2529:	0	0	1	0	0	0	0	0
2537:	0	0	0	1	0	0	0	0
2545:	0	1	0	0	0	0	1	2
2553:	0	1	0	1	1	2	0	0
2561:	0	0	0	0	1	1	0	0
2569:	0	1	1	1	1	0	0	0
2577:	0	0	1	0	1	0	0	0
2585:	0	0	1	1	0	1	0	1
2593:	0	0	0	0	0	1	0	1
2601:	0	0	0	0	1	0	0	0
2609:	0	1	0	3	8	32	41	11
2617:	7	2	0	3	0	0	2	0
2625:	0	2	1	0	1	0	0	0
2633:	0	1	0	0	1	0	0	0
2641:	2	0	0	0	2	0	1	0
2649:	0	0	1	0	0	0	1	0
2657:	0	0	1	0	0	0	0	0
2665:	2	0	1	2	0	0	0	1
2673:	0	0	0	0	0	0	1	0
2681:	0	0	0	0	0	0	1	0
2689:	1	1	0	1	1	0	0	0
2697:	2	0	0	0	0	0	1	0
2705:	0	0	0	0	2	1	0	0
2713:	0	1	0	1	0	1	0	0
2721:	0	0	0	1	0	0	0	0
2729:	1	0	0	0	0	0	0	0
2737:	0	0	0	0	1	1	1	1
2745:	1	0	0	0	0	0	0	0
2753:	0	0	1	0	0	0	0	0
2761:	0	0	0	0	0	0	1	0
2769:	0	1	0	0	1	1	1	0
2777:	0	0	0	0	0	0	0	0
2785:	0	1	1	0	0	1	1	0
2793:	1	1	0	1	0	0	0	0
2801:	1	0	0	0	0	0	1	0
2809:	0	0	1	0	0	0	0	0
2817:	1	0	1	1	1	1	0	0
2825:	0	0	0	0	2	0	0	0

2833:	3	0	0	1	0	1	0	0
2841:	1	0	0	2	0	0	0	0
2849:	0	0	1	0	0	0	0	0
2857:	1	0	0	0	0	1	0	1
2865:	0	1	0	0	0	0	0	1
2873:	0	0	0	0	0	0	0	0
2881:	0	0	1	0	0	1	0	0
2889:	0	0	0	1	0	0	0	0
2897:	0	0	0	0	0	1	0	1
2905:	0	0	0	1	0	0	0	0
2913:	0	0	0	0	0	1	0	1
2921:	0	1	0	0	0	0	1	1
2929:	0	0	2	0	1	0	0	0
2937:	0	2	0	0	0	1	0	0
2945:	0	0	0	0	0	0	0	0
2953:	0	0	2	0	2	0	1	0
2961:	1	0	1	1	1	0	0	0
2969:	0	1	0	0	0	0	0	0
2977:	1	0	0	0	0	1	0	0
2985:	2	0	0	0	0	0	0	1
2993:	0	0	0	0	0	0	0	0
3001:	1	1	1	0	0	1	0	1
3009:	0	0	1	0	0	0	0	0
3017:	0	0	0	0	0	0	0	0
3025:	0	0	0	0	1	0	0	0
3033:	0	0	0	1	0	0	0	1
3041:	1	1	0	0	1	0	2	0
3049:	0	0	1	0	1	0	1	0
3057:	0	0	0	0	2	0	0	0
3065:	0	0	0	1	0	0	0	0
3073:	0	0	0	1	1	0	1	0
3081:	0	1	1	0	0	0	0	1
3089:	0	0	0	0	0	1	0	0
3097:	0	0	1	0	0	0	0	0
3105:	0	1	1	0	0	1	0	1
3113:	0	0	0	1	0	0	0	0
3121:	0	0	0	2	0	0	1	0
3129:	0	0	0	0	0	0	0	1
3137:	0	1	0	0	0	0	0	0
3145:	0	0	0	0	0	0	0	0
3153:	0	0	1	0	1	0	0	1
3161:	0	0	0	0	0	0	0	1
3169:	1	0	0	1	0	0	0	0
3177:	0	0	0	0	0	0	1	1
3185:	0	1	0	0	0	0	0	1
3193:	0	0	0	0	2	3	1	0
3201:	0	0	0	0	0	0	0	0
3209:	0	0	0	1	0	0	0	0
3217:	1	0	0	0	0	1	0	0
3225:	0	0	0	0	0	0	0	0
3233:	0	0	0	0	2	0	0	1
3241:	0	0	0	0	1	0	1	0
3249:	0	0	0	0	0	0	0	0
3257:	0	0	0	0	1	0	0	0
3265:	0	0	1	0	2	0	0	0
3273:	0	0	0	0	0	0	0	0
3281:	0	1	0	1	1	0	0	0
3289:	0	0	0	0	0	0	1	0
3297:	0	2	0	0	0	0	1	0
3305:	0	0	0	0	0	0	0	2

3313:	1	0	0	0	0	1	1	0
3321:	0	0	0	1	0	0	0	0
3329:	0	1	0	0	0	0	0	0
3337:	0	0	0	0	0	0	0	0
3345:	0	0	1	0	0	0	1	0
3353:	1	0	1	0	0	2	0	0
3361:	0	0	1	1	0	0	0	0
3369:	0	1	0	0	0	0	0	0
3377:	1	1	0	0	0	0	0	0
3385:	0	1	0	0	1	1	0	0
3393:	0	0	0	0	0	0	0	0
3401:	0	0	0	1	0	0	1	0
3409:	0	0	0	1	0	0	0	0
3417:	0	1	1	0	0	0	0	0
3425:	1	0	0	0	0	0	0	1
3433:	0	0	0	0	1	0	0	0
3441:	0	0	0	0	0	0	0	0
3449:	0	0	0	0	0	0	1	0
3457:	0	0	0	0	0	0	0	0
3465:	1	0	0	0	0	0	0	0
3473:	0	0	0	0	0	1	0	0
3481:	1	0	0	1	0	0	0	0
3489:	0	0	0	1	0	0	0	0
3497:	1	0	1	0	0	0	1	0
3505:	0	0	1	0	1	1	0	0
3513:	0	0	0	0	0	0	0	1
3521:	0	0	0	0	0	0	0	0
3529:	0	0	0	0	0	1	0	0
3537:	0	0	0	0	0	0	1	0
3545:	1	0	0	0	0	0	1	0
3553:	0	0	0	0	0	2	0	0
3561:	0	0	0	0	0	0	0	0
3569:	0	0	0	0	0	0	0	0
3577:	0	0	0	0	1	0	0	0
3585:	0	0	0	0	0	0	0	0
3593:	1	0	0	0	0	2	0	1
3601:	1	1	0	0	0	0	0	0
3609:	0	0	0	0	1	0	0	0
3617:	0	0	0	0	0	0	0	0
3625:	0	0	0	0	0	0	0	0
3633:	0	1	0	0	0	0	2	0
3641:	0	0	0	0	0	1	0	0
3649:	0	0	0	0	0	0	0	0
3657:	0	0	0	0	1	0	0	0
3665:	2	1	0	0	0	0	0	0
3673:	0	0	0	0	1	0	0	0
3681:	0	0	0	0	0	0	1	0
3689:	0	0	0	0	0	0	0	0
3697:	0	1	0	0	0	0	0	0
3705:	0	0	0	0	0	0	0	0
3713:	0	0	0	0	0	0	0	0
3721:	0	0	0	0	0	0	1	0
3729:	0	0	0	0	0	0	0	0
3737:	0	0	0	0	0	0	0	0
3745:	0	0	0	0	0	0	0	0
3753:	0	0	1	0	1	0	0	0
3761:	0	0	0	0	0	0	0	0
3769:	0	0	0	0	0	0	0	0
3777:	0	0	0	0	0	0	0	0
3785:	1	0	0	0	0	0	0	0

3793:	0	0	0	0	0	0	0	0
3801:	0	0	0	0	0	0	0	0
3809:	1	0	0	1	1	0	0	0
3817:	1	1	0	0	0	0	0	0
3825:	0	1	0	0	0	0	0	0
3833:	0	0	0	0	0	0	0	0
3841:	0	0	0	2	0	1	0	0
3849:	0	0	0	0	1	0	0	0
3857:	0	0	0	0	0	0	0	0
3865:	0	0	0	0	0	1	0	0
3873:	1	0	1	0	0	0	0	0
3881:	0	1	0	0	0	1	0	0
3889:	0	0	0	0	0	0	0	0
3897:	0	1	0	0	0	0	0	0
3905:	0	0	0	0	0	0	0	0
3913:	0	0	0	0	0	0	0	0
3921:	0	0	0	0	0	0	0	0
3929:	0	0	0	0	0	1	0	1
3937:	0	0	0	0	0	0	0	0
3945:	0	0	0	0	0	2	0	0
3953:	1	0	0	0	0	0	0	0
3961:	0	0	0	0	0	0	0	1
3969:	0	0	0	0	0	0	0	1
3977:	0	0	0	0	0	0	0	0
3985:	0	1	0	1	0	0	0	0
3993:	0	0	1	0	0	1	0	0
4001:	0	0	0	0	0	0	1	1
4009:	0	1	0	0	0	0	2	0
4017:	0	0	0	0	2	0	0	0
4025:	0	0	0	0	0	0	1	0
4033:	1	0	0	0	1	0	0	0
4041:	0	0	1	0	0	0	2	0
4049:	0	0	0	0	0	0	0	0
4057:	0	0	0	0	0	1	0	0
4065:	0	0	0	0	0	0	0	0
4073:	0	0	0	0	0	0	0	0
4081:	0	1	0	0	0	0	0	0
4089:	0	0	0	1	0	0	0	0

Sample ID : 1111065-05 Acquisition date : 10-DEC-2011 13:09:22

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VAX/VMS Peak Search Report Generated 10-DEC-2011 14:09:47.52

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106505_GE2_GAS1102_172247.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-17-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 10-DEC-2011 13:09:22
Sample ID : 1111065-05 Sample Quantity : 3.35770E+02 gram
Sample type : SOIL Sample Geometry : 0
Detector name : GE2 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:04.04 0.1%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.66*	1014	2556	1.42	46.61	43	7	17.7		PB-210
0	53.64*	255	1976	1.75	53.59	52	5	53.9		
0	63.33*	850	3941	1.83	63.29	60	7	25.5		TH-234
0	76.44*	6470	5880	3.53	76.40	72	9	4.9		
0	93.51*	979	2696	1.28	93.47	91	6	18.4		
0	129.62	156	1437	1.29	129.60	128	5	74.7		
0	143.75*	258	2177	1.50	143.74	141	7	61.3		
0	154.19	198	2255	1.22	154.18	151	7	80.9		
0	186.17*	2434	2521	1.57	186.17	181	10	8.8		RA-226
2	238.93*	348	509	1.30	238.95	238	9	18.7	9.67E+00	PB-212
2	242.16*	1945	815	1.41	242.18	238	9	6.1		RA-224
0	257.85	354	1677	4.54	257.88	252	12	47.5		
5	270.26	444	1085	2.54	270.29	266	13	27.7	3.62E+00	
5	274.76	161	807	2.03	274.80	266	13	59.0		
0	284.42	79	605	2.53	284.46	283	5	95.7		
3	291.49	58	495	1.91	291.53	290	10	114.8	6.88E+00	
3	295.32*	4468	542	1.40	295.36	290	10	3.3		PB-214
0	323.92	52	411	1.23	323.98	322	4	113.7		RA-223
0	338.65*	140	736	1.91	338.71	336	7	66.8		
0	351.97*	7688	804	1.38	352.03	348	8	2.6		PB-214
0	388.48	105	512	3.43	388.55	386	6	71.4		
3	401.67	112	452	2.26	401.75	399	10	59.6	3.86E+00	RN-219
3	405.62	70	463	1.77	405.70	399	10	94.6		
0	410.21	88	483	2.41	410.29	408	6	82.0		
0	454.75*	87	384	1.38	454.85	452	7	78.6		
0	486.28	89	365	2.20	486.39	484	7	73.9		
0	510.57*	191	500	2.72	510.70	505	13	51.9		
1	579.79	48	141	1.91	579.94	578	14	74.5	1.89E+00	
1	583.43*	179	244	2.28	583.58	578	14	33.3		TL-208
0	609.28*	5455	489	1.99	609.44	603	12	3.2		BI-214
0	665.61	133	216	2.00	665.79	662	7	40.7		
0	704.20	89	269	1.99	704.40	700	9	70.4		
0	718.36	79	287	3.90	718.56	714	10	83.4		
0	741.02	79	234	2.86	741.23	737	10	76.2		
0	768.29	474	303	1.97	768.51	765	9	16.2		
0	786.49*	88	231	1.71	786.71	783	8	63.9		

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Sample ID : 1111065-05 Acquisition date : 10-DEC-2011 13:09:22

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	805.96	148	190	2.17	806.20	802	9	34.9	1.14E+01	
0	911.18*	96	330	2.39	911.45	906	10	73.6		
0	933.91	302	303	1.96	934.19	928	12	25.8		
0	965.98	93	373	6.28	966.27	958	16	94.6		
2	1001.26*	57	130	2.52	1001.56	997	9	76.6	1.59E+00	PA-234M
0	1069.50	31	129	3.68	1069.83	1066	7	126.2		
0	1079.07	55	178	4.60	1079.40	1075	11	97.0		
0	1120.09*	1162	208	2.25	1120.44	1115	11	7.6		BI-214
0	1154.76	155	128	2.34	1155.12	1151	8	30.0		
0	1208.21	39	97	3.55	1208.60	1205	7	90.3		
0	1238.05*	444	199	2.24	1238.44	1233	12	15.9		
0	1280.54	124	149	2.33	1280.95	1277	11	42.2		
0	1342.86	31	87	2.57	1343.30	1340	9	113.7		
1	1377.37	318	87	2.32	1377.82	1373	25	14.7	1.26E+00	
1	1385.39	66	81	2.50	1385.84	1373	25	50.9		
0	1401.06	52	92	1.40	1401.52	1398	8	70.3		
0	1407.94	139	81	2.46	1408.40	1405	8	28.4		
0	1415.70	26	57	1.22	1416.16	1413	7	106.3		
0	1460.66*	665	115	2.11	1461.14	1456	11	10.0		K-40
0	1508.89	146	92	2.65	1509.39	1506	8	27.9		
7	1579.88	13	22	1.89	1580.40	1579	8	136.8	7.96E+00	
7	1582.59	48	51	2.80	1583.11	1579	8	60.0		
1	1610.70	13	13	2.60	1611.24	1610	8	75.6	6.76E+00	
1	1613.56	26	52	2.60	1614.09	1610	8	103.2		
0	1630.33	16	33	3.27	1630.88	1628	6	124.1		
0	1660.68	76	51	2.19	1661.24	1655	12	44.0		
6	1679.85	13	20	4.24	1680.41	1677	21	123.2	3.91E+00	
6	1684.44	27	19	2.40	1685.00	1677	21	64.7		
0	1703.13	17	15	1.21	1703.70	1700	7	93.2		
0	1729.56	217	62	2.83	1730.14	1723	14	20.6		
0	1764.09*	933	42	2.55	1764.68	1758	14	7.2		BI-214
0	1838.22	31	25	2.17	1838.84	1835	8	65.0		
0	1847.15	114	31	2.76	1847.77	1843	13	28.4		
0	1935.59	31	33	5.80	1936.25	1930	13	85.2		
0	2028.66	12	14	1.51	2029.35	2025	9	130.2		
0	2118.15	80	21	1.84	2118.88	2113	12	32.1		
0	2145.80	13	0	1.25	2146.54	2143	8	55.5		
0	2203.61	260	13	2.49	2204.37	2200	11	13.6		BI-214
0	2293.20	19	4	4.09	2294.00	2290	9	59.5		
0	2301.80	10	0	3.92	2302.60	2299	8	63.2		
0	2446.95	78	5	3.15	2447.79	2442	10	25.1		
0	2613.60*	52	0	3.94	2614.51	2609	11	29.9		TL-208
0	2782.82	5	0	2.75	2783.80	2780	7	89.4		

Sample ID : 1111065-05 Acquisition date : 10-DEC-2011 13:09:22

Total number of lines in spectrum 79
Number of unidentified lines 45
Number of lines tentatively identified by NID 34 43.04%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/gram	Wtd Mean Decay Corr pCi/gram	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	3.042E+01	3.042E+01	0.453E+01	14.89	
TL-208	1.41E+10Y	1.00	1.083E+00	1.083E+00	0.260E+00	23.98	
PB-210	22.26Y	1.00	2.540E+01	2.547E+01	0.510E+01	20.02	
PB-212	1.41E+10Y	1.00	9.610E-01	9.610E-01	2.001E-01	20.83	
BI-214	1602.00Y	1.00	3.091E+01	3.091E+01	0.193E+01	6.26	
PB-214	1602.00Y	1.00	3.325E+01	3.325E+01	0.233E+01	7.00	
RN-219	3.28E+04Y	1.00	3.095E+00	3.095E+00	1.870E+00	60.42	
RA-223	3.28E+04Y	1.00	2.028E+00	2.028E+00	2.313E+00	114.06	
RA-224	1.41E+10Y	1.00	6.097E+01	6.097E+01	0.672E+01	11.02	
RA-226	1602.00Y	1.00	7.905E+01	7.905E+01	14.49E+01	183.36	
PA-234M	4.47E+09Y	1.00	2.299E+01	2.299E+01	1.775E+01	77.21	
TH-234	4.47E+09Y	1.00	1.988E+01	1.988E+01	0.540E+01	27.15	
			---	---			
	Total Activity :		3.100E+02	3.101E+02			

Grand Total Activity : 3.100E+02 3.101E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-05 Acquisition date : 10-DEC-2011 13:09:22

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/gram	Decay Corr pCi/gram	2-Sigma %Error	Status
K-40	1460.81	10.67*	4.582E-01	3.042E+01	3.042E+01	14.89	OK
	Final Mean for 1 Valid Peaks = 3.042E+01+/- 4.530E+00 (14.89%)						
TL-208	583.14	30.22*	9.242E-01	1.433E+00	1.433E+00	34.78	OK
	860.37	4.48	6.742E-01	----- Line Not Found		-----	Absent
	2614.66	35.85	3.402E-01	9.530E-01	9.530E-01	31.95	OK
	Final Mean for 2 Valid Peaks = 1.083E+00+/- 2.598E-01 (23.98%)						
PB-210	46.50	4.05*	2.204E+00	2.540E+01	2.547E+01	20.02	OK
	Final Mean for 1 Valid Peaks = 2.547E+01+/- 5.098E+00 (20.02%)						
PB-212	238.63	44.60*	1.817E+00	9.610E-01	9.610E-01	20.83	OK
	300.09	3.41	1.555E+00	----- Line Not Found		-----	Absent
	Final Mean for 1 Valid Peaks = 9.610E-01+/- 2.001E-01 (20.83%)						
BI-214	609.31	46.30*	8.915E-01	2.955E+01	2.955E+01	10.32	OK
	1120.29	15.10	5.508E-01	3.124E+01	3.124E+01	12.65	OK
	1764.49	15.80	4.084E-01	3.232E+01	3.232E+01	12.36	OK
	2204.22	4.98	3.644E-01	3.201E+01	3.201E+01	17.20	OK
	Final Mean for 4 Valid Peaks = 3.091E+01+/- 1.935E+00 (6.26%)						
PB-214	295.21	19.19	1.574E+00	3.308E+01	3.308E+01	9.83	OK
	351.92	37.19*	1.383E+00	3.343E+01	3.343E+01	9.98	OK
	Final Mean for 2 Valid Peaks = 3.325E+01+/- 2.329E+00 (7.00%)						
RN-219	401.80	6.50*	1.248E+00	3.095E+00	3.095E+00	60.42	OK
	Final Mean for 1 Valid Peaks = 3.095E+00+/- 1.870E+00 (60.42%)						
RA-223	323.87	3.88*	1.472E+00	2.028E+00	2.028E+00	114.06	OK
	Final Mean for 1 Valid Peaks = 2.028E+00+/- 2.313E+00 (114.06%)						
RA-224	240.98	3.95*	1.806E+00	6.097E+01	6.097E+01	11.02	OK
	Final Mean for 1 Valid Peaks = 6.097E+01+/- 6.718E+00 (11.02%)						
RA-226	186.21	3.28*	2.099E+00	7.905E+01	7.905E+01	183.36	OK
	Final Mean for 1 Valid Peaks = 7.905E+01+/- 1.449E+02 (183.36%)						
PA-234M	1001.03	0.92*	5.993E-01	2.299E+01	2.299E+01	77.21	OK
	Final Mean for 1 Valid Peaks = 2.299E+01+/- 1.775E+01 (77.21%)						

Sample ID : 1111065-05 Acquisition date : 10-DEC-2011 13:09:22

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/gram	Decay Corr pCi/gram	2-Sigma %Error	Status
TH-234	63.29	3.80*	2.516E+00	1.988E+01	1.988E+01	27.15	OK

Final Mean for 1 Valid Peaks = 1.988E+01+/- 5.398E+00 (27.15%)

Flag: "*" = Keyline

Sample ID : 1111065-05 Acquisition date : 10-DEC-2011 13:09:22

---- Identified Nuclides ----

Nuclide	Activity (pCi/gram)	Act error	MDA (pCi/gram)	MDA error	Act/MDA
K-40	3.042E+01	4.530E+00	2.006E+00	2.056E-01	15.169
TL-208	1.083E+00	2.598E-01	5.613E-01	5.108E-02	1.930
PB-210	2.547E+01	5.098E+00	4.496E+00	3.769E-01	5.665
PB-212	9.610E-01	2.001E-01	4.031E-01	3.316E-02	2.384
BI-214	3.091E+01	1.935E+00	4.049E-01	3.633E-02	76.343
PB-214	3.325E+01	2.329E+00	4.664E-01	4.084E-02	71.295
RN-219	3.095E+00	1.870E+00	2.935E+00	2.642E-01	1.055
RA-223	2.028E+00	2.313E+00	4.316E+00	3.700E-01	0.470
RA-224	6.097E+01	6.718E+00	4.746E+00	3.905E-01	12.848
RA-226	7.905E+01	1.449E+02	5.185E+00	9.494E+00	15.246
PA-234M	2.299E+01	1.775E+01	2.236E+01	2.053E+00	1.028
TH-234	1.988E+01	5.398E+00	5.205E+00	4.335E-01	3.820

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/gram)	K.L. Ided	Act error	MDA (pCi/gram)	MDA error	Act/MDA
BE-7	1.021E-01		1.434E+00	2.518E+00	2.328E-01	0.041
NA-22	2.743E-02		1.492E-01	2.287E-01	2.254E-02	0.120
AL-26	4.262E-02		7.443E-02	1.493E-01	1.350E-02	0.285
TI-44	-1.060E-02		1.594E-01	2.175E-01	2.039E-02	-0.049
SC-46	1.482E-02		1.633E-01	2.810E-01	2.519E-02	0.053
V-48	-3.321E-01		5.087E-01	8.334E-01	7.628E-02	-0.398
CR-51	-2.049E+00		2.406E+00	3.392E+00	3.055E-01	-0.604
MN-54	-3.665E-02		1.381E-01	2.336E-01	2.097E-02	-0.157
CO-56	-8.196E-02		1.560E-01	2.601E-01	2.335E-02	-0.315
CO-57	4.386E-02		1.154E-01	1.918E-01	1.627E-02	0.229
CO-58	1.284E-02		1.712E-01	2.657E-01	2.387E-02	0.048
FE-59	-9.780E-02		3.752E-01	6.274E-01	6.230E-02	-0.156
CO-60	2.556E-02		1.412E-01	2.442E-01	2.265E-02	0.105
ZN-65	7.280E-01		3.880E-01	6.446E-01	5.987E-02	1.129
SE-75	7.294E-02		2.464E-01	3.242E-01	2.686E-02	0.225
RB-82	-1.111E+00		2.620E+00	3.562E+00	3.179E-01	-0.312
RB-83	2.446E-01		2.780E-01	4.564E-01	7.300E-02	0.536
KR-85	2.850E+01		2.266E+01	4.125E+01	3.820E+00	0.691
SR-85	1.736E-01		1.381E-01	2.513E-01	2.327E-02	0.691
Y-88	1.681E-01		1.295E-01	2.447E-01	2.184E-02	0.687
NB-93M	1.073E+01		6.125E+00	9.143E+00	2.753E+00	1.173
NB-94	5.742E-02		1.318E-01	2.301E-01	2.065E-02	0.250
NB-95	2.104E+00		3.797E-01	6.288E-01	5.604E-02	3.346
ZR-95	8.080E-02		2.853E-01	4.996E-01	4.867E-02	0.162
RU-103	-5.165E-02		1.852E-01	3.210E-01	4.675E-02	-0.161
RU-106	-3.939E-01		1.067E+00	1.825E+00	2.472E-01	-0.216
AG-108M	-7.589E-02		1.485E-01	2.221E-01	1.958E-02	-0.342
CD-109	1.241E+01		4.551E+00	6.582E+00	1.016E+00	1.885
AG-110M	-7.603E-02		1.340E-01	2.010E-01	1.739E-02	-0.378
SN-113	1.445E-02		2.110E-01	3.355E-01	3.088E-02	0.043
TE123M	7.279E-02		1.581E-01	2.411E-01	1.940E-02	0.302

Sample ID : 1111065-05 Acquisition date : 10-DEC-2011 13:09:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/gram)	K.L. Ided	Act error	MDA (pCi/gram)	MDA error	Act/MDA
SB-124	2.387E-02		1.748E-01	2.750E-01	2.478E-02	0.087
I-125	-3.287E+00		2.709E+00	4.398E+00	4.511E-01	-0.747
SB-125	-8.406E-02		3.751E-01	6.528E-01	6.056E-02	-0.129
SB-126	1.569E-02		1.484E+00	2.293E+00	2.020E-01	0.007
SN-126	8.649E-01		4.093E-01	6.179E-01	8.733E-02	1.400
I-129	3.604E-02		2.542E-01	4.357E-01	5.341E-02	0.083
I-131	-1.250E+00		1.769E+00	3.051E+00	2.693E-01	-0.410
BA-133	-2.125E-02		1.991E-01	2.898E-01	3.857E-02	-0.073
CS-134	1.738E-01		1.327E-01	2.191E-01	1.976E-02	0.793
CS-135	2.833E+00		7.351E-01	1.226E+00	1.008E-01	2.311
CS-136	4.103E-02		8.138E-01	1.394E+00	1.322E-01	0.029
CS-137	3.204E-02		1.359E-01	2.160E-01	1.866E-02	0.148
LA-138	1.235E-02		1.995E-01	3.381E-01	3.408E-02	0.037
CE-139	3.570E-02		1.495E-01	2.453E-01	1.953E-02	0.146
BA-140	-1.407E+00		2.319E+00	3.868E+00	1.288E+00	-0.364
LA-140	8.270E-01		7.404E-01	1.423E+00	1.389E-01	0.581
CE-141	5.032E-01		4.799E-01	7.176E-01	1.780E-01	0.701
CE-144	2.135E-01		1.023E+00	1.563E+00	1.303E-01	0.137
PM-144	-2.836E-02		1.258E-01	1.927E-01	1.687E-02	-0.147
PM-145	-2.523E-01		5.518E-01	8.888E-01	5.802E-01	-0.284
PM-146	4.322E-01	+	3.425E-01	4.593E-01	4.226E-02	0.941
ND-147	-3.658E-02		5.257E+00	9.206E+00	8.510E-01	-0.004
EU-152	4.443E+00	+	1.383E+00	2.253E+00	2.732E-01	1.972
GD-153	-4.826E-01		4.439E-01	7.139E-01	8.322E-02	-0.676
EU-154	6.915E-02		4.127E-01	6.319E-01	6.228E-02	0.109
EU-155	2.750E+00		5.796E-01	7.589E-01	1.052E-01	3.623
EU-156	6.701E-01		5.049E+00	7.866E+00	1.807E+00	0.085
HO-166M	1.273E-01		2.568E-01	3.343E-01	2.937E-02	0.381
HF-172	-5.014E-01		9.187E-01	1.379E+00	1.161E-01	-0.364
LU-172	-2.069E+00		5.145E+00	8.534E+00	7.914E-01	-0.242
LU-173	2.656E+00		6.086E-01	1.006E+00	8.264E-02	2.640
HF-175	-2.518E-02		2.193E-01	2.788E-01	2.427E-02	-0.090
LU-176	-9.443E-02		1.121E-01	1.740E-01	1.468E-02	-0.543
TA-182	1.638E+01	+	2.071E+00	2.367E+00	2.197E-01	6.919
IR-192	2.091E-02		2.810E-01	4.936E-01	4.557E-02	0.042
HG-203	4.577E-02		2.578E-01	3.365E-01	2.845E-02	0.136
BI-207	-2.422E-02		9.986E-02	1.716E-01	1.570E-02	-0.141
BI-210M	2.534E-01		2.751E-01	3.714E-01	3.056E-02	0.682
PB-211	4.364E+00	+	4.151E+00	6.933E+00	6.252E-01	0.629
BI-212	1.261E+00		1.090E+00	1.796E+00	1.585E-01	0.702
RA-225	-1.393E-02		1.619E+00	2.555E+00	2.372E-01	-0.005
TH-227	2.369E+00		1.103E+00	1.707E+00	1.404E-01	1.388
AC-228	1.208E+00	+	8.969E-01	1.069E+00	9.616E-02	1.129
TH-230	-2.585E+00		4.064E+01	5.548E+01	5.175E+00	-0.047
PA-231	6.766E+00		4.952E+00	7.628E+00	6.412E-01	0.887
TH-231	-4.006E-02		1.184E+00	2.028E+00	2.986E-01	-0.020
PA-233	-1.329E-01		5.903E-01	9.369E-01	2.099E-01	-0.142
PA-234	1.918E-01		5.053E-01	7.751E-01	6.482E-02	0.247

Sample ID : 1111065-05 Acquisition date : 10-DEC-2011 13:09:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/gram)	K.L. Ided	Act error	MDA (pCi/gram)	MDA error	Act/MDA
U-235	2.328E+00	+	1.487E+00	1.695E+00	2.935E-01	1.374
NP-237	6.664E+00		1.405E+00	1.839E+00	2.549E-01	3.624
AM-241	5.488E-01		3.745E-01	5.304E-01	3.968E-02	1.035
AM-243	3.854E+00		5.063E-01	4.518E-01	4.951E-02	8.531
CM-243	7.516E-01		7.821E-01	1.195E+00	9.801E-02	0.629

Sample ID : 1111065-05 Acquisition date : 10-DEC-2011 13:09:22

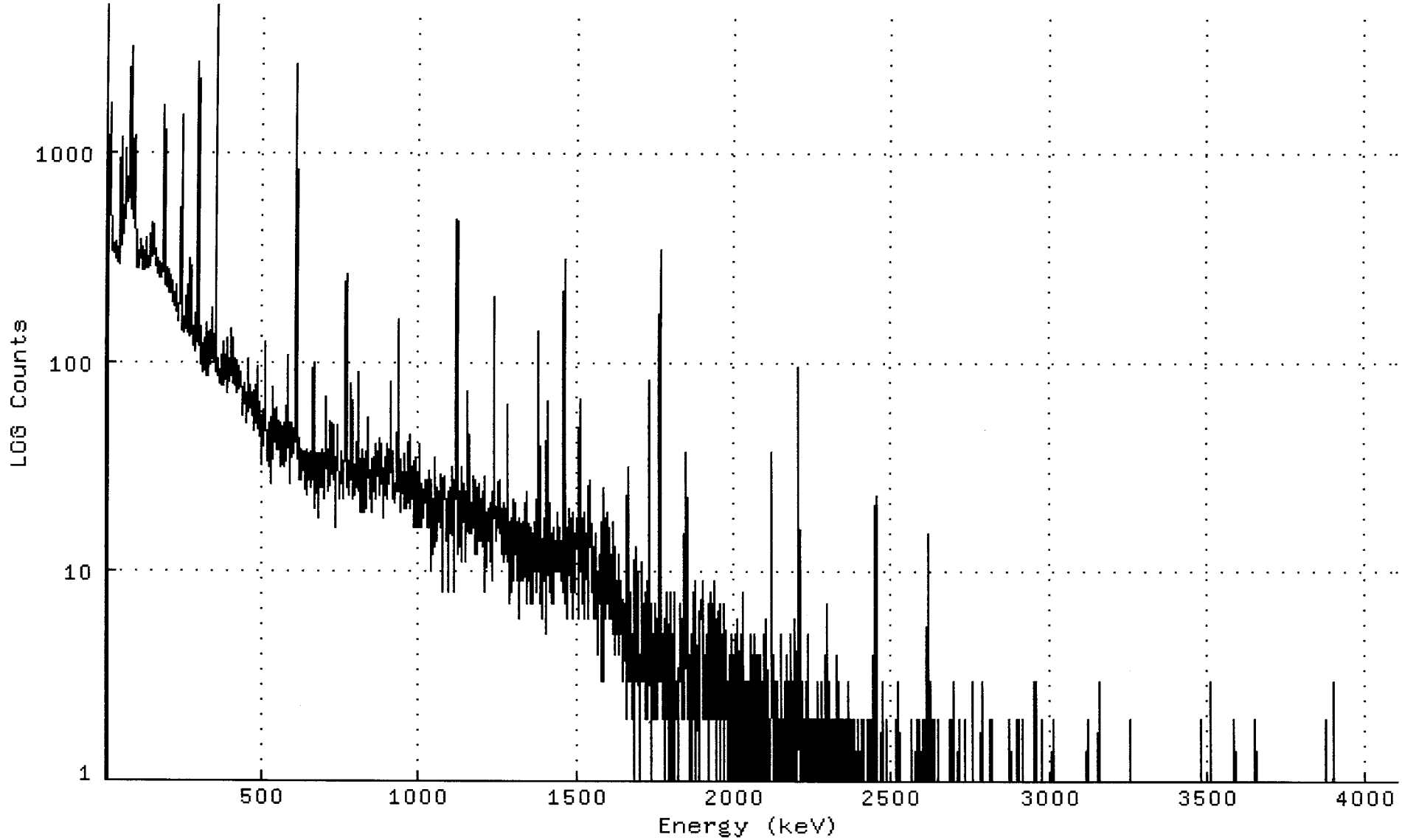
Total number of lines in spectrum	79	
Number of unidentified lines	45	
Number of lines tentatively identified by NID	34	43.04%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/gram	Wtd Mean Decay Corr pCi/gram	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	3.042E+01	3.042E+01	0.453E+01	14.89	
TL-208	1.41E+10Y	1.00	1.083E+00	1.083E+00	0.260E+00	23.98	
PB-210	22.26Y	1.00	2.540E+01	2.547E+01	0.510E+01	20.02	
PB-212	1.41E+10Y	1.00	9.610E-01	9.610E-01	2.001E-01	20.83	
BI-214	1602.00Y	1.00	3.091E+01	3.091E+01	0.193E+01	6.26	
PB-214	1602.00Y	1.00	3.325E+01	3.325E+01	0.233E+01	7.00	
RN-219	3.28E+04Y	1.00	3.095E+00	3.095E+00	1.870E+00	60.42	
RA-223	3.28E+04Y	1.00	2.028E+00	2.028E+00	2.313E+00	114.06	
RA-224	1.41E+10Y	1.00	6.097E+01	6.097E+01	0.672E+01	11.02	
RA-226	1602.00Y	1.00	7.905E+01	7.905E+01	14.49E+01	183.36	
PA-234M	4.47E+09Y	1.00	2.299E+01	2.299E+01	1.775E+01	77.21	
TH-234	4.47E+09Y	1.00	1.988E+01	1.988E+01	0.540E+01	27.15	
			---	---			
	Total Activity :		3.100E+02	3.101E+02			
	Grand Total Activity :		3.100E+02	3.101E+02			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106505_GE2_GAS1102_172247.CNF;1
Title :
Sample Title: DY2-17-31-111109
Start Time: 10-DEC-2011 13:09 Sample Time: 9-NOV-2011 00:00: Energy Offset: 6.87229E-02
Real Time : 0 01:00:04.04 Sample ID : 1111065-05 Energy Slope : 9.99625E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



8127

Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106505_GE2_GAS1102_1722

Channel

1:	0	0	0	0	0	0	1	54
9:	447	876	1565	1205	794	1055	1695	561
17:	417	354	359	341	330	359	323	337
25:	347	351	352	364	347	333	340	369
33:	351	308	295	294	348	295	300	314
41:	313	337	288	338	351	727	1165	389
49:	357	468	404	358	547	526	407	399
57:	410	435	508	537	581	532	1019	1009
65:	577	573	637	717	609	571	639	598
73:	705	891	2468	1164	3119	2166	641	637
81:	732	552	487	1047	612	477	1130	1092
89:	518	782	464	702	1188	563	504	344
97:	345	399	364	342	279	278	301	332
105:	320	320	300	341	328	338	309	342
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3233:	0	0	0	0	0	0	0	0
3241:	0	0	0	0	0	0	0	0
3249:	0	0	1	2	0	0	0	0
3257:	1	0	0	0	0	1	0	1
3265:	0	0	0	0	0	0	0	0
3273:	0	0	0	0	0	0	1	0
3281:	0	0	0	1	0	0	1	0
3289:	0	0	0	0	0	0	1	0
3297:	0	0	0	0	0	0	0	0
3305:	0	0	0	0	1	0	0	0

3313:	0	0	0	1	0	0	0	0
3321:	0	0	1	0	0	0	0	0
3329:	0	0	0	0	0	0	1	1
3337:	0	0	1	0	0	0	0	0
3345:	1	0	0	0	0	0	0	0
3353:	0	0	0	1	1	0	0	1
3361:	0	0	1	0	0	0	0	0
3369:	0	0	0	0	0	0	0	0
3377:	0	0	0	0	0	0	0	0
3385:	0	0	0	0	0	1	0	0
3393:	0	0	1	0	0	0	0	0
3401:	1	0	1	0	0	0	1	0
3409:	0	0	0	0	0	0	1	0
3417:	0	0	0	0	0	0	0	0
3425:	0	0	0	0	0	0	1	0
3433:	1	0	0	0	1	1	0	0
3441:	0	0	0	0	0	0	1	0
3449:	0	0	1	0	0	0	0	0
3457:	0	0	0	0	0	0	0	0
3465:	0	0	0	0	1	0	1	0
3473:	1	0	0	0	0	0	2	0
3481:	0	0	0	0	0	0	0	0
3489:	0	0	1	0	0	0	0	0
3497:	0	0	1	0	0	1	0	0
3505:	0	0	3	0	0	0	0	0
3513:	0	0	1	1	0	0	0	0
3521:	1	0	0	0	0	0	0	0
3529:	0	0	0	0	0	0	0	0
3537:	0	0	0	0	0	0	0	1
3545:	0	0	0	0	0	1	0	0
3553:	0	0	0	0	0	0	0	0
3561:	0	1	1	1	0	0	0	0
3569:	0	0	0	0	0	0	0	0
3577:	0	0	0	0	0	0	2	0
3585:	0	0	0	0	0	0	0	0
3593:	1	0	0	0	0	0	0	0
3601:	1	0	0	0	0	0	0	0
3609:	0	0	0	1	0	0	1	0
3617:	0	0	0	0	0	0	0	0
3625:	0	1	0	0	0	0	0	0
3633:	0	0	0	1	0	0	0	0
3641:	0	1	0	0	1	0	1	0
3649:	0	2	0	0	0	1	0	0
3657:	0	0	0	0	0	0	0	0
3665:	0	0	0	0	0	0	0	0
3673:	0	0	0	0	0	0	0	0
3681:	0	1	0	0	1	0	0	0
3689:	0	0	0	0	1	1	0	0
3697:	1	0	0	0	0	0	1	0
3705:	0	1	0	0	0	0	0	0
3713:	0	0	0	0	0	1	0	1
3721:	0	0	1	0	0	0	0	0
3729:	0	0	0	0	0	0	0	0
3737:	1	0	0	0	0	0	1	1
3745:	0	0	0	0	0	0	0	0
3753:	0	0	0	0	0	0	0	0
3761:	0	1	0	0	0	1	0	0
3769:	0	0	0	0	0	0	1	0
3777:	0	0	0	1	0	1	0	0
3785:	0	0	0	1	1	0	0	0

3793:	0	0	0	0	0	0	0	0
3801:	0	0	0	0	0	0	0	0
3809:	0	0	0	0	0	0	1	0
3817:	0	0	0	0	1	0	0	0
3825:	0	0	0	0	1	0	0	0
3833:	0	0	1	1	1	0	0	0
3841:	0	0	1	0	1	1	0	0
3849:	0	0	1	0	0	0	0	0
3857:	0	0	0	0	0	0	0	0
3865:	0	1	0	1	0	2	0	1
3873:	1	0	0	0	0	0	0	0
3881:	0	0	0	0	0	1	0	1
3889:	0	0	0	1	0	0	0	0
3897:	3	0	0	0	0	0	0	0
3905:	1	0	0	1	0	0	0	1
3913:	1	0	0	0	0	0	0	0
3921:	1	0	0	0	0	0	0	0
3929:	0	1	0	0	0	0	0	1
3937:	0	0	0	0	0	0	0	0
3945:	1	1	0	1	0	0	1	0
3953:	0	0	0	0	0	0	0	1
3961:	0	0	0	0	0	1	0	0
3969:	0	0	1	0	0	0	0	0
3977:	1	0	1	1	0	0	0	0
3985:	0	0	0	0	0	0	0	0
3993:	0	0	1	0	0	0	0	0
4001:	0	0	0	0	0	0	0	0
4009:	1	0	0	0	0	0	0	1
4017:	0	0	0	0	0	1	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	1	0	0	0	0	0
4041:	0	0	0	0	0	0	0	0
4049:	0	0	0	0	0	0	0	0
4057:	1	0	0	0	0	0	0	0
4065:	0	0	0	1	0	0	0	0
4073:	0	0	0	0	1	0	0	0
4081:	0	0	0	0	0	1	0	0
4089:	0	0	0	0	0	1	0	0

Sample ID : 1111065-06 Acquisition date : 10-DEC-2011 13:48:08

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VAX/VMS Peak Search Report Generated 10-DEC-2011 14:48:56.01

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106506_GE3_GAS1102_172250.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-17-32-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 10-DEC-2011 13:48:08
Sample ID : 1111065-06 Sample Quantity : 3.51600E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE3 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:28.57 0.8%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	15.69	139	1776	1.73	15.97	15	5	93.2		NB-93M
0	46.71*	1061	2631	1.11	47.00	44	6	16.6		PB-210
0	63.49*	703	4293	1.11	63.78	61	6	30.5		TH-234
1	77.84*	4216	3105	1.36	78.12	72	12	5.2	5.84E+02	
0	88.26	1253	4171	1.16	88.54	86	6	17.3		SN-126
										CD-109
0	93.36*	1175	3908	1.30	93.64	91	7	19.2		
0	145.05*	239	2647	1.92	145.33	142	7	72.7		CE-141
2	184.00	151	926	1.67	184.29	183	9	55.1	2.25E+01	
2	186.54*	2326	1528	1.54	186.83	183	9	6.5		RA-226
0	209.90	146	1727	2.90	210.19	207	7	96.6		
0	242.07*	2492	1941	1.35	242.37	238	8	7.3		RA-224
0	249.06	77	863	2.75	249.36	248	5	116.8		
0	258.75	229	1526	4.25	259.05	254	9	62.8		
0	270.76	314	1410	2.86	271.05	267	8	42.9		LU-173
4	295.66*	4468	573	1.34	295.96	292	13	3.4	1.94E+00	PB-214
4	300.73	186	968	2.20	301.02	292	13	57.9		
0	315.71	164	1018	3.73	316.01	312	9	71.7		
0	339.63*	95	860	1.37	339.93	336	7	105.2		AC-228
0	352.37*	7783	1031	1.68	352.67	348	10	2.7		PB-214
0	388.81	113	925	3.59	389.12	385	9	98.2		
0	402.10	69	588	1.59	402.41	399	6	113.4		RN-219
0	462.16	94	504	3.51	462.47	460	8	84.8		
0	487.52	74	401	1.45	487.82	485	7	93.0		
0	511.31*	119	398	2.62	511.62	508	8	62.9		
0	526.40	50	272	3.26	526.71	524	6	108.9		
0	533.09	85	356	4.96	533.40	530	8	80.6		
0	543.87	53	316	2.31	544.18	541	7	113.9		
1	580.52	56	251	1.88	580.83	578	16	93.3	3.70E+00	
1	583.86*	215	242	1.89	584.17	578	16	27.1		TL-208
0	609.85*	5525	380	1.54	610.17	606	9	3.0		BI-214
0	666.05	167	261	1.88	666.37	663	8	36.8		
0	704.35	108	231	2.31	704.67	702	8	52.4		
0	743.19	58	207	2.64	743.51	741	7	86.0		
0	768.84*	498	324	1.84	769.16	765	10	16.3		
0	786.77	141	285	1.70	787.10	783	9	46.8		

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Sample ID : 1111065-06 Acquisition date : 10-DEC-2011 13:48:08

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	797.06	64	259	6.18	797.39	793	10	97.2		
0	806.54	177	228	1.96	806.87	803	9	34.1		
0	826.53	51	124	2.36	826.86	825	5	71.9		
0	839.01	56	259	2.08	839.34	836	8	102.5		
0	861.97	43	168	2.76	862.30	859	7	104.5		
0	911.74	108	297	1.55	912.08	907	10	63.0		AC-228
0	934.92	265	216	1.79	935.25	931	9	23.6		
0	967.73	133	312	7.70	968.07	962	13	57.4		AC-228
0	1071.63	49	182	2.72	1071.97	1067	10	107.6		
3	1120.96*	1093	95	2.02	1121.31	1116	13	6.7	2.93E+00	BI-214
0	1155.65	116	189	1.43	1156.00	1152	8	45.0		
0	1209.30	25	82	2.06	1209.65	1207	5	118.9		
0	1229.69	48	127	4.81	1230.04	1225	10	93.2		
0	1238.71	453	120	1.97	1239.06	1235	8	12.6		
0	1253.63	93	154	3.33	1253.98	1249	12	57.8		
0	1281.34	106	134	2.49	1281.70	1278	9	43.8		
0	1329.94	24	51	2.53	1330.30	1328	5	96.4		
0	1378.36	273	133	1.91	1378.72	1374	9	19.2		
0	1385.92	47	84	2.53	1386.28	1384	6	68.4		
1	1402.49	99	103	2.34	1402.85	1396	20	38.4	1.25E+00	
1	1408.77	133	84	2.35	1409.13	1396	20	29.7		
0	1461.67*	499	163	2.34	1462.04	1457	12	13.7		K-40
0	1496.14	44	108	3.42	1496.50	1493	12	98.5		
0	1509.65	151	114	2.37	1510.02	1504	12	32.7		
0	1524.04	42	111	4.54	1524.41	1519	11	102.9		
0	1539.49	23	75	1.59	1539.86	1538	6	127.5		
0	1544.84	32	70	1.12	1545.21	1543	7	97.1		
0	1584.38	45	56	2.91	1584.75	1581	8	65.4		
0	1590.62	22	52	2.30	1591.00	1589	6	108.9		
0	1662.48	61	39	1.63	1662.86	1659	9	44.4		
0	1694.96	38	46	2.89	1695.35	1690	11	76.6		
0	1730.86	186	45	2.54	1731.24	1726	12	20.8		
0	1765.37*	859	31	2.35	1765.76	1759	14	7.4		BI-214
0	1807.61	25	21	7.69	1808.00	1802	12	84.1		AL-26
0	1848.66	142	25	2.49	1849.05	1843	11	21.6		
0	1913.36	8	10	1.70	1913.75	1911	5	138.1		
0	2015.58	9	7	1.25	2015.98	2014	6	111.9		
0	2053.97	13	6	2.87	2054.37	2051	8	82.6		
0	2107.46	23	16	8.12	2107.87	2100	16	88.3		
0	2119.70	64	7	3.12	2120.10	2115	9	29.0		
0	2205.06	234	18	2.65	2205.47	2200	13	14.9		BI-214
0	2242.25	9	6	2.71	2242.66	2237	8	114.2		
0	2257.23	9	6	3.20	2257.64	2254	9	123.9		
0	2294.83	13	6	1.51	2295.25	2290	8	86.7		
0	2316.25	9	6	1.32	2316.67	2311	10	133.6		
0	2329.58	7	0	1.16	2330.00	2326	7	75.6		
0	2448.69	59	0	2.27	2449.12	2445	9	26.0		
0	2616.08*	47	0	2.22	2616.52	2613	8	30.9		TL-208

Sample ID : 1111065-06 Acquisition date : 10-DEC-2011 13:48:08

Total number of lines in spectrum	83	
Number of unidentified lines	49	
Number of lines tentatively identified by NID	34	40.96%

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AL-26	7.20E+05Y	1.00	1.575E-01	1.575E-01	1.333E-01	84.64	
LU-173	1.37Y	1.04	2.001E+00	2.090E+00	0.917E+00	43.87	
			---	---			
Total Activity :			2.158E+00	2.248E+00			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.636E+01	2.636E+01	0.444E+01	16.83	
TL-208	1.41E+10Y	1.00	1.153E+00	1.153E+00	0.266E+00	23.06	
PB-210	22.26Y	1.00	3.198E+01	3.207E+01	0.635E+01	19.79	
BI-214	1602.00Y	1.00	3.340E+01	3.340E+01	0.214E+01	6.41	
PB-214	1602.00Y	1.00	3.425E+01	3.425E+01	0.243E+01	7.10	
RN-219	3.28E+04Y	1.00	2.004E+00	2.004E+00	2.282E+00	113.87	
RA-224	1.41E+10Y	1.00	7.779E+01	7.779E+01	0.956E+01	12.29	
RA-226	1602.00Y	1.00	7.396E+01	7.396E+01	13.56E+01	183.35	
AC-228	1.41E+10Y	1.00	1.753E+00	1.753E+00	0.746E+00	42.57	
TH-234	4.47E+09Y	1.00	1.782E+01	1.782E+01	0.571E+01	32.04	
			---	---			
Total Activity :			3.005E+02	3.006E+02			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NB-93M	14.60Y	1.00	1.317E+01	1.323E+01	1.574E+01	119.01	
CD-109	464.00D	1.05	2.909E+01	3.049E+01	0.731E+01	23.97	
SN-126	1.00E+05Y	1.00	2.926E+00	2.926E+00	0.678E+00	23.16	
CE-141	32.50D	1.96	4.568E-01	8.962E-01	6.922E-01	77.23	
			---	---			
Total Activity :			4.564E+01	4.754E+01			

Grand Total Activity : 3.483E+02 3.504E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-06 Acquisition date : 10-DEC-2011 13:48:08

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
AL-26	1808.65	99.76*	3.376E-01	1.575E-01	1.575E-01	84.64	OK
Final Mean for 1 Valid Peaks = 1.575E-01+/- 1.333E-01 (84.64%)							
LU-173	100.72	5.24	2.489E+00	----- Line Not Found		-----	Absent
	272.11	21.20*	1.580E+00	2.001E+00	2.090E+00	43.87	OK
Final Mean for 1 Valid Peaks = 2.090E+00+/- 9.171E-01 (43.87%)							

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	3.789E-01	2.636E+01	2.636E+01	16.83	OK
Final Mean for 1 Valid Peaks = 2.636E+01+/- 4.436E+00 (16.83%)							
TL-208	583.14	30.22*	8.029E-01	1.889E+00	1.889E+00	29.09	OK
	860.37	4.48	5.645E-01	----- Line Not Found		-----	Absent
	2614.66	35.85	3.019E-01	9.278E-01	9.278E-01	32.73	OK
Final Mean for 2 Valid Peaks = 1.153E+00+/- 2.658E-01 (23.06%)							
PB-210	46.50	4.05*	1.750E+00	3.198E+01	3.207E+01	19.79	OK
Final Mean for 1 Valid Peaks = 3.207E+01+/- 6.347E+00 (19.79%)							
BI-214	609.31	46.30*	7.707E-01	3.306E+01	3.306E+01	10.98	OK
	1120.29	15.10	4.552E-01	3.397E+01	3.397E+01	12.49	OK
	1764.49	15.80	3.416E-01	3.398E+01	3.398E+01	12.27	OK
	2204.22	4.98	3.132E-01	3.209E+01	3.209E+01	18.16	OK
Final Mean for 4 Valid Peaks = 3.340E+01+/- 2.140E+00 (6.41%)							
PB-214	295.21	19.19	1.480E+00	3.358E+01	3.358E+01	9.83	OK
	351.92	37.19*	1.276E+00	3.503E+01	3.503E+01	10.26	OK
Final Mean for 2 Valid Peaks = 3.425E+01+/- 2.432E+00 (7.10%)							
RN-219	401.80	6.50*	1.133E+00	2.004E+00	2.004E+00	113.87	OK
Final Mean for 1 Valid Peaks = 2.004E+00+/- 2.282E+00 (113.87%)							
RA-224	240.98	3.95*	1.732E+00	7.779E+01	7.779E+01	12.29	OK
Final Mean for 1 Valid Peaks = 7.779E+01+/- 9.560E+00 (12.29%)							
RA-226	186.21	3.28*	2.048E+00	7.396E+01	7.396E+01	183.35	OK
Final Mean for 1 Valid Peaks = 7.396E+01+/- 1.356E+02 (183.35%)							

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Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
AC-228	338.32	11.40	1.320E+00	1.343E+00	1.343E+00	105.69	OK
	911.07	27.70*	5.376E-01	1.544E+00	1.544E+00	63.60	OK
	969.11	16.60	5.106E-01	3.350E+00	3.350E+00	58.22	OK
Final Mean for 3 Valid Peaks = 1.753E+00+/- 7.461E-01 (42.57%)							
TH-234	63.29	3.80*	2.218E+00	1.782E+01	1.782E+01	32.04	OK
Final Mean for 1 Valid Peaks = 1.782E+01+/- 5.710E+00 (32.04%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
NB-93M	16.57	9.43*	2.383E-01	1.317E+01	1.323E+01	119.01	OK
Final Mean for 1 Valid Peaks = 1.323E+01+/- 1.574E+01 (119.01%)							
CD-109	88.03	3.72*	2.473E+00	2.909E+01	3.049E+01	23.97	OK
Final Mean for 1 Valid Peaks = 3.049E+01+/- 7.310E+00 (23.97%)							
SN-126	87.57	37.00*	2.471E+00	2.926E+00	2.926E+00	23.16	OK
Final Mean for 1 Valid Peaks = 2.926E+00+/- 6.776E-01 (23.16%)							
CE-141	145.44	48.40*	2.304E+00	4.568E-01	8.962E-01	77.23	OK
Final Mean for 1 Valid Peaks = 8.962E-01+/- 6.922E-01 (77.23%)							

Flag: "*" = Keyline

Sample ID : 1111065-06 Acquisition date : 10-DEC-2011 13:48:08

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
AL-26	1.575E-01	1.333E-01	1.547E-01	1.384E-02	1.018
K-40	2.636E+01	4.436E+00	2.337E+00	2.096E-01	11.283
NB-93M	1.323E+01	1.574E+01	1.566E+01	1.158E+01	0.845
CD-109	3.049E+01	7.310E+00	6.393E+00	1.031E+00	4.770
SN-126	2.926E+00	6.776E-01	6.133E-01	9.129E-02	4.771
CE-141	8.962E-01	6.922E-01	7.064E-01	1.819E-01	1.269
LU-173	2.090E+00	9.171E-01	9.114E-01	7.566E-02	2.294
TL-208	1.153E+00	2.658E-01	6.267E-01	6.206E-02	1.839
PB-210	3.207E+01	6.347E+00	5.778E+00	5.819E-01	5.550
BI-214	3.340E+01	2.140E+00	4.440E-01	4.342E-02	75.228
PB-214	3.425E+01	2.432E+00	4.641E-01	4.197E-02	73.785
RN-219	2.004E+00	2.282E+00	3.041E+00	2.903E-01	0.659
RA-224	7.779E+01	9.560E+00	4.854E+00	4.374E-01	16.027
RA-226	7.396E+01	1.356E+02	5.347E+00	9.795E+00	13.832
AC-228	1.753E+00	7.461E-01	9.356E-01	7.598E-02	1.873
TH-234	1.782E+01	5.710E+00	6.030E+00	5.488E-01	2.955

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	-6.990E-01		1.761E+00	2.775E+00	2.761E-01	-0.252
NA-22	1.027E-01		1.592E-01	2.603E-01	2.385E-02	0.395
TI-44	1.308E-01		1.753E-01	2.480E-01	2.518E-02	0.527
SC-46	6.486E-02		1.867E-01	3.301E-01	2.675E-02	0.196
V-48	4.993E-01		5.665E-01	1.026E+00	8.941E-02	0.486
CR-51	-4.743E-01		2.651E+00	3.949E+00	3.598E-01	-0.120
MN-54	7.739E-02		1.861E-01	2.745E-01	2.363E-02	0.282
CO-56	2.282E-02		2.010E-01	3.172E-01	2.699E-02	0.072
CO-57	1.144E-01		1.218E-01	2.064E-01	2.398E-02	0.554
CO-58	-3.819E-04		1.988E-01	3.124E-01	2.753E-02	-0.001
FE-59	-3.943E-01		4.198E-01	6.801E-01	6.969E-02	-0.580
CO-60	-8.951E-02		1.575E-01	2.613E-01	2.656E-02	-0.343
ZN-65	8.226E-02		3.313E-01	5.264E-01	5.129E-02	0.156
SE-75	-1.049E-02		2.568E-01	3.402E-01	2.909E-02	-0.031
RB-82	-2.495E+00		2.897E+00	3.875E+00	3.492E-01	-0.644
RB-83	4.661E-02		3.339E-01	4.972E-01	8.177E-02	0.094
KR-85	4.942E+01		2.810E+01	4.788E+01	4.795E+00	1.032
SR-85	3.012E-01		1.713E-01	2.918E-01	2.922E-02	1.032
Y-88	8.415E-02		1.436E-01	2.558E-01	2.287E-02	0.329
NB-94	-6.383E-02		1.368E-01	2.328E-01	1.929E-02	-0.274
NB-95	1.119E+00		3.392E-01	5.863E-01	5.323E-02	1.909
ZR-95	2.020E-01		3.162E-01	5.706E-01	5.677E-02	0.354
RU-103	5.017E-02		2.175E-01	3.536E-01	5.318E-02	0.142
RU-106	2.638E-01		1.113E+00	1.995E+00	2.809E-01	0.132
AG-108M	8.941E-03		1.395E-01	2.457E-01	2.276E-02	0.036
AG-110M	3.973E-04		1.445E-01	2.299E-01	2.168E-02	0.002
SN-113	1.467E-01		2.556E-01	3.876E-01	3.763E-02	0.379

Sample ID : 1111065-06 Acquisition date : 10-DEC-2011 13:48:08

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
TE123M	-1.977E-01		1.548E-01	2.487E-01	2.537E-02	-0.795
SB-124	1.300E-01		1.875E-01	3.089E-01	3.032E-02	0.421
I-125	-3.951E+00		3.523E+00	5.902E+00	8.273E-01	-0.669
SB-125	6.272E-02		4.437E-01	7.172E-01	7.080E-02	0.087
SB-126	9.684E-01		1.351E+00	2.443E+00	2.265E-01	0.396
I-129	-2.067E-01		3.582E-01	6.131E-01	1.140E-01	-0.337
I-131	2.120E+00		1.991E+00	3.340E+00	3.068E-01	0.635
BA-133	7.510E-01		2.291E-01	3.475E-01	4.696E-02	2.161
CS-134	7.001E-02		1.354E-01	2.211E-01	2.172E-02	0.317
CS-135	1.323E+00		7.502E-01	1.180E+00	9.917E-02	1.121
CS-136	1.444E-01		1.005E+00	1.752E+00	1.658E-01	0.082
CS-137	-7.996E-02		1.457E-01	2.243E-01	2.110E-02	-0.357
LA-138	-4.801E-02		2.232E-01	3.769E-01	3.275E-02	-0.127
CE-139	2.659E-02		1.520E-01	2.533E-01	2.515E-02	0.105
BA-140	1.198E+00		3.095E+00	4.078E+00	1.367E+00	0.294
LA-140	5.468E-01		8.884E-01	1.455E+00	1.292E-01	0.376
CE-144	-1.275E-02		9.833E-01	1.644E+00	1.835E-01	-0.008
PM-144	5.968E-03		1.260E-01	2.132E-01	1.993E-02	0.028
PM-145	-4.124E-01		7.510E-01	1.200E+00	7.904E-01	-0.344
PM-146	3.271E-01		2.923E-01	4.896E-01	4.828E-02	0.668
ND-147	5.367E+00		8.184E+00	1.103E+01	1.105E+00	0.486
EU-152	4.907E+00	+	1.567E+00	2.613E+00	2.856E-01	1.878
GD-153	-4.795E-01		4.660E-01	7.637E-01	1.018E-01	-0.628
EU-154	2.845E-01		4.410E-01	7.208E-01	6.606E-02	0.395
EU-155	4.325E-01		5.902E-01	8.217E-01	1.201E-01	0.526
EU-156	-2.554E+00		5.880E+00	8.926E+00	2.044E+00	-0.286
HO-166M	-2.096E-01		2.419E-01	3.602E-01	3.349E-02	-0.582
HF-172	5.743E-02		8.877E-01	1.489E+00	1.706E-01	0.039
LU-172	1.551E+00		6.163E+00	1.082E+01	1.035E+00	0.143
HF-175	-3.818E-02		2.280E-01	2.960E-01	2.647E-02	-0.129
LU-176	2.867E-02		1.183E-01	1.796E-01	1.524E-02	0.160
TA-182	1.781E+01	+	2.225E+00	2.662E+00	2.603E-01	6.690
IR-192	1.606E-01		3.464E-01	5.249E-01	5.205E-02	0.306
HG-203	-3.518E-01		2.325E-01	3.601E-01	3.013E-02	-0.977
BI-207	2.043E-03		1.155E-01	2.047E-01	2.036E-02	0.010
BI-210M	1.440E-02		2.505E-01	3.795E-01	3.248E-02	0.038
PB-211	7.484E-01		4.811E+00	7.175E+00	6.866E-01	0.104
BI-212	-6.182E-02		1.052E+00	1.844E+00	1.705E-01	-0.034
PB-212	7.854E-01		3.260E-01	5.089E-01	4.609E-02	1.543
RA-223	1.249E+00		3.091E+00	4.702E+00	4.093E-01	0.266
RA-225	1.102E+00		2.157E+00	3.501E+00	4.176E-01	0.315
TH-227	7.810E-01		1.109E+00	1.707E+00	1.555E-01	0.457
TH-230	3.407E+01		4.474E+01	6.332E+01	6.399E+00	0.538
PA-231	7.737E+00		5.238E+00	8.207E+00	6.916E-01	0.943
TH-231	6.068E-02		1.847E+00	3.185E+00	7.884E-01	0.019
PA-233	2.003E-01		6.259E-01	9.520E-01	2.135E-01	0.210
PA-234	-4.068E-02		4.802E-01	8.024E-01	9.025E-02	-0.051
PA-234M	1.720E+01		1.765E+01	3.178E+01	2.813E+00	0.541

Sample ID : 1111065-06 Acquisition date : 10-DEC-2011 13:48:08

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
U-235	2.097E+00	+	1.576E+00	1.726E+00	3.221E-01	1.215
NP-237	1.042E+00		1.430E+00	1.991E+00	2.909E-01	0.524
AM-241	7.433E-01		3.880E-01	6.263E-01	5.158E-02	1.187
AM-243	4.235E+00		5.860E-01	5.038E-01	5.911E-02	8.407
CM-243	1.202E-01		8.509E-01	1.289E+00	1.050E-01	0.093

Sample ID : 1111065-06 Acquisition date : 10-DEC-2011 13:48:08

Total number of lines in spectrum	83	
Number of unidentified lines	49	
Number of lines tentatively identified by NID	34	40.96%

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AL-26	7.20E+05Y	1.00	1.575E-01	1.575E-01	1.333E-01	84.64	
LU-173	1.37Y	1.04	2.001E+00	2.090E+00	0.917E+00	43.87	
			---	---			
Total Activity :			2.158E+00	2.248E+00			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.636E+01	2.636E+01	0.444E+01	16.83	
TL-208	1.41E+10Y	1.00	1.153E+00	1.153E+00	0.266E+00	23.06	
PB-210	22.26Y	1.00	3.198E+01	3.207E+01	0.635E+01	19.79	
BI-214	1602.00Y	1.00	3.340E+01	3.340E+01	0.214E+01	6.41	
PB-214	1602.00Y	1.00	3.425E+01	3.425E+01	0.243E+01	7.10	
RN-219	3.28E+04Y	1.00	2.004E+00	2.004E+00	2.282E+00	113.87	
RA-224	1.41E+10Y	1.00	7.779E+01	7.779E+01	0.956E+01	12.29	
RA-226	1602.00Y	1.00	7.396E+01	7.396E+01	13.56E+01	183.35	
AC-228	1.41E+10Y	1.00	1.753E+00	1.753E+00	0.746E+00	42.57	
TH-234	4.47E+09Y	1.00	1.782E+01	1.782E+01	0.571E+01	32.04	
			---	---			
Total Activity :			3.005E+02	3.006E+02			

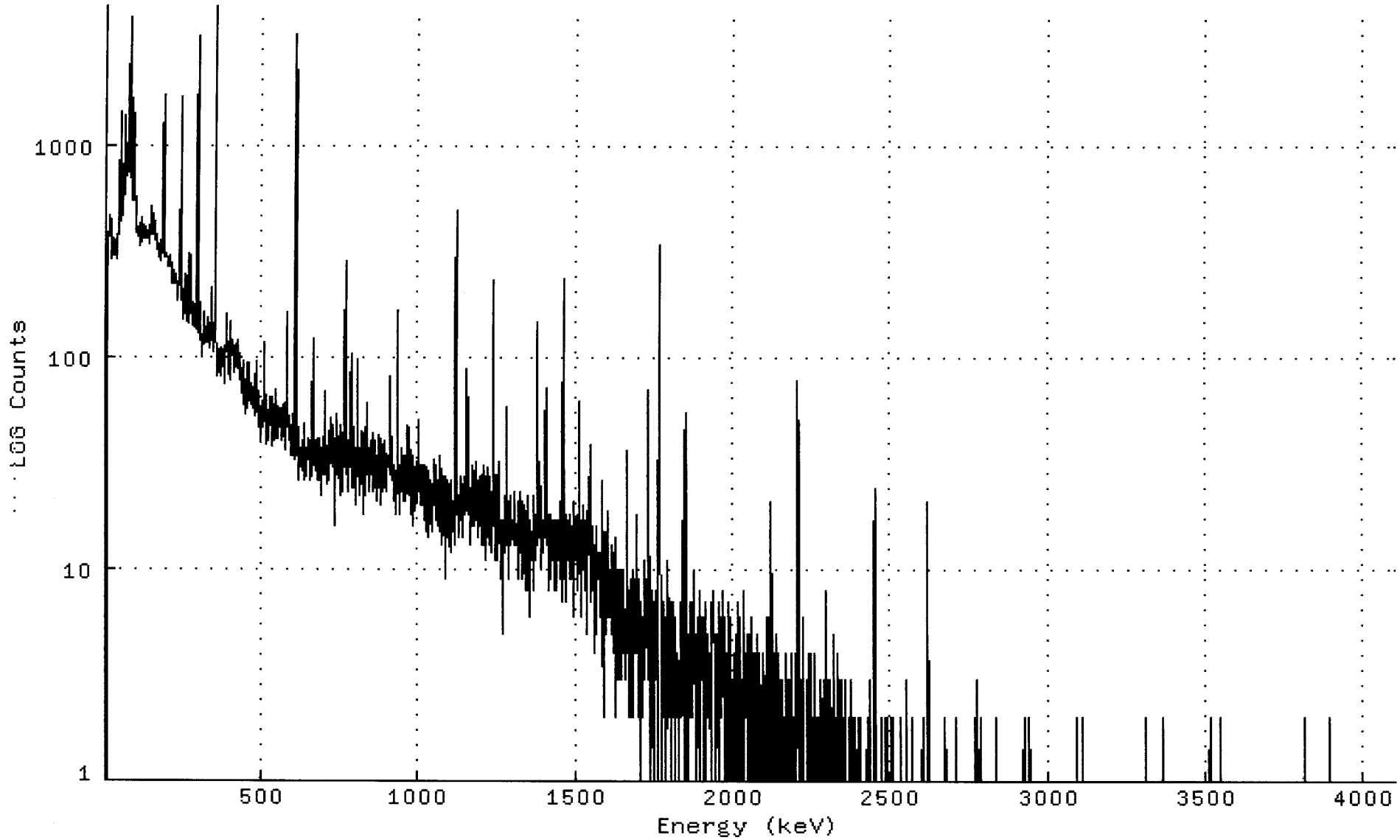
Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NB-93M	14.60Y	1.00	1.317E+01	1.323E+01	1.574E+01	119.01	
CD-109	464.00D	1.05	2.909E+01	3.049E+01	0.731E+01	23.97	
SN-126	1.00E+05Y	1.00	2.926E+00	2.926E+00	0.678E+00	23.16	
CE-141	32.50D	1.96	4.568E-01	8.962E-01	6.922E-01	77.23	
			---	---			
Total Activity :			4.564E+01	4.754E+01			

Grand Total Activity : 3.483E+02 3.504E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106506_GE3_GAS1102_172250.CNF;1
Title :
Sample Title: DY2-17-32-111109
Start Time: 10-DEC-2011 13:48 Sample Time: 9-NOV-2011 00:00: Energy Offset: -2.78447E-01
Real Time : 0 01:00:28.57 Sample ID : 1111065-06 Energy Slope : 9.99940E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106506_GE3_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	11	341	446	373	438	397	371	461
17:	435	328	320	356	287	305	321	302
25:	306	361	309	352	316	322	298	355
33:	344	315	289	321	349	335	364	375
41:	377	406	401	396	418	505	1416	580
49:	439	504	558	493	549	800	465	499
57:	522	558	579	659	699	702	813	1367
65:	744	728	758	830	808	715	738	748
73:	844	839	2384	2083	2153	3981	817	944
81:	723	841	552	1039	909	550	972	1650
89:	647	811	794	548	1403	895	643	501
97:	388	440	466	425	416	367	376	378
105:	405	410	391	330	378	400	345	412
113:	406	454	385	373	395	357	350	371
121:	381	375	421	402	381	382	383	406
129:	363	383	382	365	389	373	386	362
137:	384	365	411	369	399	338	373	461
145:	515	424	387	392	379	438	374	418
153:	395	389	473	401	353	386	354	357
161:	354	338	380	364	357	321	357	325
169:	301	337	334	297	299	314	354	313
177:	282	325	329	337	325	306	313	379
185:	349	943	1738	437	295	302	311	295
193:	292	293	300	302	305	297	294	273
201:	277	292	281	267	267	286	272	288
209:	266	301	253	268	225	223	240	235
217:	239	256	219	233	240	229	242	245
225:	247	220	221	232	220	215	182	202
233:	226	218	217	303	332	248	497	415
241:	234	843	1699	291	212	185	176	179
249:	209	201	201	150	189	162	158	192
257:	243	193	219	240	179	169	160	147
265:	186	163	170	144	169	310	278	301
273:	181	171	198	206	160	178	163	149
281:	142	167	181	160	139	161	175	165
289:	147	143	160	136	140	148	921	3274
297:	742	130	154	191	218	153	167	136
305:	139	143	122	112	113	128	100	112
313:	118	114	162	139	149	147	123	118
321:	120	134	129	129	138	133	139	118
329:	144	126	153	135	124	135	136	116
337:	110	124	210	160	121	120	121	115
345:	119	106	120	111	127	163	224	2813
353:	4608	455	116	115	104	81	95	96
361:	81	95	95	107	99	100	97	86
369:	80	93	84	101	110	84	98	107
377:	94	89	96	101	91	103	112	111
385:	75	100	129	131	120	160	105	111
393:	107	115	117	97	83	95	97	104
401:	78	147	140	91	108	120	104	105
409:	104	114	109	87	93	101	86	84
417:	91	96	98	103	99	115	102	106
425:	106	87	106	119	90	81	83	84

433:	84	82	72	67	87	83	78	88
441:	76	88	84	74	60	95	60	58
449:	59	54	77	67	67	66	94	78
457:	92	63	57	66	85	78	94	80
465:	70	59	66	62	65	75	72	63
473:	58	67	71	57	70	73	69	63
481:	83	76	53	56	65	62	70	95
489:	68	60	55	55	69	46	59	58
497:	47	57	52	48	40	51	57	62
505:	56	58	50	49	56	80	91	116
513:	79	56	53	47	50	52	39	55
521:	45	50	44	40	55	57	64	57
529:	49	47	58	59	61	64	63	51
537:	38	46	51	43	40	46	51	70
545:	64	57	41	55	62	51	44	41
553:	42	58	46	54	57	50	48	46
561:	46	51	43	52	57	40	46	45
569:	45	53	47	58	42	60	36	51
577:	50	36	39	51	73	54	75	161
585:	65	50	42	44	49	40	43	52
593:	38	36	34	46	47	36	34	40
601:	47	43	49	54	53	33	51	59
609:	738	3320	1523	96	53	46	37	34
617:	46	32	26	41	32	33	31	37
625:	33	30	32	32	30	40	39	40
633:	29	36	26	32	48	41	39	32
641:	29	32	34	37	36	27	30	34
649:	34	41	41	33	40	36	26	34
657:	39	40	26	37	34	31	33	27
665:	48	122	96	37	31	34	32	34
673:	36	40	38	32	29	34	32	41
681:	26	29	28	38	41	26	34	26
689:	34	24	37	22	30	34	28	33
697:	29	36	34	42	28	28	44	69
705:	58	41	35	38	26	33	25	27
713:	35	26	31	45	31	34	28	44
721:	51	37	33	37	32	30	30	47
729:	37	33	32	33	41	16	30	26
737:	26	32	47	34	28	44	47	54
745:	33	30	29	28	28	29	24	22
753:	33	47	38	34	23	28	44	42
761:	26	32	43	40	30	47	46	99
769:	282	182	44	39	28	30	31	24
777:	23	40	29	28	42	37	39	37
785:	30	70	104	51	32	39	24	30
793:	24	32	37	46	26	34	34	33
801:	37	20	30	34	39	43	97	76
809:	32	32	22	29	31	28	26	37
817:	31	29	34	36	25	39	45	27
825:	32	38	44	43	18	26	39	29
833:	38	46	35	28	40	33	50	61
841:	45	29	29	37	23	28	32	37
849:	32	40	28	35	30	26	30	23
857:	44	23	25	27	33	32	40	27
865:	27	21	33	24	34	22	27	24
873:	32	28	43	29	34	32	28	31
881:	20	28	41	35	25	24	35	23
889:	39	27	40	28	40	24	30	25
897:	23	35	30	30	28	32	34	32
905:	32	30	30	32	28	39	48	80

913:	47	33	42	26	33	26	37	31
921:	30	21	30	31	25	31	27	25
929:	27	29	24	18	28	77	165	94
937:	27	28	20	24	25	18	27	31
945:	31	31	24	30	23	37	32	30
953:	21	22	30	23	27	26	24	34
961:	27	21	24	41	47	41	29	32
969:	39	46	37	33	33	22	26	34
977:	36	26	18	21	16	28	34	28
985:	27	29	19	20	29	20	28	30
993:	27	32	32	21	25	26	23	24
1001:	49	50	32	23	26	30	31	21
1009:	21	28	20	29	22	31	27	25
1017:	20	27	17	31	30	24	23	25
1025:	15	22	30	16	21	17	22	14
1033:	29	23	25	25	22	22	22	26
1041:	17	15	21	17	24	24	21	30
1049:	20	30	25	30	33	29	25	27
1057:	24	17	19	19	19	26	16	21
1065:	22	27	15	26	17	34	30	29
1073:	19	24	24	13	19	19	15	27
1081:	20	17	22	9	20	24	19	22
1089:	27	14	20	22	24	15	26	24
1097:	20	19	25	16	15	13	12	23
1105:	23	26	20	15	18	15	21	16
1113:	20	17	17	13	30	15	23	175
1121:	496	395	79	27	18	21	22	14
1129:	20	15	18	15	20	27	26	23
1137:	17	25	25	19	21	14	21	17
1145:	19	25	19	18	18	27	19	22
1153:	23	28	37	87	48	36	24	29
1161:	26	21	15	13	21	19	23	24
1169:	18	31	21	16	21	21	20	16
1177:	29	26	18	17	25	20	32	19
1185:	26	21	17	25	26	17	17	14
1193:	18	16	16	20	27	22	18	16
1201:	13	28	23	22	17	28	13	25
1209:	31	23	14	13	23	19	24	11
1217:	25	30	25	19	18	14	24	13
1225:	13	15	16	15	27	20	20	15
1233:	22	12	13	19	25	92	230	146
1241:	34	14	21	21	20	28	11	11
1249:	17	22	18	19	28	28	32	20
1257:	18	17	19	9	15	16	14	17
1265:	16	5	15	17	13	16	11	15
1273:	15	16	17	22	12	15	17	18
1281:	44	58	42	13	21	12	20	10
1289:	14	9	22	13	21	13	17	16
1297:	17	14	15	15	17	14	13	14
1305:	19	23	16	18	14	15	13	13
1313:	14	13	21	9	15	16	19	14
1321:	19	17	23	18	14	12	12	10
1329:	17	18	21	9	10	12	16	13
1337:	17	20	10	10	8	15	12	19
1345:	8	17	17	10	12	22	13	10
1353:	11	6	14	13	15	12	11	12
1361:	15	14	13	8	22	18	12	10
1369:	12	11	18	11	15	12	14	13
1377:	38	92	148	56	19	14	15	16
1385:	22	32	31	20	10	16	14	16

1393:	12	14	17	16	14	12	14	14
1401:	22	46	56	26	20	14	26	37
1409:	71	44	13	18	15	12	8	13
1417:	14	17	9	14	16	10	18	14
1425:	12	17	17	11	13	14	11	17
1433:	13	13	8	12	12	14	17	14
1441:	8	17	13	14	15	11	12	13
1449:	10	19	9	13	21	10	11	16
1457:	14	7	12	44	136	233	149	23
1465:	12	10	8	18	7	14	16	12
1473:	11	14	13	17	16	14	15	18
1481:	15	12	12	9	16	12	10	11
1489:	12	9	12	6	7	10	14	21
1497:	15	16	15	11	13	13	9	8
1505:	14	12	15	11	30	62	51	26
1513:	17	10	9	12	14	17	6	12
1521:	17	18	18	20	20	10	14	10
1529:	8	10	14	17	14	19	12	15
1537:	16	5	27	23	15	16	12	16
1545:	39	12	9	7	7	9	11	8
1553:	16	13	10	12	11	13	13	4
1561:	13	10	12	13	8	5	12	16
1569:	10	10	10	12	9	10	11	9
1577:	6	9	12	9	8	10	18	17
1585:	26	14	6	2	10	15	14	10
1593:	11	14	7	15	11	5	8	19
1601:	10	11	6	7	8	8	6	8
1609:	6	9	9	11	5	7	11	9
1617:	13	11	8	5	11	10	4	7
1625:	5	2	10	14	6	9	3	6
1633:	6	10	8	6	8	10	6	8
1641:	6	3	7	10	6	8	4	3
1649:	6	4	5	10	9	7	6	4
1657:	6	5	3	4	8	36	21	13
1665:	4	8	3	6	2	4	7	8
1673:	2	5	6	5	9	3	2	10
1681:	4	3	10	2	9	8	4	4
1689:	6	4	4	7	13	7	18	7
1697:	9	5	5	5	2	6	7	1
1705:	3	6	4	3	3	2	6	4
1713:	5	3	3	3	6	11	3	3
1721:	6	9	5	5	5	6	3	6
1729:	24	43	70	44	15	9	5	5
1737:	1	4	1	2	7	2	8	3
1745:	5	7	7	5	1	4	4	6
1753:	6	8	6	3	4	4	1	7
1761:	5	5	13	82	240	337	155	26
1769:	10	9	2	1	3	5	6	3
1777:	3	2	7	3	2	2	2	2
1785:	6	2	1	3	3	4	5	3
1793:	11	5	4	5	6	4	2	5
1801:	2	1	3	2	7	7	4	5
1809:	2	2	6	6	1	3	5	2
1817:	2	2	2	4	3	4	2	4
1825:	3	2	0	3	3	2	7	5
1833:	6	6	2	4	3	4	17	5
1841:	4	4	1	5	1	6	13	39
1849:	55	31	8	8	0	4	5	2
1857:	3	1	1	4	4	6	2	7
1865:	3	4	2	7	2	6	3	2

1873:	4	10	6	5	3	4	2	5
1881:	3	4	2	1	2	6	4	4
1889:	4	5	6	8	6	0	3	8
1897:	3	5	6	6	3	3	5	3
1905:	1	3	6	1	6	2	2	1
1913:	7	6	2	2	2	2	2	5
1921:	3	2	4	3	4	2	3	1
1929:	1	5	3	3	7	5	7	7
1937:	8	8	5	4	5	3	2	3
1945:	1	2	2	5	2	3	2	6
1953:	1	4	5	3	7	2	3	6
1961:	2	5	2	3	4	6	7	6
1969:	8	3	4	2	6	1	2	3
1977:	3	4	1	4	4	1	5	1
1985:	7	2	2	5	4	1	6	3
1993:	2	1	3	2	2	2	2	1
2001:	4	4	4	0	3	1	3	5
2009:	1	5	5	3	0	1	7	3
2017:	2	3	0	3	2	6	1	2
2025:	3	2	3	2	2	1	3	2
2033:	1	8	2	1	4	2	4	3
2041:	3	4	1	0	3	2	5	4
2049:	0	1	1	1	5	4	6	1
2057:	1	0	1	0	4	3	1	4
2065:	0	1	2	1	0	4	0	1
2073:	2	1	5	2	1	2	2	2
2081:	0	1	2	4	2	0	2	0
2089:	2	2	1	1	1	4	1	1
2097:	0	1	2	0	2	2	2	5
2105:	6	2	3	1	1	3	6	2
2113:	2	2	0	2	1	4	19	21
2121:	19	5	0	1	1	2	0	0
2129:	2	2	0	4	1	5	2	2
2137:	2	0	1	4	0	3	1	4
2145:	0	3	0	0	0	2	1	1
2153:	2	0	2	3	1	0	1	2
2161:	0	0	1	4	1	1	2	1
2169:	3	3	0	1	1	0	0	0
2177:	0	3	1	2	2	2	2	1
2185:	2	2	4	0	1	1	2	2
2193:	1	2	1	4	1	1	1	0
2201:	2	4	8	35	75	77	33	9
2209:	2	4	1	2	2	2	3	1
2217:	1	2	1	1	0	6	1	1
2225:	1	1	1	1	0	0	0	0
2233:	2	2	1	3	0	3	1	0
2241:	4	4	3	0	0	4	1	0
2249:	1	1	1	1	2	0	4	1
2257:	4	2	2	1	1	0	1	0
2265:	2	1	1	1	0	1	2	0
2273:	3	1	2	2	0	1	1	1
2281:	1	2	0	0	2	3	0	3
2289:	3	0	2	1	2	4	8	2
2297:	0	0	1	1	3	1	1	0
2305:	1	0	3	1	1	2	1	2
2313:	1	1	1	5	2	1	1	0
2321:	0	2	0	1	0	0	1	0
2329:	1	1	4	0	0	1	1	0
2337:	0	0	3	1	3	1	0	0
2345:	2	2	0	1	0	0	2	2

2353:	1	0	0	3	0	1	0	1
2361:	0	1	0	0	1	2	1	1
2369:	2	1	3	0	3	1	0	0
2377:	2	0	1	2	2	0	1	0
2385:	2	0	1	2	0	0	1	0
2393:	1	1	1	0	0	2	1	1
2401:	0	0	0	1	2	1	1	0
2409:	0	0	0	1	0	1	0	1
2417:	0	1	1	0	1	0	0	1
2425:	2	1	0	1	0	0	0	0
2433:	1	3	0	1	0	1	0	0
2441:	0	0	1	0	0	1	2	12
2449:	24	15	4	1	0	0	0	0
2457:	1	1	1	1	0	0	1	0
2465:	1	0	1	0	1	2	1	1
2473:	1	0	1	0	0	0	1	0
2481:	2	0	1	1	0	0	0	0
2489:	2	0	0	1	1	0	0	0
2497:	1	1	1	0	2	0	0	1
2505:	1	0	1	2	0	0	0	0
2513:	0	1	0	1	0	1	1	0
2521:	0	1	0	0	0	0	1	1
2529:	2	0	0	0	0	0	0	1
2537:	0	0	0	0	0	0	0	0
2545:	0	0	0	0	3	0	0	0
2553:	0	0	0	0	0	0	1	0
2561:	0	1	0	0	1	0	2	2
2569:	0	0	0	0	0	0	0	0
2577:	0	0	0	0	0	1	1	1
2585:	0	0	1	0	0	1	1	0
2593:	0	1	0	0	0	0	1	0
2601:	2	0	1	1	0	0	1	0
2609:	0	1	1	0	0	1	6	21
2617:	15	7	2	0	0	0	0	0
2625:	0	1	0	1	0	0	0	0
2633:	0	0	0	0	0	1	0	0
2641:	0	0	0	1	1	1	0	0
2649:	0	0	1	0	0	0	1	1
2657:	1	0	0	0	0	0	0	0
2665:	0	1	0	0	0	0	0	1
2673:	2	0	0	0	0	0	0	0
2681:	1	0	0	0	0	0	1	0
2689:	0	0	0	0	1	1	0	1
2697:	1	0	0	0	0	1	0	0
2705:	1	1	1	2	0	0	1	1
2713:	0	0	1	0	0	0	0	0
2721:	0	0	0	0	0	1	1	0
2729:	0	0	0	0	0	0	0	0
2737:	0	0	0	1	0	0	0	0
2745:	0	0	0	0	0	0	0	0
2753:	0	0	1	0	0	0	0	0
2761:	1	0	0	0	1	2	0	0
2769:	1	0	3	0	1	0	0	0
2777:	0	0	0	0	0	0	2	0
2785:	0	0	1	0	0	1	0	1
2793:	0	0	0	0	0	0	0	1
2801:	0	1	0	0	0	0	0	0
2809:	0	1	0	1	0	0	0	0
2817:	1	0	0	0	0	1	0	0
2825:	0	0	0	0	0	0	1	0

2833:	0	0	2	0	0	0	0	0
2841:	0	0	0	0	1	0	0	0
2849:	0	0	0	1	0	1	0	0
2857:	0	0	0	0	0	0	0	0
2865:	1	0	0	0	0	0	0	0
2873:	0	0	0	1	0	0	0	1
2881:	0	0	1	0	0	0	0	0
2889:	0	0	0	0	0	1	0	1
2897:	0	0	0	1	0	0	0	0
2905:	0	0	0	1	0	0	0	1
2913:	0	0	0	0	0	0	0	1
2921:	1	1	2	1	0	0	1	0
2929:	0	0	0	0	0	0	1	0
2937:	0	0	0	2	0	0	0	0
2945:	0	0	0	0	0	0	0	0
2953:	0	0	0	0	0	0	0	0
2961:	0	1	0	0	0	0	0	0
2969:	0	0	0	0	0	0	0	1
2977:	0	0	1	0	0	0	0	0
2985:	0	0	0	0	0	1	1	0
2993:	0	0	1	0	0	1	0	0
3001:	1	1	0	0	0	0	0	0
3009:	0	0	0	0	0	0	0	1
3017:	0	0	0	0	0	0	1	0
3025:	0	0	1	0	0	0	0	0
3033:	0	0	1	0	0	0	0	0
3041:	0	0	0	1	0	0	0	1
3049:	0	0	0	1	0	0	1	0
3057:	1	0	1	0	0	0	0	0
3065:	0	0	1	1	0	0	0	0
3073:	0	0	1	0	0	0	1	0
3081:	0	0	1	0	0	0	0	0
3089:	0	2	0	0	0	0	1	0
3097:	0	0	0	0	0	0	1	0
3105:	0	0	2	0	0	0	0	0
3113:	0	0	1	0	0	0	0	0
3121:	0	0	0	0	0	0	1	0
3129:	0	0	1	0	0	0	0	0
3137:	0	0	0	0	0	0	0	1
3145:	0	0	0	0	0	0	0	0
3153:	0	0	0	0	0	0	1	0
3161:	0	0	0	0	1	1	0	0
3169:	0	0	0	0	0	0	0	0
3177:	0	0	0	1	0	0	0	0
3185:	0	0	1	0	1	0	1	0
3193:	0	0	0	0	0	0	1	0
3201:	0	0	0	0	0	0	0	0
3209:	0	0	0	0	0	1	0	0
3217:	1	0	0	0	0	1	0	0
3225:	0	0	0	1	1	0	0	0
3233:	0	0	0	0	0	0	0	0
3241:	0	0	0	0	0	0	0	0
3249:	0	0	0	0	0	0	0	0
3257:	0	1	0	0	0	0	0	0
3265:	0	0	0	0	0	0	0	0
3273:	0	0	0	0	0	0	0	0
3281:	0	0	0	0	0	0	0	0
3289:	0	0	0	0	0	0	0	0
3297:	1	0	0	0	0	0	0	0
3305:	1	2	0	0	1	0	0	0

3313:	0	0	0	1	0	0	0	0
3321:	0	0	0	0	0	0	0	0
3329:	0	0	0	0	0	0	0	0
3337:	0	0	0	0	0	0	1	0
3345:	0	0	0	0	0	0	0	1
3353:	0	0	0	1	1	0	0	0
3361:	2	0	0	0	0	0	0	0
3369:	0	0	0	0	0	0	0	0
3377:	0	0	0	0	1	0	0	0
3385:	0	0	0	0	0	0	0	0
3393:	0	0	0	0	0	0	0	1
3401:	0	0	0	1	0	0	0	0
3409:	0	0	0	0	0	0	1	0
3417:	0	0	0	1	0	0	1	1
3425:	0	0	0	0	0	0	0	0
3433:	0	1	1	0	0	0	0	0
3441:	0	1	0	0	0	1	1	0
3449:	0	0	0	0	1	0	0	0
3457:	0	0	0	0	0	0	0	0
3465:	1	0	0	0	0	0	0	0
3473:	1	0	0	0	0	0	1	0
3481:	1	0	1	0	1	0	0	0
3489:	0	0	0	0	0	1	0	0
3497:	0	0	0	0	0	1	0	0
3505:	0	0	0	0	0	0	2	0
3513:	0	0	0	0	0	0	0	0
3521:	0	0	0	0	0	0	0	0
3529:	0	0	0	0	0	0	0	0
3537:	0	0	0	0	0	0	0	2
3545:	0	0	0	0	0	0	0	0
3553:	0	1	0	0	0	0	0	0
3561:	0	1	0	1	1	0	0	0
3569:	0	0	0	0	0	0	1	0
3577:	0	0	0	0	0	0	0	0
3585:	0	0	0	0	0	0	0	0
3593:	0	0	0	0	0	0	0	1
3601:	0	1	0	0	0	0	0	0
3609:	0	0	1	0	0	1	0	0
3617:	0	0	0	0	0	0	0	0
3625:	0	0	0	0	0	0	0	0
3633:	0	0	0	0	0	0	0	0
3641:	0	0	1	0	0	0	1	0
3649:	0	0	0	0	0	0	0	0
3657:	0	0	0	0	0	0	0	0
3665:	1	0	0	0	0	0	0	0
3673:	0	0	0	0	0	0	0	0
3681:	0	0	0	0	0	0	0	0
3689:	0	0	0	0	0	0	0	0
3697:	0	0	0	0	1	0	1	0
3705:	0	0	0	0	0	0	0	0
3713:	0	0	1	0	0	0	0	0
3721:	0	0	0	0	0	0	0	0
3729:	1	0	0	0	0	1	0	0
3737:	0	0	0	1	0	0	0	0
3745:	0	0	0	0	0	0	0	1
3753:	0	0	0	0	0	0	0	0
3761:	0	0	1	0	1	0	0	1
3769:	0	0	0	0	0	0	0	0
3777:	0	0	0	0	0	0	0	0
3785:	0	0	0	0	0	0	0	0

3793:	0	0	0	0	1	0	0	1
3801:	0	0	0	0	0	0	0	0
3809:	0	2	0	0	0	0	0	0
3817:	0	0	0	0	0	0	0	0
3825:	1	0	0	0	0	1	0	0
3833:	0	0	0	0	0	0	0	1
3841:	0	0	0	0	0	0	0	0
3849:	0	0	0	0	0	0	0	0
3857:	0	0	0	0	0	0	0	0
3865:	0	0	0	0	0	0	0	0
3873:	1	1	0	1	0	0	0	0
3881:	0	0	0	0	0	0	0	0
3889:	0	0	2	0	0	1	0	0
3897:	0	0	0	0	0	0	0	0
3905:	0	1	0	0	0	0	1	0
3913:	0	0	0	0	0	1	0	0
3921:	0	0	0	0	0	1	0	0
3929:	0	0	0	0	0	0	0	0
3937:	0	0	1	0	0	0	0	0
3945:	0	0	0	0	1	0	0	0
3953:	0	0	0	0	0	0	0	0
3961:	0	0	0	0	0	0	0	0
3969:	0	0	0	1	0	0	0	0
3977:	0	0	0	1	0	0	0	1
3985:	1	0	0	0	0	0	0	0
3993:	0	0	0	0	0	0	0	0
4001:	0	0	0	0	0	0	0	0
4009:	1	0	0	0	0	0	0	0
4017:	0	0	0	0	0	0	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	0	0	0	0	0
4041:	0	1	0	1	0	0	0	0
4049:	0	0	0	1	0	0	0	0
4057:	0	0	0	0	0	0	0	0
4065:	0	0	0	0	0	0	0	0
4073:	0	0	0	0	0	0	0	0
4081:	0	0	0	0	0	0	0	0
4089:	0	1	1	0	0	0	0	0

Sample ID : 1111065-07 Acquisition date : 10-DEC-2011 13:49:31

AG
12/10/11

VAX/VMS Peak Search Report Generated 10-DEC-2011 14:50:15.57

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106507_GE4_GAS1102_172251.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-32-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 10-DEC-2011 13:49:31
Sample ID : 1111065-07 Sample Quantity : 4.21810E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE4 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:23.80 0.7%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	26.22	279	8357	2.82	25.55	23	7	109.3		
0	46.51*	3610	10461	1.87	45.85	43	6	9.5		PB-210
0	52.94	598	14510	1.88	52.29	50	7	67.3		
0	63.20*	3035	16516	1.99	62.55	60	6	13.9		TH-234
0	76.46*	25143	33851	3.80	75.82	70	12	3.2		
0	87.84	2334	16519	1.74	87.22	85	6	17.9		NP-237
										SN-126
										CD-109
0	93.29*	3818	14431	2.19	92.67	90	7	11.1		
0	143.95	713	10615	2.00	143.36	141	7	48.5		CE-141
0	154.24	577	10602	2.18	153.66	151	7	59.8		
0	186.30*	8089	10731	2.13	185.74	181	9	5.1		RA-226
3	236.58	973	6314	2.54	236.06	232	15	28.6	2.11E+00	
3	242.27*	6669	4455	1.97	241.75	232	15	4.0		RA-224
0	258.35	862	6386	4.41	257.84	253	10	35.4		
3	270.21	1304	4718	2.77	269.72	265	12	19.1	4.03E+00	
3	274.07	248	3561	2.62	273.57	265	12	78.7		
0	286.30	182	3261	2.37	285.82	284	6	100.3		
3	291.70	128	1070	1.96	291.22	290	9	63.9	1.11E+01	
3	295.49*	13715	3192	1.97	295.01	290	9	2.1		PB-214
0	314.60	173	2600	2.68	314.13	312	6	94.3		
0	330.34	265	2949	3.92	329.89	327	7	69.0		
0	352.20*	23084	4492	2.09	351.76	346	12	1.8		PB-214
0	388.48	374	3033	2.30	388.07	384	9	54.1		
9	402.24	502	3333	3.95	401.83	397	12	44.1	5.46E+00	RN-219
9	406.26	158	1695	1.58	405.86	397	12	80.5		
0	462.99	175	1788	3.11	462.64	459	8	85.2		
0	479.05	316	2136	2.08	478.71	473	11	57.9		BE-7
0	487.68	165	1306	2.44	487.34	484	7	74.1		LA-140
0	510.81*	331	1691	2.59	510.49	506	10	48.1		
0	581.78	148	1190	3.61	581.50	577	8	82.3		TL-208
0	609.68*	15588	1366	2.26	609.43	604	10	1.8		BI-214
0	633.33	97	666	4.13	633.10	630	7	90.5		
0	665.45	414	1043	2.13	665.24	661	10	30.8		
0	687.32	85	626	1.19	687.13	684	7	100.2		
0	703.12	99	827	1.92	702.93	700	8	103.0		

AG
12/12/11

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It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	742.71	149	709	3.67	742.55	739	8	64.2		
0	768.53	1450	1131	2.36	768.40	762	12	10.7		
0	786.42	337	796	2.37	786.30	782	9	32.1		
0	806.59	300	842	2.14	806.48	802	9	36.9		
0	840.12	125	731	2.54	840.03	836	8	77.1		
0	912.06	115	784	2.10	912.03	909	9	90.5		
0	934.62	732	821	2.58	934.60	930	10	16.5		
0	1001.62	89	500	1.62	1001.65	998	7	85.6		PA-234M
4	1116.96	63	281	2.74	1117.07	1114	13	99.8	9.65E-01	ZN-65
4	1120.76	2764	343	2.40	1120.88	1114	13	4.4		BI-214
0	1133.65	134	419	4.19	1133.78	1130	9	57.9		
0	1155.87	394	433	2.39	1156.01	1152	9	21.6		
0	1194.06	84	419	2.68	1194.23	1190	10	93.9		
0	1208.24	61	349	2.30	1208.42	1205	8	108.6		
0	1238.52	1065	599	2.55	1238.72	1232	14	11.5		
0	1281.65	221	383	2.43	1281.89	1278	9	34.7		
2	1378.17	735	268	2.49	1378.47	1374	17	10.4	1.22E+00	
2	1385.90	164	343	3.11	1386.21	1374	17	43.4		
2	1402.16	289	269	2.97	1402.48	1397	21	23.6	1.37E+00	
2	1408.57	462	237	2.68	1408.90	1397	21	14.9		
0	1461.30*	325	374	3.04	1461.67	1457	9	24.2		K-40
0	1509.77	378	383	2.72	1510.17	1505	10	21.9		
0	1583.90	117	253	2.55	1584.35	1580	10	54.0		
0	1597.03	97	324	6.08	1597.49	1592	12	77.3		LA-140
0	1661.58	214	192	3.18	1662.09	1655	14	30.8		
0	1693.43	35	102	1.41	1693.96	1691	7	103.1		
0	1730.26	443	190	2.69	1730.82	1723	14	16.3		
0	1765.09	2106	164	2.76	1765.67	1759	15	5.1		BI-214
0	1815.07	30	51	4.73	1815.69	1812	8	88.5		
1	1838.63	65	70	2.94	1839.27	1835	25	51.7	1.19E+00	
1	1848.16	312	62	2.95	1848.81	1835	25	14.5		
0	1874.62	53	105	1.57	1875.28	1867	14	87.9		
1	1886.60	27	74	2.96	1887.27	1884	21	98.4	2.87E+00	
1	1898.59	43	51	2.96	1899.27	1884	21	77.6		
0	2095.24	42	58	8.14	2096.06	2087	20	97.7		
0	2119.15	148	31	3.01	2119.99	2114	14	23.0		
0	2169.22	11	11	2.17	2170.09	2167	6	119.9		
0	2204.88	588	43	2.81	2205.78	2199	15	9.6		BI-214
0	2268.04	14	13	1.30	2268.98	2263	11	118.8		
0	2293.80	54	6	2.20	2294.76	2288	13	33.6		
0	2448.53	169	3	2.47	2449.60	2444	12	15.9		
0	2615.40*	12	2	1.68	2616.59	2613	8	80.7		TL-208

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Total number of lines in spectrum 76
Number of unidentified lines 42
Number of lines tentatively identified by NID 34 44.74%

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
BE-7	53.44D	1.51	1.040E+01	1.566E+01	0.932E+01	59.52	
ZN-65	244.40D	1.09	9.835E-01	1.076E+00	1.081E+00	100.47	
LA-140	12.79D	5.54	1.157E+00	6.411E+00	3.486E+00	54.38	
			---	---			
	Total Activity :		1.254E+01	2.315E+01			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	3.017E+01	3.017E+01	0.791E+01	26.22	
TL-208	1.41E+10Y	1.00	5.032E-01	5.032E-01	3.479E-01	69.14	
PB-210	22.26Y	1.00	1.127E+02	1.130E+02	0.150E+02	13.28	
BI-214	1602.00Y	1.00	1.486E+02	1.486E+02	0.090E+02	6.06	
PB-214	1602.00Y	1.00	1.538E+02	1.538E+02	0.126E+02	8.17	
RN-219	3.28E+04Y	1.00	2.221E+01	2.221E+01	1.025E+01	46.13	
RA-224	1.41E+10Y	1.00	2.994E+02	2.994E+02	0.325E+02	10.84	
RA-226	1602.00Y	1.00	3.572E+02	3.572E+02	6.546E+02	183.25	
PA-234M	4.47E+09Y	1.00	6.999E+01	6.999E+01	6.061E+01	86.59	
TH-234	4.47E+09Y	1.00	8.673E+01	8.673E+01	1.413E+01	16.30	
			---	---			
	Total Activity :		1.281E+03	1.282E+03			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	6.598E+01	6.917E+01	1.508E+01	21.81	
SN-126	1.00E+05Y	1.00	6.631E+00	6.631E+00	1.390E+00	20.96	
CE-141	32.50D	1.96	1.825E+00	3.580E+00	1.961E+00	54.76	
NP-237	2.14E+06Y	1.00	1.945E+01	1.945E+01	0.407E+01	20.90	
			---	---			
	Total Activity :		9.389E+01	9.883E+01			

Grand Total Activity : 1.388E+03 1.404E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

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Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
BE-7	477.59	10.42*	5.185E-01	1.040E+01	1.566E+01	59.52	OK
	Final Mean for 1 Valid Peaks = 1.566E+01+/- 9.321E+00 (59.52%)						
ZN-65	1115.52	50.75*	2.238E-01	9.835E-01	1.076E+00	100.47	OK
	Final Mean for 1 Valid Peaks = 1.076E+00+/- 1.081E+00 (100.47%)						
LA-140	328.77	20.50	7.553E-01	----- Line Not Found		-----	Absent
	487.03	45.50	5.081E-01	1.272E+00	7.050E+00	75.37	OK
	815.85	23.50	2.999E-01	----- Line Not Found		-----	Absent
	1596.49	95.49*	1.688E-01	1.070E+00	5.928E+00	77.93	OK
	Final Mean for 2 Valid Peaks = 6.411E+00+/- 3.486E+00 (54.38%)						

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	1.798E-01	3.017E+01	3.017E+01	26.22	OK
	Final Mean for 1 Valid Peaks = 3.017E+01+/- 7.913E+00 (26.22%)						
TL-208	583.14	30.22*	4.216E-01	2.070E+00	2.070E+00	83.18	OK
	860.37	4.48	2.847E-01	----- Line Not Found		-----	Absent
	2614.66	35.85	1.318E-01	4.365E-01	4.365E-01	81.38	OK
	Final Mean for 2 Valid Peaks = 5.032E-01+/- 3.479E-01 (69.14%)						
PB-210	46.50	4.05*	1.407E+00	1.127E+02	1.130E+02	13.28	OK
	Final Mean for 1 Valid Peaks = 1.130E+02+/- 1.501E+01 (13.28%)						
BI-214	609.31	46.30*	4.029E-01	1.487E+02	1.487E+02	11.69	OK
	1120.29	15.10	2.230E-01	1.461E+02	1.461E+02	12.63	OK
	1764.49	15.80	1.582E-01	1.500E+02	1.500E+02	10.82	OK
	2204.22	4.98	1.404E-01	1.495E+02	1.496E+02	13.96	OK
	Final Mean for 4 Valid Peaks = 1.486E+02+/- 9.001E+00 (6.06%)						
PB-214	295.21	19.19	8.368E-01	1.520E+02	1.520E+02	10.82	OK
	351.92	37.19*	7.067E-01	1.563E+02	1.563E+02	12.46	OK
	Final Mean for 2 Valid Peaks = 1.538E+02+/- 1.257E+01 (8.17%)						
RN-219	401.80	6.50*	6.189E-01	2.221E+01	2.221E+01	46.13	OK
	Final Mean for 1 Valid Peaks = 2.221E+01+/- 1.025E+01 (46.13%)						

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Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
RA-224	240.98	3.95*	1.004E+00	2.994E+02	2.994E+02	10.84	OK
Final Mean for 1 Valid Peaks = 2.994E+02+/- 3.247E+01 (10.84%)							
RA-226	186.21	3.28*	1.229E+00	3.572E+02	3.572E+02	183.25	OK
Final Mean for 1 Valid Peaks = 3.572E+02+/- 6.546E+02 (183.25%)							
PA-234M	1001.03	0.92*	2.467E-01	6.999E+01	6.999E+01	86.59	OK
Final Mean for 1 Valid Peaks = 6.999E+01+/- 6.061E+01 (86.59%)							
TH-234	63.29	3.80*	1.639E+00	8.673E+01	8.673E+01	16.30	OK
Final Mean for 1 Valid Peaks = 8.673E+01+/- 1.413E+01 (16.30%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CD-109	88.03	3.72*	1.693E+00	6.598E+01	6.917E+01	21.81	OK
Final Mean for 1 Valid Peaks = 6.917E+01+/- 1.508E+01 (21.81%)							
SN-126	87.57	37.00*	1.693E+00	6.631E+00	6.631E+00	20.96	OK
Final Mean for 1 Valid Peaks = 6.631E+00+/- 1.390E+00 (20.96%)							
CE-141	145.44	48.40*	1.436E+00	1.825E+00	3.580E+00	54.76	OK
Final Mean for 1 Valid Peaks = 3.580E+00+/- 1.961E+00 (54.76%)							
NP-237	86.50	12.60*	1.695E+00	1.945E+01	1.945E+01	20.90	OK
Final Mean for 1 Valid Peaks = 1.945E+01+/- 4.066E+00 (20.90%)							

Flag: "*" = Keyline

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---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	1.566E+01	9.321E+00	8.948E+00	1.161E+00	1.750
K-40	3.017E+01	7.913E+00	8.087E+00	7.602E-01	3.731
ZN-65	1.076E+00	1.081E+00	1.752E+00	1.963E-01	0.614
CD-109	6.917E+01	1.508E+01	1.873E+01	2.198E+00	3.693
SN-126	6.631E+00	1.390E+00	1.777E+00	1.792E-01	3.731
LA-140	6.411E+00	3.486E+00	4.561E+00	4.118E-01	1.406
CE-141	3.580E+00	1.961E+00	2.290E+00	5.737E-01	1.563
TL-208	5.032E-01	3.479E-01	2.119E+00	2.429E-01	0.237
PB-210	1.130E+02	1.501E+01	1.446E+01	1.204E+00	7.816
BI-214	1.486E+02	9.001E+00	1.396E+00	1.511E-01	106.480
PB-214	1.538E+02	1.257E+01	1.600E+00	1.867E-01	96.154
RN-219	2.221E+01	1.025E+01	9.939E+00	1.299E+00	2.235
RA-224	2.994E+02	3.247E+01	1.464E+01	1.353E+00	20.459
RA-226	3.572E+02	6.546E+02	1.805E+01	3.306E+01	19.788
PA-234M	6.999E+01	6.061E+01	8.501E+01	1.069E+01	0.823
TH-234	8.673E+01	1.413E+01	1.700E+01	1.290E+00	5.101
NP-237	1.945E+01	4.066E+00	5.185E+00	5.160E-01	3.752

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
NA-22	1.108E-01		5.220E-01	7.971E-01	7.684E-02	0.139
AL-26	-5.831E-02		3.024E-01	4.565E-01	3.892E-02	-0.128
TI-44	3.005E-01		6.062E-01	7.099E-01	5.665E-02	0.423
SC-46	-2.569E-01		6.221E-01	1.057E+00	1.391E-01	-0.243
V-48	9.677E-01		1.817E+00	3.163E+00	4.027E-01	0.306
CR-51	-1.393E+00		9.225E+00	1.329E+01	1.461E+00	-0.105
MN-54	2.723E-01		5.434E-01	8.380E-01	1.023E-01	0.325
CO-56	3.926E-02		6.714E-01	1.022E+00	1.269E-01	0.038
CO-57	-9.951E-02		3.910E-01	6.403E-01	5.901E-02	-0.155
CO-58	5.420E-01		6.709E-01	1.043E+00	1.232E-01	0.520
FE-59	-6.196E-01		1.310E+00	2.215E+00	2.650E-01	-0.280
CO-60	2.165E-01		4.697E-01	8.175E-01	8.420E-02	0.265
SE-75	-1.153E-01		9.979E-01	1.133E+00	1.062E-01	-0.102
RB-82	-7.069E-01		1.140E+01	1.261E+01	1.412E+00	-0.056
RB-83	-2.672E-01		1.224E+00	1.742E+00	3.155E-01	-0.153
KR-85	1.153E+02		1.033E+02	1.511E+02	1.910E+01	0.763
SR-85	7.030E-01		6.297E-01	9.210E-01	1.164E-01	0.763
Y-88	7.716E-01		4.457E-01	7.787E-01	6.572E-02	0.991
NB-93M	1.569E+02		6.594E+01	2.367E+01	9.720E+00	6.627
NB-94	7.163E-02		4.604E-01	7.950E-01	1.021E-01	0.090
NB-95	1.139E+01		1.681E+00	2.077E+00	2.288E-01	5.483
ZR-95	5.377E-02		1.139E+00	1.740E+00	2.012E-01	0.031
RU-103	2.429E-01		7.522E-01	1.163E+00	1.982E-01	0.209
RU-106	-2.422E+00		4.060E+00	6.411E+00	9.381E-01	-0.378
AG-108M	2.656E-01		4.423E-01	7.729E-01	7.947E-02	0.344
AG-110M	-5.713E-02		4.808E-01	7.329E-01	6.873E-02	-0.078

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
SN-113	9.082E-01		1.050E+00	1.210E+00	1.597E-01	0.751
TE123M	3.330E-01		5.682E-01	8.328E-01	7.222E-02	0.400
SB-124	-3.018E-01		6.865E-01	9.659E-01	1.062E-01	-0.312
I-125	-2.633E+01		9.820E+00	1.445E+01	1.537E+00	-1.822
SB-125	1.322E+00		1.447E+00	2.354E+00	3.115E-01	0.562
SB-126	4.847E+00		4.358E+00	7.663E+00	7.847E-01	0.633
I-129	4.748E-01		9.471E-01	1.416E+00	1.877E-01	0.335
I-131	2.299E+00		6.632E+00	1.080E+01	1.306E+00	0.213
BA-133	2.917E+01		4.762E+00	1.904E+00	2.946E-01	15.322
CS-134	4.539E+00		7.825E-01	9.831E-01	1.078E-01	4.617
CS-135	1.120E+01		3.429E+00	3.979E+00	3.710E-01	2.815
CS-136	3.256E+00		3.052E+00	5.361E+00	6.577E-01	0.607
CS-137	6.447E-01		5.056E-01	7.970E-01	7.381E-02	0.809
LA-138	-8.820E-02		7.446E-01	1.268E+00	1.165E-01	-0.070
CE-139	1.985E-01		5.142E-01	8.424E-01	7.204E-02	0.236
BA-140	-4.197E+00		8.796E+00	1.384E+01	4.746E+00	-0.303
CE-144	-6.854E-01		3.234E+00	5.292E+00	4.790E-01	-0.130
PM-144	2.729E-01		5.188E-01	6.886E-01	6.778E-02	0.396
PM-145	-3.236E+00		2.773E+00	2.933E+00	1.916E+00	-1.103
PM-146	1.601E-03		1.096E+00	1.574E+00	2.060E-01	0.001
ND-147	1.382E+01		2.214E+01	3.607E+01	4.478E+00	0.383
EU-152	2.992E+01	+	5.741E+00	8.193E+00	9.311E-01	3.652
GD-153	-4.975E+00		1.628E+00	2.352E+00	2.271E-01	-2.115
EU-154	2.586E-01		1.446E+00	2.207E+00	2.127E-01	0.117
EU-155	8.029E+00	+	1.678E+00	2.283E+00	2.271E-01	3.518
EU-156	-1.254E+01		1.990E+01	2.925E+01	7.087E+00	-0.429
HO-166M	-4.965E-01		8.120E-01	1.212E+00	1.223E-01	-0.410
HF-172	-1.342E+00		2.860E+00	4.670E+00	4.276E-01	-0.287
LU-172	-2.907E+00		1.914E+01	3.274E+01	3.766E+00	-0.089
LU-173	1.399E+01		2.415E+00	3.287E+00	3.065E-01	4.255
HF-175	-6.027E-01		7.161E-01	1.011E+00	1.152E-01	-0.596
LU-176	-8.131E-01		4.480E-01	6.138E-01	6.258E-02	-1.325
TA-182	7.662E+01	+	9.663E+00	7.317E+00	8.133E-01	10.471
IR-192	1.861E+00		1.507E+00	1.758E+00	2.290E-01	1.059
HG-203	3.006E-01		1.047E+00	1.199E+00	1.146E-01	0.251
BI-207	2.409E-01		4.150E-01	6.759E-01	7.939E-02	0.356
BI-210M	1.665E+00		1.120E+00	1.308E+00	1.218E-01	1.273
PB-211	1.580E+01	+	1.290E+01	2.453E+01	3.207E+00	0.644
BI-212	-3.554E-01		3.361E+00	5.793E+00	5.998E-01	-0.061
PB-212	1.211E+01		1.516E+00	1.642E+00	1.515E-01	7.377
RA-223	6.507E+00		1.175E+01	1.560E+01	1.677E+00	0.417
RA-225	1.117E+01		5.838E+00	8.681E+00	8.172E-01	1.286
TH-227	1.474E+01	+	4.473E+00	5.495E+00	5.064E-01	2.683
AC-228	2.731E+00	+	2.500E+00	3.101E+00	4.108E-01	0.881
TH-230	9.700E+01		1.548E+02	1.814E+02	1.444E+01	0.535
PA-231	4.322E+01		1.801E+01	2.623E+01	2.639E+00	1.648
TH-231	4.800E+00	+	5.310E+00	6.844E+00	1.140E+00	0.701
PA-233	-5.468E-01		2.337E+00	3.358E+00	7.783E-01	-0.163

Sample ID : 1111065-07 Acquisition date : 10-DEC-2011 13:49:31

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PA-234	5.510E-01		1.562E+00	2.566E+00	2.331E-01	0.215
U-235	8.360E+00	+	4.330E+00	5.534E+00	9.768E-01	1.511
AM-241	3.588E+00		1.507E+00	1.777E+00	1.296E-01	2.019
AM-243	2.873E+01		2.835E+00	1.426E+00	1.231E-01	20.145
CM-243	2.697E+00		2.883E+00	4.217E+00	3.932E-01	0.640

Sample ID : 1111065-07 Acquisition date : 10-DEC-2011 13:49:31

Total number of lines in spectrum 76
Number of unidentified lines 42
Number of lines tentatively identified by NID 34 44.74%

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
BE-7	53.44D	1.51	1.040E+01	1.566E+01	0.932E+01	59.52	
ZN-65	244.40D	1.09	9.835E-01	1.076E+00	1.081E+00	100.47	
LA-140	12.79D	5.54	1.157E+00	6.411E+00	3.486E+00	54.38	
			---	---			
	Total Activity :		1.254E+01	2.315E+01			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	3.017E+01	3.017E+01	0.791E+01	26.22	
TL-208	1.41E+10Y	1.00	5.032E-01	5.032E-01	3.479E-01	69.14	
PB-210	22.26Y	1.00	1.127E+02	1.130E+02	0.150E+02	13.28	
BI-214	1602.00Y	1.00	1.486E+02	1.486E+02	0.090E+02	6.06	
PB-214	1602.00Y	1.00	1.538E+02	1.538E+02	0.126E+02	8.17	
RN-219	3.28E+04Y	1.00	2.221E+01	2.221E+01	1.025E+01	46.13	
RA-224	1.41E+10Y	1.00	2.994E+02	2.994E+02	0.325E+02	10.84	
RA-226	1602.00Y	1.00	3.572E+02	3.572E+02	6.546E+02	183.25	
PA-234M	4.47E+09Y	1.00	6.999E+01	6.999E+01	6.061E+01	86.59	
TH-234	4.47E+09Y	1.00	8.673E+01	8.673E+01	1.413E+01	16.30	
			---	---			
	Total Activity :		1.281E+03	1.282E+03			

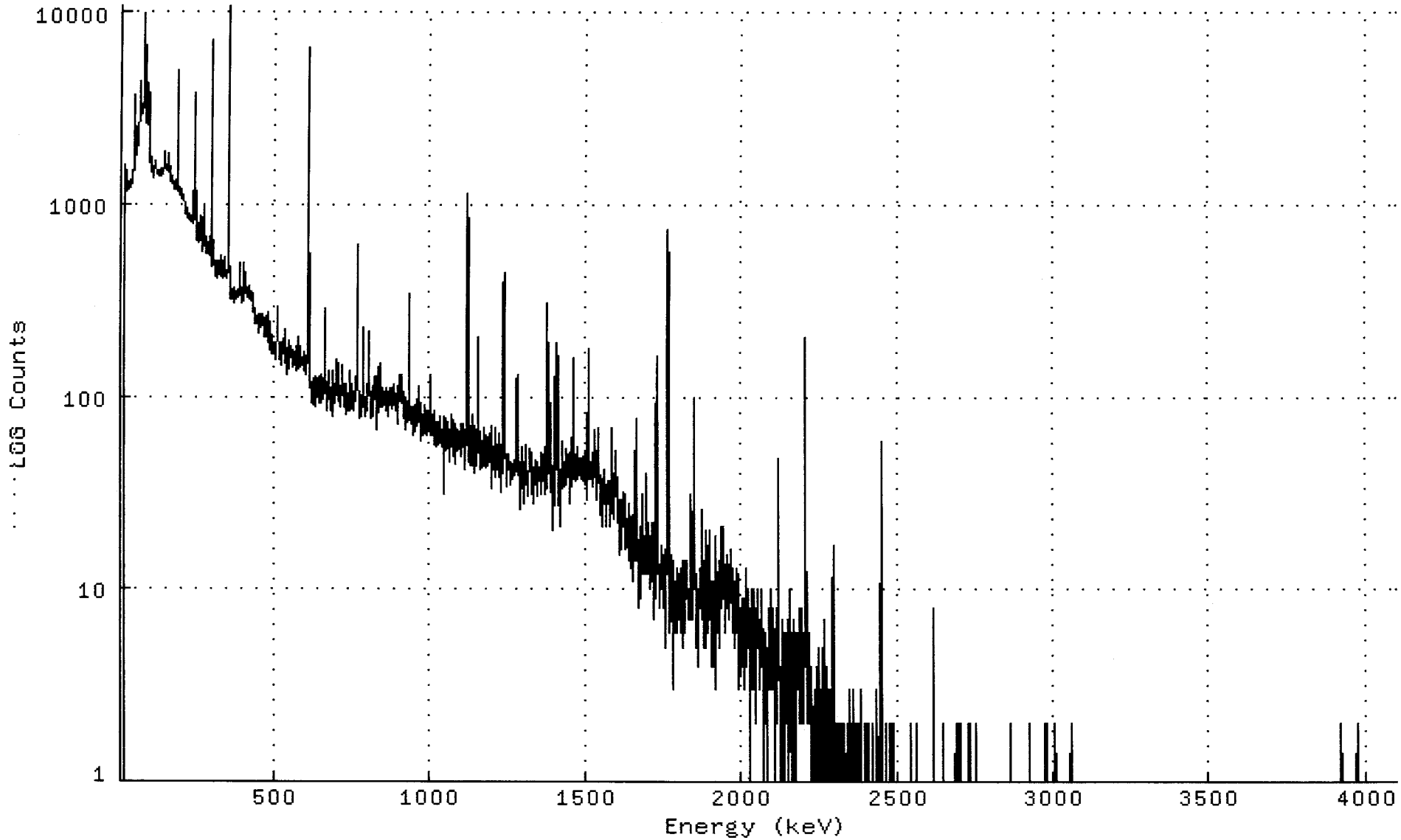
Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	6.598E+01	6.917E+01	1.508E+01	21.81	
SN-126	1.00E+05Y	1.00	6.631E+00	6.631E+00	1.390E+00	20.96	
CE-141	32.50D	1.96	1.825E+00	3.580E+00	1.961E+00	54.76	
NP-237	2.14E+06Y	1.00	1.945E+01	1.945E+01	0.407E+01	20.90	
			---	---			
	Total Activity :		9.389E+01	9.883E+01			

Grand Total Activity : 1.388E+03 1.404E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106507_GE4_GAS1102_172251.CNF;1
Title :
Sample Title: DY2-32-31-111109
Start Time: 10-DEC-2011 13:49 Sample Time: 9-NOV-2011 00:00: Energy Offset: 6.91748E-01
Real Time : 0 01:00:23.80 Sample ID : 1111065-07 Energy Slope : 9.99279E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106507_GE4_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	8	1052	1572
17:	1416	1379	1283	1206	1201	1147	1173	1213
25:	1258	1300	1286	1186	1220	1219	1331	1245
33:	1233	1202	1258	1267	1335	1314	1469	1425
41:	1480	1523	1605	1763	2585	3676	2719	1756
49:	2018	2134	1947	2355	2469	2185	2035	1983
57:	2158	2295	2519	2663	2888	3749	4294	3243
65:	2755	2990	3238	3078	2912	2907	2996	3162
73:	4092	6912	7037	8753	9641	4575	3003	3018
81:	2911	2576	3544	3254	2534	3578	4142	3106
89:	2899	2594	2721	3773	3275	2388	1939	1618
97:	1656	1718	1555	1487	1444	1462	1476	1365
105:	1473	1447	1528	1550	1565	1522	1575	1653
113:	1560	1535	1440	1460	1463	1409	1443	1420
121:	1463	1493	1487	1384	1379	1495	1470	1420
129:	1495	1454	1507	1379	1470	1500	1477	1423
137:	1484	1467	1488	1508	1533	1587	1785	1864
145:	1570	1463	1526	1501	1480	1582	1507	1570
153:	1691	1822	1674	1477	1438	1547	1467	1372
161:	1389	1306	1404	1395	1359	1357	1297	1289
169:	1271	1274	1220	1181	1273	1245	1264	1315
177:	1243	1224	1188	1263	1215	1259	1237	1629
185:	3763	4851	2586	1191	1112	1188	1157	1199
193:	1148	1107	1171	1157	1044	1141	1169	1047
201:	1096	1088	1025	1033	1082	1039	989	951
209:	985	960	925	875	939	863	867	868
217:	845	908	863	841	853	864	845	831
225:	870	865	809	807	829	800	831	791
233:	788	870	1045	1151	918	868	817	1104
241:	2902	3779	1770	762	723	725	692	699
249:	646	693	627	688	686	650	721	866
257:	749	793	833	685	662	603	597	615
265:	555	578	627	713	982	967	880	734
273:	600	691	673	613	578	549	552	565
281:	568	589	546	564	599	623	584	536
289:	537	534	604	537	864	3757	7004	3902
297:	830	466	592	634	516	518	507	474
305:	500	456	457	466	470	421	433	408
313:	505	481	488	451	440	445	474	431
321:	467	485	470	534	436	432	422	457
329:	509	497	448	473	408	426	460	415
337:	446	528	445	464	452	435	449	427
345:	417	407	412	460	470	1646	7488	10809
353:	4230	655	337	342	334	347	319	321
361:	353	335	324	348	324	327	301	312
369:	310	329	337	364	330	320	324	347
377:	330	329	333	327	334	343	356	328
385:	336	392	403	484	447	359	326	332
393:	334	304	365	338	312	347	380	328
401:	411	492	371	379	422	435	353	343
409:	344	364	322	356	348	338	350	371
417:	332	316	349	354	317	348	351	349
425:	331	338	308	339	318	319	288	285

433:	276	261	284	258	262	249	237	257
441:	260	245	249	262	237	255	264	261
449:	213	231	239	222	235	264	261	233
457:	239	228	240	233	267	264	256	235
465:	238	230	201	228	251	222	257	203
473:	210	225	246	231	188	207	208	274
481:	269	200	194	174	206	215	245	237
489:	195	199	178	207	188	197	165	168
497:	189	187	167	187	174	154	161	190
505:	177	170	177	206	221	260	289	219
513:	198	180	153	178	175	190	188	176
521:	190	163	170	144	179	184	189	166
529:	180	176	172	175	221	195	161	187
537:	188	162	129	156	170	152	161	175
545:	167	192	139	184	150	152	181	158
553:	182	160	175	158	159	160	174	140
561:	153	157	162	159	163	165	145	165
569:	177	172	181	149	169	160	136	161
577:	137	149	159	201	189	171	176	156
585:	141	159	150	155	145	145	152	145
593:	158	152	170	134	154	156	158	130
601:	140	144	162	143	138	155	300	2140
609:	6401	5754	1643	180	111	126	123	125
617:	126	109	107	110	111	113	91	116
625:	122	107	110	107	98	90	106	125
633:	114	118	123	87	105	115	123	114
641:	110	124	108	116	103	92	125	93
649:	120	129	109	105	91	118	96	107
657:	108	122	99	113	104	134	103	141
665:	257	286	151	91	95	95	107	84
673:	114	113	99	106	96	96	135	83
681:	111	100	106	95	109	105	103	136
689:	85	78	85	97	114	97	109	91
697:	92	109	101	103	107	113	154	141
705:	106	104	98	111	93	97	111	95
713:	95	111	87	113	102	105	119	143
721:	104	101	113	115	102	88	101	111
729:	115	97	80	112	80	98	84	90
737:	101	89	85	97	113	121	134	125
745:	100	83	97	109	85	91	105	100
753:	115	95	84	97	92	90	105	94
761:	93	104	95	109	121	132	242	597
769:	610	278	128	88	77	103	83	105
777:	101	101	79	95	86	92	81	93
785:	157	226	186	112	108	78	98	90
793:	95	94	81	91	86	95	94	83
801:	114	92	108	106	120	210	217	119
809:	93	77	95	94	95	90	79	113
817:	90	89	105	100	101	127	102	95
825:	98	96	104	105	67	100	114	127
833:	112	91	103	82	87	105	136	148
841:	121	90	87	94	88	102	105	111
849:	88	92	94	90	98	104	93	94
857:	95	104	108	101	110	107	84	93
865:	84	97	88	79	106	103	93	90
873:	93	111	96	86	100	111	103	96
881:	111	106	114	104	109	105	90	99
889:	93	103	92	100	85	95	71	96
897:	113	91	111	107	93	100	103	100
905:	128	113	109	91	99	102	128	118

913:	94	87	102	93	76	87	80	67
921:	85	99	76	91	75	74	77	90
929:	84	93	89	75	187	330	341	190
937:	81	87	80	74	77	85	71	88
945:	84	62	74	82	85	66	74	72
953:	89	69	66	71	95	87	76	93
961:	90	84	73	112	111	86	85	82
969:	65	91	59	70	70	82	70	63
977:	76	62	80	63	89	64	90	79
985:	65	85	70	63	81	84	65	69
993:	83	65	69	70	65	69	64	63
1001:	129	107	87	70	80	70	70	71
1009:	62	64	83	67	77	74	57	56
1017:	65	57	69	73	64	55	64	73
1025:	56	68	72	70	62	65	67	78
1033:	61	62	57	63	62	57	67	62
1041:	55	58	31	68	73	62	79	52
1049:	67	68	74	77	76	68	53	73
1057:	58	58	73	59	62	58	66	57
1065:	46	67	55	56	80	69	60	66
1073:	66	75	58	50	49	49	54	59
1081:	72	45	57	62	52	52	58	67
1089:	63	65	58	61	56	58	65	57
1097:	49	71	64	50	50	49	56	55
1105:	63	62	55	71	60	57	67	50
1113:	51	42	44	68	62	83	238	797
1121:	1132	647	167	71	55	46	58	60
1129:	44	49	59	70	61	75	81	57
1137:	51	49	44	54	55	40	59	46
1145:	70	40	62	55	56	67	49	44
1153:	59	60	146	203	135	75	57	48
1161:	51	57	42	55	48	45	43	56
1169:	57	51	68	44	46	59	61	62
1177:	44	63	43	48	57	60	61	56
1185:	56	44	56	56	48	46	54	53
1193:	47	60	58	70	41	41	33	43
1201:	36	46	51	48	42	55	43	68
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1217:	56	54	49	63	53	39	38	64
1225:	49	45	56	54	32	54	44	40
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1241:	61	48	49	50	46	41	38	44
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1257:	45	35	38	41	46	41	43	42
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1273:	39	40	41	49	44	44	49	44
1281:	118	130	88	39	49	43	40	46
1289:	45	31	27	26	36	55	33	43
1297:	45	39	47	44	40	28	33	38
1305:	37	56	36	43	38	39	35	36
1313:	33	41	40	41	30	53	49	46
1321:	46	44	41	41	41	34	46	51
1329:	36	31	39	28	32	33	37	41
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1345:	30	35	43	46	41	41	36	39
1353:	43	36	51	38	48	49	31	36
1361:	50	44	39	42	36	45	38	43
1369:	55	31	52	42	44	33	35	49
1377:	141	303	274	131	63	40	44	46
1385:	61	91	83	44	44	32	44	28

1393:	38	31	44	20	40	27	31	42
1401:	75	125	104	72	42	42	72	144
1409:	191	137	55	32	46	41	38	33
1417:	21	38	35	36	28	31	56	33
1425:	46	37	58	52	40	36	39	34
1433:	38	41	39	46	40	53	35	36
1441:	43	44	43	38	40	50	51	28
1449:	30	51	40	38	46	34	34	44
1457:	39	39	42	90	136	158	121	39
1465:	37	46	41	50	45	42	36	51
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1481:	47	48	39	43	46	37	44	48
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1505:	29	37	42	57	121	175	139	76
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1601:	37	27	22	28	35	35	23	29
1609:	19	26	15	24	29	20	22	20
1617:	16	24	26	32	21	22	25	27
1625:	28	24	28	25	16	31	19	20
1633:	23	20	19	21	19	14	15	28
1641:	18	22	25	23	13	17	15	17
1649:	14	19	18	24	17	11	17	15
1657:	21	16	14	32	51	55	77	42
1665:	19	14	24	9	18	17	11	16
1673:	8	15	16	21	16	14	9	14
1681:	14	12	15	17	31	22	15	19
1689:	13	15	16	12	21	40	23	13
1697:	12	16	22	14	12	14	18	16
1705:	10	19	17	13	14	15	11	19
1713:	22	11	20	16	16	7	13	10
1721:	17	11	22	17	9	9	20	20
1729:	53	161	160	93	30	12	15	12
1737:	9	13	13	8	9	17	11	10
1745:	15	16	12	13	15	13	8	9
1753:	10	16	5	11	15	12	11	23
1761:	12	18	41	230	623	740	431	91
1769:	17	10	9	6	8	13	8	8
1777:	7	15	3	9	6	11	14	11
1785:	6	9	6	8	11	11	10	9
1793:	13	6	13	7	11	12	12	9
1801:	7	10	11	10	10	13	10	7
1809:	6	9	5	6	7	14	12	14
1817:	10	12	6	8	12	11	12	10
1825:	14	10	9	9	8	10	7	10
1833:	8	9	7	12	11	24	31	21
1841:	18	12	9	7	13	12	46	87
1849:	98	79	17	11	9	5	11	7
1857:	12	6	4	8	4	10	9	8
1865:	13	10	11	12	8	9	10	7

1873:	11	26	16	14	12	8	9	5
1881:	5	14	12	12	5	14	20	11
1889:	6	12	12	17	14	14	12	7
1897:	10	17	18	20	10	11	7	4
1905:	4	6	10	10	6	8	4	11
1913:	8	11	3	10	19	8	5	7
1921:	9	9	9	9	11	14	12	8
1929:	12	5	13	9	8	12	12	11
1937:	21	19	15	10	9	11	12	21
1945:	6	9	8	9	7	12	15	8
1953:	11	10	13	14	13	10	9	7
1961:	8	8	9	10	16	10	9	9
1969:	8	6	9	13	9	6	11	8
1977:	9	9	8	5	10	6	7	13
1985:	7	10	10	8	4	5	10	12
1993:	3	4	5	6	7	8	6	9
2001:	6	5	6	5	5	3	3	3
2009:	8	4	9	8	11	10	7	4
2017:	13	8	5	6	5	6	9	3
2025:	1	6	7	5	8	8	8	7
2033:	7	10	3	5	10	6	6	4
2041:	9	3	5	4	8	8	2	6
2049:	9	5	10	8	9	5	7	6
2057:	3	3	6	7	4	5	6	4
2065:	5	10	4	4	5	1	2	3
2073:	4	2	2	6	3	3	5	4
2081:	0	2	2	5	2	6	4	3
2089:	8	7	6	10	10	3	8	4
2097:	5	4	8	4	3	3	4	3
2105:	2	1	2	2	5	8	7	7
2113:	2	3	5	5	5	11	43	48
2121:	37	11	1	4	3	3	0	4
2129:	1	3	0	3	2	7	3	1
2137:	5	2	2	6	2	3	5	5
2145:	3	6	3	5	7	4	0	2
2153:	10	3	3	2	3	6	2	1
2161:	2	2	6	6	1	2	3	1
2169:	7	6	4	1	2	2	6	3
2177:	3	3	4	6	4	3	3	8
2185:	7	3	2	5	4	2	5	5
2193:	8	5	6	6	4	6	2	5
2201:	6	4	19	71	155	202	120	31
2209:	5	2	2	5	2	2	3	3
2217:	4	2	4	6	2	2	4	2
2225:	2	0	2	1	0	1	2	2
2233:	3	3	1	0	3	0	2	1
2241:	3	1	1	4	1	3	0	5
2249:	4	0	4	1	1	2	2	3
2257:	1	1	2	5	2	0	3	2
2265:	1	2	2	3	7	2	2	3
2273:	0	2	4	1	2	3	1	2
2281:	1	0	2	3	0	2	0	2
2289:	2	3	1	3	5	8	17	11
2297:	3	2	3	0	0	2	0	0
2305:	1	0	2	1	0	1	1	0
2313:	0	2	2	0	2	1	0	2
2321:	1	2	2	1	0	2	0	1
2329:	2	0	1	1	0	1	0	1
2337:	0	2	0	1	0	1	0	3
2345:	0	0	0	1	1	2	1	2

2353:	0	0	0	1	0	3	1	0
2361:	2	0	1	0	2	2	2	0
2369:	1	0	2	0	0	0	0	1
2377:	2	0	1	2	0	0	1	0
2385:	3	0	0	0	0	0	0	0
2393:	1	2	1	0	1	1	0	0
2401:	1	0	0	2	2	0	0	1
2409:	0	0	0	1	0	1	0	0
2417:	1	2	0	2	1	0	1	0
2425:	0	1	1	1	1	1	0	3
2433:	0	1	0	0	0	1	0	1
2441:	1	3	0	1	1	4	5	23
2449:	43	58	23	12	1	1	0	0
2457:	1	0	0	1	2	1	0	0
2465:	1	1	1	1	0	0	0	0
2473:	0	2	1	0	1	0	0	0
2481:	0	1	2	1	2	1	0	1
2489:	0	1	1	0	0	0	0	0
2497:	0	1	0	0	0	0	0	1
2505:	0	0	1	0	0	1	0	1
2513:	0	0	0	0	1	0	0	0
2521:	0	0	1	0	1	0	0	1
2529:	0	1	0	0	0	0	1	1
2537:	0	1	0	1	0	2	0	1
2545:	0	1	1	1	1	0	0	1
2553:	1	0	0	0	0	0	0	0
2561:	1	2	0	0	1	0	0	1
2569:	0	0	0	1	1	0	0	0
2577:	0	0	0	1	0	0	0	0
2585:	0	0	1	0	0	0	0	0
2593:	0	0	0	0	0	0	1	1
2601:	0	0	0	0	0	1	0	0
2609:	0	0	1	0	0	1	0	8
2617:	5	2	1	0	1	0	1	0
2625:	1	0	0	0	0	0	0	1
2633:	0	0	0	0	0	0	0	1
2641:	0	0	0	0	0	2	0	0
2649:	0	0	0	1	1	0	0	1
2657:	0	0	0	0	0	1	1	0
2665:	0	0	0	0	0	0	0	1
2673:	0	0	0	0	0	1	0	0
2681:	1	0	0	0	0	0	0	2
2689:	0	2	1	0	0	0	2	0
2697:	2	1	1	2	1	0	0	0
2705:	0	1	0	0	1	0	0	0
2713:	0	1	0	0	0	0	0	0
2721:	0	0	1	0	0	0	0	0
2729:	2	2	0	0	2	0	0	0
2737:	0	0	0	0	0	1	0	0
2745:	0	0	0	1	0	2	2	0
2753:	0	0	0	0	0	0	0	0
2761:	0	0	1	0	0	1	0	0
2769:	0	0	0	1	1	0	1	0
2777:	0	0	1	1	1	0	0	0
2785:	0	1	0	0	0	0	0	0
2793:	0	1	0	0	0	0	0	0
2801:	1	0	0	0	0	0	0	0
2809:	0	0	0	0	0	0	1	0
2817:	0	0	0	0	0	1	1	1
2825:	0	0	0	0	0	0	0	0

2833:	0	1	0	0	0	0	0	0
2841:	1	0	1	0	0	0	0	0
2849:	0	0	0	0	0	0	0	1
2857:	0	0	0	2	0	0	0	0
2865:	0	0	0	0	0	0	0	0
2873:	0	0	1	0	0	1	0	1
2881:	0	0	0	1	0	0	0	1
2889:	0	0	0	0	0	0	1	0
2897:	0	0	0	0	0	0	1	0
2905:	0	0	0	0	0	0	0	1
2913:	0	1	0	0	0	1	0	0
2921:	0	0	0	1	2	0	1	0
2929:	0	0	1	0	0	0	0	0
2937:	0	0	0	1	0	0	1	1
2945:	1	0	0	1	1	0	0	0
2953:	1	0	0	0	0	1	0	0
2961:	0	0	0	0	0	0	1	0
2969:	0	0	0	0	0	0	2	0
2977:	0	0	0	2	1	1	0	0
2985:	0	0	0	0	0	0	0	0
2993:	0	0	0	1	0	0	0	0
3001:	0	1	1	0	0	2	0	1
3009:	0	0	0	0	0	0	0	0
3017:	1	0	0	0	0	1	0	0
3025:	0	1	0	0	0	0	1	0
3033:	0	0	0	0	0	0	0	0
3041:	0	0	0	0	0	1	0	0
3049:	0	0	0	0	0	0	0	2
3057:	0	0	0	1	0	1	0	0
3065:	0	0	0	0	0	0	0	0
3073:	0	0	0	0	0	0	0	1
3081:	0	0	1	0	1	0	0	0
3089:	0	0	1	0	0	0	0	0
3097:	0	0	0	0	0	0	1	0
3105:	0	1	0	1	0	1	1	0
3113:	0	0	0	0	1	0	0	0
3121:	1	0	0	0	0	0	0	0
3129:	0	0	0	0	0	0	0	0
3137:	1	0	0	0	0	1	0	1
3145:	0	0	0	0	0	0	0	0
3153:	0	0	1	0	0	0	0	0
3161:	0	0	0	0	0	0	0	0
3169:	0	0	0	0	1	0	0	0
3177:	0	1	1	0	1	0	0	0
3185:	0	0	0	0	0	1	0	0
3193:	0	0	0	0	0	0	0	0
3201:	0	0	0	0	0	0	0	0
3209:	0	1	0	0	0	0	0	0
3217:	1	0	0	0	0	0	0	0
3225:	0	0	0	0	0	0	1	0
3233:	0	0	0	0	0	0	1	0
3241:	0	0	0	0	0	0	0	0
3249:	0	0	1	0	0	0	0	0
3257:	0	0	0	0	0	0	0	0
3265:	1	0	0	0	0	1	0	0
3273:	0	0	0	0	0	0	0	1
3281:	0	0	0	0	0	0	1	0
3289:	1	0	0	0	0	0	0	0
3297:	0	0	0	0	0	0	0	0
3305:	0	0	0	0	0	0	0	0

3313:	0	0	0	1	0	0	0	0
3321:	0	0	0	0	0	0	0	0
3329:	0	0	1	0	0	0	0	0
3337:	0	0	0	0	0	0	0	0
3345:	0	0	0	0	0	0	0	0
3353:	0	0	0	0	0	0	0	0
3361:	0	0	0	0	0	0	0	0
3369:	0	0	0	1	0	0	0	0
3377:	0	0	0	0	0	0	0	0
3385:	0	0	0	0	0	0	1	0
3393:	0	0	0	0	1	0	0	0
3401:	0	0	0	0	0	0	0	0
3409:	0	1	0	0	0	0	1	0
3417:	0	1	0	0	0	0	0	0
3425:	0	0	1	0	0	0	0	0
3433:	0	0	0	0	0	1	1	0
3441:	0	0	0	0	1	0	0	0
3449:	0	0	0	0	0	0	0	0
3457:	0	0	0	0	1	0	0	0
3465:	1	0	0	0	1	0	0	1
3473:	0	1	1	1	0	0	0	0
3481:	0	0	1	1	0	1	0	1
3489:	0	0	0	0	0	1	0	0
3497:	0	0	1	0	0	0	0	0
3505:	0	0	0	0	1	0	0	0
3513:	0	0	0	0	0	0	0	0
3521:	0	0	1	0	0	0	0	0
3529:	0	0	0	0	0	0	0	0
3537:	0	0	0	0	0	0	0	1
3545:	0	1	0	0	0	0	0	0
3553:	0	0	0	0	0	0	0	0
3561:	0	0	0	0	0	0	0	0
3569:	0	0	0	0	0	0	0	0
3577:	0	0	0	0	0	0	0	0
3585:	0	1	0	0	1	0	0	0
3593:	0	0	0	1	0	0	0	0
3601:	0	0	0	0	0	0	0	1
3609:	0	0	0	0	1	0	0	0
3617:	0	0	0	1	1	0	0	0
3625:	0	0	0	0	0	0	0	0
3633:	0	0	0	0	0	1	0	0
3641:	0	0	0	0	0	0	0	0
3649:	0	0	0	1	0	0	0	0
3657:	0	0	0	1	0	0	0	0
3665:	0	0	0	1	0	0	1	0
3673:	0	0	0	0	0	0	0	0
3681:	0	0	0	0	1	0	0	0
3689:	1	0	0	0	0	0	0	0
3697:	0	0	0	0	0	0	0	1
3705:	0	0	0	0	0	0	0	0
3713:	0	0	0	0	0	0	0	0
3721:	0	0	0	1	0	0	0	0
3729:	0	0	0	0	0	0	0	0
3737:	0	0	0	0	0	0	1	0
3745:	1	0	1	0	0	0	0	1
3753:	0	0	0	1	0	0	0	1
3761:	0	0	0	0	0	0	0	0
3769:	0	0	0	1	0	0	0	0
3777:	1	1	0	0	0	0	0	0
3785:	0	0	0	0	0	0	0	0

3793:	0	0	0	0	0	0	0	0
3801:	1	0	0	0	0	0	0	0
3809:	0	0	0	0	0	0	0	1
3817:	1	0	0	0	0	0	0	0
3825:	0	0	0	0	0	0	0	0
3833:	0	0	0	1	0	0	0	0
3841:	0	0	0	0	0	0	1	0
3849:	0	0	0	0	0	0	0	0
3857:	0	0	0	0	0	1	0	0
3865:	0	0	0	1	1	0	0	0
3873:	0	0	0	0	0	0	1	0
3881:	0	0	0	0	0	0	0	0
3889:	0	0	0	0	0	1	0	0
3897:	1	0	0	0	0	0	0	0
3905:	0	0	0	0	1	0	1	0
3913:	0	0	0	0	0	0	0	0
3921:	2	0	0	0	0	1	0	0
3929:	0	0	0	0	0	0	0	0
3937:	0	0	0	0	0	0	0	0
3945:	0	0	0	0	1	0	1	0
3953:	0	0	0	0	0	0	0	0
3961:	0	0	0	0	0	0	0	0
3969:	0	0	2	0	0	0	0	0
3977:	0	0	0	0	0	0	0	0
3985:	0	0	1	0	0	0	0	0
3993:	1	0	0	0	0	0	0	0
4001:	0	0	0	0	0	0	0	0
4009:	1	0	0	0	0	0	0	0
4017:	0	0	0	0	1	0	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	0	0	0	0	0
4041:	0	0	0	0	0	0	0	0
4049:	1	0	0	0	0	0	0	0
4057:	0	0	0	0	0	0	0	0
4065:	0	0	0	0	0	0	0	0
4073:	0	0	0	0	0	0	1	1
4081:	1	0	0	0	0	0	0	1
4089:	0	1	1	0	1	0	0	0

Sample ID : 1111065-08 Acquisition date : 10-DEC-2011 14:14:27

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VAX/VMS Peak Search Report Generated 10-DEC-2011 15:14:57.95

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106508_GE2_GAS1102_172254.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-33-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 10-DEC-2011 14:14:27
Sample ID : 1111065-08 Sample Quantity : 4.11930E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE2 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:15.46 0.4%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	27.44	315	5245	1.38	27.38	25	5	69.9		
0	32.15*	246	5384	1.49	32.09	31	5	91.0		
0	46.56*	4229	9218	1.49	46.50	44	6	7.8		PB-210
0	53.62*	908	11005	1.64	53.57	51	6	37.2		
0	63.29*	3105	15141	1.88	63.25	61	6	13.0		TH-234
1	68.00	1084	5145	1.44	67.96	67	16	17.0	1.34E+03	
1	75.17*	12135	9964	1.45	75.13	67	16	2.9		AM-243
0	93.64*	4154	11414	1.23	93.60	91	6	8.9		
0	113.16	273	6929	0.92	113.14	111	5	92.5		
0	144.35*	1064	9699	1.50	144.34	141	7	31.4		U-235
										CE-141
0	154.32	665	8683	1.80	154.31	151	6	45.0		
0	163.88*	337	7559	3.18	163.87	161	6	82.8		U-235
0	186.21*	9310	9202	1.61	186.21	182	8	4.1		RA-226
2	233.30	200	2217	1.82	233.32	232	15	62.5	9.01E+00	
2	236.15	1200	3616	1.58	236.17	232	15	16.0		
2	238.98*	393	3533	1.53	239.00	232	15	49.5		PB-212
2	242.11*	8910	2700	1.43	242.13	232	15	2.7		RA-224
1	256.13	485	2627	1.46	256.16	254	8	31.2	1.52E+01	
1	258.81	625	3244	1.72	258.84	254	8	29.2		
6	270.18	1974	2256	2.79	270.22	268	10	8.0	1.64E+01	
6	274.98	525	3415	1.94	275.01	268	10	36.8		
0	295.32*	19062	3594	1.78	295.37	292	7	1.8		PB-214
0	323.30	287	3002	1.52	323.35	321	7	64.4		RA-223
0	329.73	248	2181	1.21	329.78	328	5	57.9		
0	338.77*	184	2625	1.67	338.82	336	6	89.2		
0	351.97*	32368	3233	1.39	352.03	348	8	1.3		PB-214
0	388.09	538	3070	3.45	388.16	384	9	38.1		
1	401.75	473	1747	1.75	401.83	398	11	27.8	2.45E+00	RN-219
1	405.09	372	1743	1.78	405.17	398	11	35.4		
0	455.09*	236	1660	1.24	455.19	452	7	58.9		
0	462.08*	277	1503	2.24	462.19	459	7	48.2		
0	469.48	98	1335	1.31	469.59	467	6	120.0		
2	480.98	270	1233	1.85	481.09	478	13	42.1	2.39E+00	
2	486.95	342	1116	1.93	487.06	478	13	33.1		
0	510.53*	313	1557	3.49	510.65	507	9	47.4		

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Sample ID : 1111065-08 Acquisition date : 10-DEC-2011 14:14:27

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	524.57	111	978	1.57	524.69	522	6	91.3		
4	580.00	225	1098	2.29	580.15	577	9	50.3	1.19E+01	
0	609.26*	24184	1742	1.99	609.42	603	12	1.5		BI-214
2	661.55*	167	549	2.28	661.73	659	15	44.5	3.67E+00	CS-137
2	665.43	800	664	1.98	665.61	659	15	12.3		
0	703.16	230	945	2.17	703.35	700	8	48.0		
0	719.92	239	1114	2.52	720.12	715	10	53.9		
0	732.57	85	756	2.59	732.77	730	7	109.9		
0	742.37	147	822	2.39	742.58	739	8	69.4		
9	765.43	263	786	4.60	765.65	762	11	51.4	4.34E+00	NB-95
9	768.24	2091	506	1.76	768.46	762	11	5.6		
0	786.08*	517	955	1.69	786.30	782	9	23.3		
0	806.33	542	880	1.96	806.57	802	9	21.6		
0	816.35	88	660	3.28	816.59	813	7	98.9		
0	825.51	63	526	2.53	825.75	824	5	111.7		
0	838.87	288	668	1.70	839.12	837	6	30.8		
2	929.15	47	275	2.47	929.43	928	11	95.7	2.39E+00	
2	933.96	1202	574	1.85	934.24	928	11	8.6		
0	963.56*	120	832	3.01	963.86	959	9	88.5		
0	1001.16*	210	863	2.08	1001.47	996	10	54.1		PA-234M
0	1051.33	129	614	1.95	1051.66	1047	9	71.7		
0	1069.91	109	470	1.39	1070.24	1067	7	68.8		
0	1120.14*	5091	721	2.20	1120.49	1115	11	3.5		BI-214
0	1133.70	122	618	2.70	1134.06	1130	9	76.1		
0	1155.07	532	701	2.21	1155.44	1150	10	20.6		
0	1181.10	119	519	3.47	1181.48	1177	9	71.2		
0	1207.86	170	540	2.16	1208.24	1204	9	51.9		
2	1232.02	50	159	1.83	1232.42	1231	14	70.0	2.41E+00	
2	1237.92*	1973	360	2.25	1238.32	1231	14	5.5		
0	1254.74	169	578	5.29	1255.14	1250	11	57.5		
0	1280.58	417	504	2.77	1280.99	1276	9	21.7		
0	1328.90	53	250	3.72	1329.33	1327	6	97.4		
0	1337.29	60	354	1.57	1337.72	1334	8	112.1		
0	1360.18	81	325	3.47	1360.62	1357	8	80.7		
1	1377.42	1308	311	2.26	1377.87	1373	17	7.2	2.27E+00	
1	1384.78	267	330	2.49	1385.23	1373	17	25.0		
0	1401.06	413	495	2.25	1401.51	1396	10	22.4		
0	1407.77	567	437	2.24	1408.23	1405	8	15.3		
0	1460.39*	797	555	2.09	1460.87	1456	11	13.5		K-40
0	1499.00	51	330	3.21	1499.50	1497	7	121.5		
0	1508.83	646	605	2.41	1509.33	1504	12	17.1		
4	1538.32	169	359	2.55	1538.83	1534	17	41.3	1.71E+00	
4	1542.94	195	392	3.42	1543.45	1534	17	43.2		
0	1552.31	37	189	3.12	1552.82	1551	6	122.0		
0	1583.10	173	286	2.19	1583.63	1580	8	37.1		
0	1594.16	44	191	1.36	1594.69	1593	5	97.7		
0	1599.12	71	255	2.37	1599.65	1597	7	78.4		
0	1660.53	278	217	2.28	1661.09	1655	10	23.1		
0	1682.83	69	151	2.26	1683.39	1679	10	70.9		
1	1691.67	78	105	2.64	1692.24	1689	12	47.8	7.00E+00	
1	1694.43	41	128	2.40	1695.00	1689	12	101.9		

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It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	1729.21	882	206	2.34	1729.79	1724	12	9.4		
0	1748.27	26	76	3.03	1748.86	1746	7	120.3		
0	1764.11*	4111	178	2.65	1764.70	1760	13	3.4		BI-214
2	1837.87	59	125	2.97	1838.49	1834	22	69.5	1.21E+00	
2	1847.08	595	86	2.71	1847.70	1834	22	9.9		
0	1872.24	77	113	2.29	1872.88	1866	12	60.0		
0	1936.49	108	117	4.54	1937.15	1931	14	46.3		
0	2091.26	25	48	5.42	2091.97	2084	11	120.0		
4	2102.23	25	12	3.74	2102.95	2095	34	79.1	2.15E+00	
4	2110.28	21	10	2.56	2111.00	2095	34	80.8		
4	2118.01	289	13	2.81	2118.74	2095	34	12.8		
4	2125.50	26	12	3.33	2126.23	2095	34	51.7		
1	2130.29	19	8	2.82	2131.02	2129	27	60.0	3.13E+00	
1	2136.27	22	16	2.57	2137.00	2129	27	75.2		
1	2146.04	16	16	2.83	2146.78	2129	27	100.4		
1	2152.00	22	12	2.82	2152.74	2129	27	60.3		
0	2203.47	1087	79	2.79	2204.23	2197	15	7.0		BI-214
0	2259.28	18	11	1.35	2260.06	2255	11	85.5		
3	2284.32	14	4	3.49	2285.11	2281	18	81.4	6.47E-01	
3	2292.68	77	5	3.42	2293.47	2281	18	25.8		
0	2408.26	9	6	1.76	2409.09	2405	9	125.8		
0	2417.39	7	2	2.16	2418.22	2414	8	100.6		
0	2446.81	336	0	2.87	2447.66	2440	13	10.9		
0	2482.97	7	4	1.44	2483.83	2479	9	140.4		
0	2613.99*	47	2	2.57	2614.91	2610	10	34.3		
0	2694.08	7	6	2.89	2695.03	2690	8	138.3		
0	2726.45	5	0	1.24	2727.40	2722	8	89.4		
0	2879.39	5	0	1.24	2880.40	2877	6	89.4		
0	3051.64	7	0	1.16	3052.71	3048	8	75.6		

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Total number of lines in spectrum 115
Number of unidentified lines 69
Number of lines tentatively identified by NID 46 40.00%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.972E+01	2.972E+01	0.517E+01	17.40	
PB-210	22.26Y	1.00	8.634E+01	8.657E+01	1.052E+01	12.15	
PB-212	1.41E+10Y	1.00	8.848E-01	8.848E-01	4.456E-01	50.36	
BI-214	1602.00Y	1.00	1.107E+02	1.107E+02	0.060E+02	5.43	
PB-214	1602.00Y	1.00	1.149E+02	1.149E+02	0.078E+02	6.76	
RN-219	3.28E+04Y	1.00	1.063E+01	1.063E+01	0.314E+01	29.53	
RA-223	3.28E+04Y	1.00	9.162E+00	9.162E+00	5.960E+00	65.05	
RA-224	1.41E+10Y	1.00	2.277E+02	2.277E+02	0.217E+02	9.53	
RA-226	1602.00Y	1.00	2.464E+02	2.464E+02	4.515E+02	183.19	
PA-234M	4.47E+09Y	1.00	6.948E+01	6.948E+01	3.825E+01	55.05	
TH-234	4.47E+09Y	1.00	5.919E+01	5.919E+01	0.945E+01	15.97	
U-235	7.04E+08Y	1.00	5.829E+00	5.829E+00	4.955E+00	85.00	
			---	---			
	Total Activity :		9.709E+02	9.711E+02			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NB-95	35.06D	1.87	6.491E-01	1.213E+00	0.634E+00	52.32	
CS-137	30.17Y	1.00	4.299E-01	4.307E-01	1.961E-01	45.52	
CE-141	32.50D	1.96	1.705E+00	3.346E+00	1.345E+00	40.19	
			---	---			
	Total Activity :		2.784E+00	4.989E+00			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AM-243	7380.00Y	1.00	1.290E+01	1.290E+01	0.155E+01	12.02	
			---	---			
	Total Activity :		1.290E+01	1.290E+01			

Grand Total Activity : 9.865E+02 9.890E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-08 Acquisition date : 10-DEC-2011 14:14:27

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	4.582E-01	2.972E+01	2.972E+01	17.40	OK
	Final Mean for 1 Valid Peaks = 2.972E+01+/- 5.172E+00 (17.40%)						
PB-210	46.50	4.05*	2.204E+00	8.634E+01	8.657E+01	12.15	OK
	Final Mean for 1 Valid Peaks = 8.657E+01+/- 1.052E+01 (12.15%)						
PB-212	238.63	44.60*	1.817E+00	8.848E-01	8.848E-01	50.36	OK
	300.09	3.41	1.555E+00	----- Line Not Found		-----	Absent
	Final Mean for 1 Valid Peaks = 8.848E-01+/- 4.456E-01 (50.36%)						
BI-214	609.31	46.30*	8.915E-01	1.068E+02	1.068E+02	9.93	OK
	1120.29	15.10	5.508E-01	1.116E+02	1.116E+02	10.69	OK
	1764.49	15.80	4.084E-01	1.161E+02	1.161E+02	10.61	OK
	2204.22	4.98	3.644E-01	1.092E+02	1.092E+02	12.70	OK
	Final Mean for 4 Valid Peaks = 1.107E+02+/- 6.006E+00 (5.43%)						
PB-214	295.21	19.19	1.574E+00	1.150E+02	1.150E+02	9.42	OK
	351.92	37.19*	1.383E+00	1.147E+02	1.147E+02	9.71	OK
	Final Mean for 2 Valid Peaks = 1.149E+02+/- 7.769E+00 (6.76%)						
RN-219	401.80	6.50*	1.248E+00	1.063E+01	1.063E+01	29.53	OK
	Final Mean for 1 Valid Peaks = 1.063E+01+/- 3.139E+00 (29.53%)						
RA-223	323.87	3.88*	1.472E+00	9.162E+00	9.162E+00	65.05	OK
	Final Mean for 1 Valid Peaks = 9.162E+00+/- 5.960E+00 (65.05%)						
RA-224	240.98	3.95*	1.806E+00	2.277E+02	2.277E+02	9.53	OK
	Final Mean for 1 Valid Peaks = 2.277E+02+/- 2.171E+01 (9.53%)						
RA-226	186.21	3.28*	2.099E+00	2.464E+02	2.464E+02	183.19	OK
	Final Mean for 1 Valid Peaks = 2.464E+02+/- 4.515E+02 (183.19%)						
PA-234M	1001.03	0.92*	5.993E-01	6.948E+01	6.948E+01	55.05	OK
	Final Mean for 1 Valid Peaks = 6.948E+01+/- 3.825E+01 (55.05%)						
TH-234	63.29	3.80*	2.516E+00	5.919E+01	5.919E+01	15.97	OK
	Final Mean for 1 Valid Peaks = 5.919E+01+/- 9.454E+00 (15.97%)						

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Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
U-235	143.76	10.50*	2.361E+00	7.823E+00	7.823E+00	36.05	<<WM Interf
	163.35	4.70	2.238E+00	5.829E+00	5.829E+00	85.00	OK
	205.31	4.70	1.990E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 5.829E+00+/- 4.955E+00 (85.00%)

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
NB-95	765.79	99.81*	7.400E-01	6.491E-01	1.213E+00	52.32	OK

Final Mean for 1 Valid Peaks = 1.213E+00+/- 6.345E-01 (52.32%)

CS-137	661.65	85.12*	8.333E-01	4.299E-01	4.307E-01	45.52	OK

Final Mean for 1 Valid Peaks = 4.307E-01+/- 1.961E-01 (45.52%)

CE-141	145.44	48.40*	2.351E+00	1.705E+00	3.346E+00	40.19	OK

Final Mean for 1 Valid Peaks = 3.346E+00+/- 1.345E+00 (40.19%)

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
AM-243	74.67	66.00*	2.598E+00	1.290E+01	1.290E+01	12.02	OK

Final Mean for 1 Valid Peaks = 1.290E+01+/- 1.551E+00 (12.02%)

Flag: "*" = Keyline

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---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.972E+01	5.172E+00	3.454E+00	3.542E-01	8.604
NB-95	1.213E+00	6.345E-01	5.516E-01	4.917E-02	2.198
CS-137	4.307E-01	1.961E-01	3.109E-01	2.685E-02	1.385
CE-141	3.346E+00	1.345E+00	1.146E+00	2.844E-01	2.920
PB-210	8.657E+01	1.052E+01	7.294E+00	6.114E-01	11.868
PB-212	8.848E-01	4.456E-01	5.980E-01	4.919E-02	1.480
BI-214	1.107E+02	6.006E+00	6.169E-01	5.536E-02	179.380
PB-214	1.149E+02	7.769E+00	7.541E-01	6.604E-02	152.350
RN-219	1.063E+01	3.139E+00	4.471E+00	4.025E-01	2.377
RA-223	9.162E+00	5.960E+00	6.939E+00	5.948E-01	1.320
RA-224	2.277E+02	2.171E+01	6.800E+00	5.595E-01	33.483
RA-226	2.464E+02	4.515E+02	8.856E+00	1.622E+01	27.827
PA-234M	6.948E+01	3.825E+01	3.545E+01	3.254E+00	1.960
TH-234	5.919E+01	9.454E+00	8.634E+00	7.191E-01	6.855
U-235	5.829E+00	4.955E+00	2.655E+00	4.597E-01	2.196
AM-243	1.290E+01	1.551E+00	5.420E-01	5.940E-02	23.797

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	-1.188E+00		2.813E+00	3.949E+00	3.651E-01	-0.301
NA-22	3.811E-02		2.323E-01	3.438E-01	3.388E-02	0.111
AL-26	5.542E-03		1.219E-01	2.176E-01	1.967E-02	0.025
TI-44	8.187E-01	+	1.624E-01	3.693E-01	3.462E-02	2.217
SC-46	-1.646E-01		2.650E-01	4.358E-01	3.907E-02	-0.378
V-48	-5.879E-01		7.751E-01	1.260E+00	1.153E-01	-0.466
CR-51	4.946E-01		4.130E+00	6.014E+00	5.416E-01	0.082
MN-54	2.183E-01		2.349E-01	3.635E-01	3.263E-02	0.601
CO-56	1.324E-01		2.850E-01	4.354E-01	3.910E-02	0.304
CO-57	1.096E-01		2.010E-01	3.302E-01	2.801E-02	0.332
CO-58	-2.504E-03		3.379E-01	4.038E-01	3.627E-02	-0.006
FE-59	-2.321E-01		5.896E-01	9.653E-01	9.585E-02	-0.240
CO-60	5.683E-03		2.267E-01	3.368E-01	3.124E-02	0.017
ZN-65	2.177E+00		5.894E-01	9.282E-01	8.621E-02	2.345
SE-75	2.665E-01		4.170E-01	5.420E-01	4.492E-02	0.492
RB-82	-4.670E+00		4.632E+00	5.198E+00	4.639E-01	-0.898
RB-83	-9.568E-02		5.251E-01	7.395E-01	1.183E-01	-0.129
KR-85	3.398E+01		4.051E+01	6.388E+01	5.915E+00	0.532
SR-85	2.071E-01		2.470E-01	3.894E-01	3.606E-02	0.532
Y-88	3.503E-01		2.038E-01	3.524E-01	3.146E-02	0.994
NB-93M	2.044E+01		9.040E+00	1.153E+01	3.471E+00	1.772
NB-94	-1.426E-01		2.024E-01	3.324E-01	2.983E-02	-0.429
ZR-95	-1.089E-01		4.890E-01	7.355E-01	7.164E-02	-0.148
RU-103	1.480E-01		3.000E-01	5.207E-01	7.582E-02	0.284
RU-106	-6.183E-01		1.686E+00	2.853E+00	3.864E-01	-0.217
AG-108M	2.114E-01		2.145E-01	3.355E-01	2.958E-02	0.630
CD-109	3.539E+01		8.822E+00	1.076E+01	1.661E+00	3.288

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
AG-110M	1.154E-02		2.037E-01	3.124E-01	2.703E-02	0.037
SN-113	2.798E-01		3.434E-01	5.441E-01	5.010E-02	0.514
TE123M	-6.057E-02		3.196E-01	4.186E-01	3.368E-02	-0.145
SB-124	1.455E-01		2.715E-01	4.227E-01	3.809E-02	0.344
I-125	-2.572E+00		4.373E+00	6.781E+00	6.955E-01	-0.379
SB-125	7.684E-01		6.160E-01	1.076E+00	9.980E-02	0.714
SB-126	6.092E+00	+	3.336E+00	3.552E+00	3.129E-01	1.715
SN-126	2.461E+00		7.392E-01	1.013E+00	1.432E-01	2.429
I-129	1.231E-01		4.460E-01	6.256E-01	7.669E-02	0.197
I-131	-7.806E-01		2.810E+00	4.872E+00	4.300E-01	-0.160
BA-133	2.469E-01		3.077E-01	4.504E-01	5.994E-02	0.548
CS-134	6.341E-01		2.165E-01	3.440E-01	3.103E-02	1.843
CS-135	6.992E+00		1.397E+00	1.984E+00	1.631E-01	3.524
CS-136	8.328E-01		1.468E+00	2.231E+00	2.116E-01	0.373
LA-138	2.750E-02		3.274E-01	5.376E-01	5.419E-02	0.051
CE-139	2.418E-01		2.741E-01	4.129E-01	3.287E-02	0.586
BA-140	-5.509E+00		4.060E+00	6.013E+00	2.003E+00	-0.916
LA-140	2.526E+00		1.391E+00	2.292E+00	2.237E-01	1.102
CE-144	-1.505E+00		1.639E+00	2.640E+00	2.200E-01	-0.570
PM-144	4.545E-02		1.923E-01	2.956E-01	2.588E-02	0.154
PM-145	-6.630E-01		9.917E-01	1.386E+00	9.049E-01	-0.478
PM-146	9.609E-01	+	5.742E-01	7.328E-01	6.743E-02	1.311
ND-147	9.946E+00		9.902E+00	1.564E+01	1.446E+00	0.636
EU-152	1.479E+01	+	2.945E+00	3.800E+00	4.609E-01	3.893
GD-153	-1.658E+00		7.755E-01	1.205E+00	1.404E-01	-1.376
EU-154	9.536E-02		6.430E-01	9.509E-01	9.372E-02	0.100
EU-155	8.084E+00		1.387E+00	1.242E+00	1.722E-01	6.507
EU-156	-3.762E-01		1.003E+01	1.197E+01	2.750E+00	-0.031
HO-166M	-2.366E-01		4.521E-01	5.292E-01	4.650E-02	-0.447
HF-172	-1.800E+00		1.464E+00	2.348E+00	1.978E-01	-0.767
LU-172	-6.801E+00		8.260E+00	1.329E+01	1.232E+00	-0.512
LU-173	8.265E+00		1.195E+00	1.641E+00	1.348E-01	5.037
HF-175	-3.121E-01		3.715E-01	4.566E-01	3.975E-02	-0.684
LU-176	-2.672E-01		1.835E-01	2.805E-01	2.367E-02	-0.952
TA-182	5.849E+01	+	6.250E+00	3.986E+00	3.700E-01	14.672
IR-192	4.500E-01	+	5.418E-01	7.632E-01	7.046E-02	0.590
HG-203	-2.649E-01		3.905E-01	5.622E-01	4.754E-02	-0.471
BI-207	2.332E-02		1.663E-01	2.854E-01	2.611E-02	0.082
TL-208	5.622E-01		6.200E-01	9.747E-01	8.869E-02	0.577
BI-210M	2.492E-01		4.159E-01	6.150E-01	5.060E-02	0.405
PB-211	1.886E+01	+	6.925E+00	1.125E+01	1.014E+00	1.677
BI-212	3.988E-01		1.974E+00	2.407E+00	2.125E-01	0.166
RA-225	-1.610E+00		2.632E+00	4.081E+00	3.788E-01	-0.394
TH-227	1.039E+01	+	1.913E+00	2.750E+00	2.262E-01	3.779
AC-228	6.711E-01		7.546E-01	1.290E+00	1.160E-01	0.520
TH-230	2.088E+02	+	4.138E+01	9.402E+01	8.770E+00	2.221
PA-231	2.029E+01		8.277E+00	1.232E+01	1.035E+00	1.647
TH-231	6.547E-01		1.839E+00	2.918E+00	4.298E-01	0.224

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PA-233	9.327E-01		1.010E+00	1.587E+00	3.555E-01	0.588
PA-234	6.127E-01		7.908E-01	1.297E+00	1.085E-01	0.472
NP-237	1.959E+01		3.360E+00	3.010E+00	4.172E-01	6.507
AM-241	1.299E+00		6.534E-01	9.012E-01	6.741E-02	1.441
CM-243	4.827E-01		1.336E+00	1.965E+00	1.611E-01	0.246

Sample ID : 1111065-08 Acquisition date : 10-DEC-2011 14:14:27

Total number of lines in spectrum	115	
Number of unidentified lines	69	
Number of lines tentatively identified by NID	46	40.00%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.972E+01	2.972E+01	0.517E+01	17.40	
PB-210	22.26Y	1.00	8.634E+01	8.657E+01	1.052E+01	12.15	
PB-212	1.41E+10Y	1.00	8.848E-01	8.848E-01	4.456E-01	50.36	
BI-214	1602.00Y	1.00	1.107E+02	1.107E+02	0.060E+02	5.43	
PB-214	1602.00Y	1.00	1.149E+02	1.149E+02	0.078E+02	6.76	
RN-219	3.28E+04Y	1.00	1.063E+01	1.063E+01	0.314E+01	29.53	
RA-223	3.28E+04Y	1.00	9.162E+00	9.162E+00	5.960E+00	65.05	
RA-224	1.41E+10Y	1.00	2.277E+02	2.277E+02	0.217E+02	9.53	
RA-226	1602.00Y	1.00	2.464E+02	2.464E+02	4.515E+02	183.19	
PA-234M	4.47E+09Y	1.00	6.948E+01	6.948E+01	3.825E+01	55.05	
TH-234	4.47E+09Y	1.00	5.919E+01	5.919E+01	0.945E+01	15.97	
U-235	7.04E+08Y	1.00	5.829E+00	5.829E+00	4.955E+00	85.00	
			---	---			
	Total Activity :		9.709E+02	9.711E+02			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NB-95	35.06D	1.87	6.491E-01	1.213E+00	0.634E+00	52.32	
CS-137	30.17Y	1.00	4.299E-01	4.307E-01	1.961E-01	45.52	
CE-141	32.50D	1.96	1.705E+00	3.346E+00	1.345E+00	40.19	
			---	---			
	Total Activity :		2.784E+00	4.989E+00			

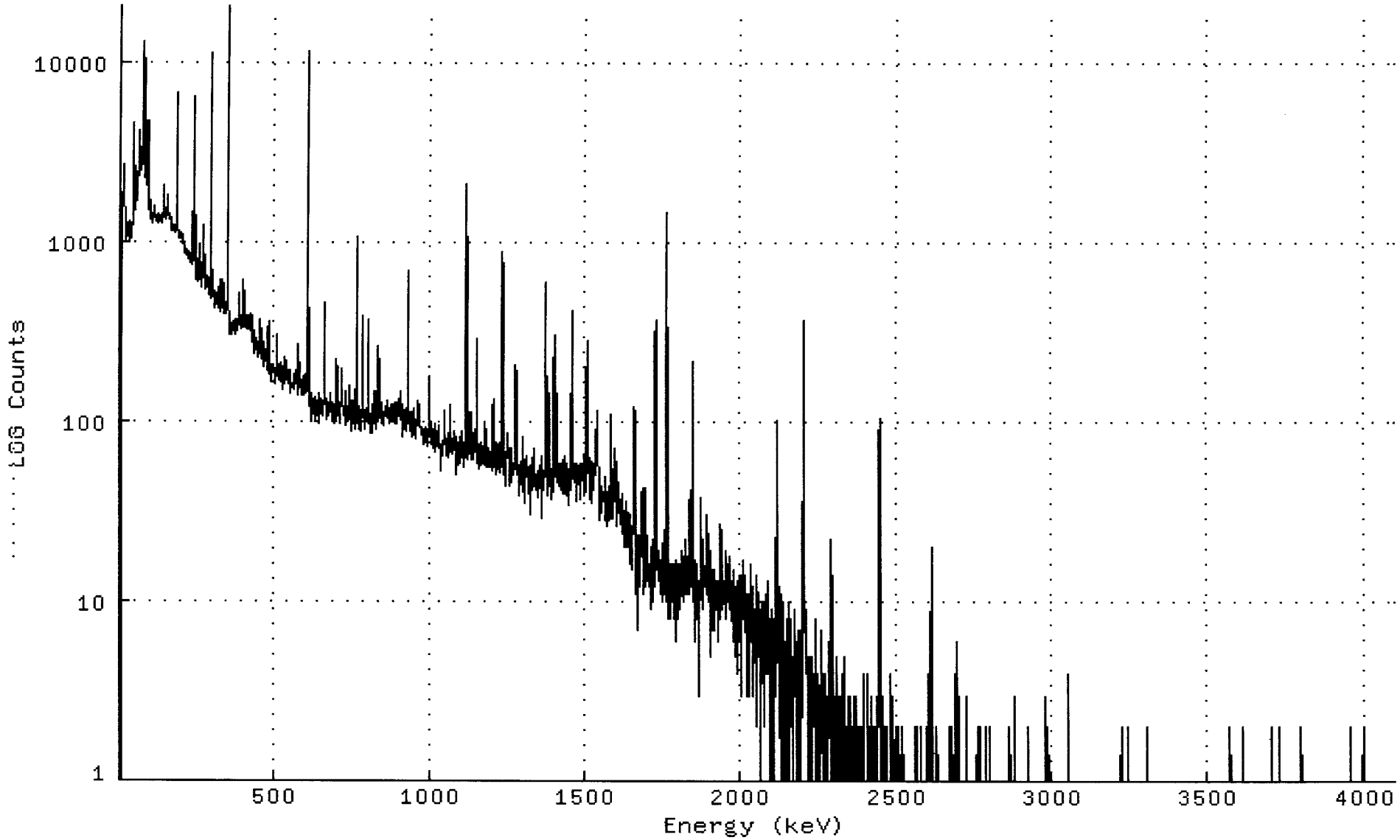
Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AM-243	7380.00Y	1.00	1.290E+01	1.290E+01	0.155E+01	12.02	
			---	---			
	Total Activity :		1.290E+01	1.290E+01			

Grand Total Activity : 9.865E+02 9.890E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106508_GE2_GAS1102_172254.CNF;1
Title :
Sample Title: DY2-33-31-111109
Start Time: 10-DEC-2011 14:14 Sample Time: 9-NOV-2011 00:00: Energy Offset: 6.87229E-02
Real Time : 0 01:00:15.46 Sample ID : 1111065-08 Energy Slope : 9.99625E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106508_GE2_GAS1102_1722

Channel

1:	0	0	0	0	0	0	1	188
9:	1135	1517	2333	2058	1895	1959	2683	1768
17:	1359	1225	1195	1126	1013	1063	1089	1087
25:	1063	1089	1157	1256	995	1068	1077	1279
33:	1180	1107	1036	1123	1253	1139	1162	1228
41:	1220	1303	1337	1402	1523	3018	4514	1526
49:	1508	1951	1862	1676	2534	2345	1805	1697
57:	1870	2023	2192	2342	2524	2611	4158	3978
65:	2529	2483	2692	3349	2556	2644	2653	2656
73:	2879	3880	9661	4821	12933	8548	2729	2954
81:	3199	2464	2231	4298	2482	2025	4694	4282
89:	2159	3099	2112	2696	4664	2335	2258	1593
97:	1337	1682	1593	1401	1323	1347	1319	1265
105:	1387	1421	1347	1394	1382	1410	1488	1367
113:	1576	1370	1401	1288	1317	1407	1334	1347
121:	1385	1380	1438	1267	1370	1270	1325	1297
129:	1358	1312	1397	1337	1329	1262	1342	1324
137:	1365	1432	1382	1410	1445	1365	1482	2038
145:	1681	1379	1389	1319	1423	1479	1474	1470
153:	1465	1807	1727	1405	1446	1352	1413	1398
161:	1339	1347	1379	1334	1276	1227	1143	1203
169:	1194	1235	1242	1178	1194	1135	1206	1179
177:	1129	1153	1146	1140	1160	1218	1228	1136
185:	1936	6759	4081	1161	1090	1139	1130	1058
193:	1068	1034	1052	1113	1066	1062	1055	1055
201:	963	1100	970	995	1048	1078	948	987
209:	908	961	937	858	870	837	836	848
217:	891	864	862	868	797	807	802	826
225:	866	782	773	864	761	758	762	733
233:	867	752	879	1444	997	798	975	779
241:	1611	6437	2700	737	667	652	614	628
249:	687	684	598	629	686	642	671	940
257:	870	719	956	747	611	669	594	631
265:	612	594	574	549	1051	1220	1109	893
273:	624	680	834	607	592	550	537	545
281:	610	548	600	616	552	641	612	552
289:	542	532	568	509	543	1448	11120	7787
297:	782	475	507	685	565	493	570	509
305:	532	438	430	449	422	460	479	521
313:	443	463	472	442	447	463	437	421
321:	424	457	498	607	480	405	418	449
329:	468	617	468	427	449	506	480	399
337:	426	587	535	450	415	457	446	394
345:	420	438	460	432	474	623	5603	20916
353:	6765	465	346	380	365	299	351	358
361:	303	347	319	324	313	346	343	343
369:	343	315	358	346	356	347	305	351
377:	371	330	332	353	324	366	353	316
385:	352	386	504	426	514	405	374	331
393:	362	328	353	346	334	366	337	359
401:	442	612	407	377	531	483	357	335
409:	361	376	329	334	366	382	356	384
417:	380	329	364	361	380	321	356	386
425:	349	339	398	381	334	319	277	312

433:	290	287	283	314	303	239	242	259
441:	247	259	264	289	286	260	237	274
449:	245	260	228	264	252	246	364	273
457:	264	241	220	246	275	326	274	236
465:	206	200	237	220	238	272	230	236
473:	215	247	229	224	241	192	197	278
481:	336	235	218	194	206	232	358	260
489:	190	164	187	191	204	191	197	202
497:	206	190	193	194	188	181	180	183
505:	197	163	178	177	239	267	301	272
513:	195	176	171	179	204	207	179	174
521:	164	179	180	177	209	180	164	150
529:	187	184	171	182	229	222	163	187
537:	183	189	169	169	182	187	214	178
545:	190	161	188	180	170	162	191	165
553:	159	151	144	148	157	159	159	162
561:	163	158	158	153	181	164	150	155
569:	179	178	161	175	192	172	163	158
577:	142	160	140	267	202	152	208	185
585:	164	168	153	168	163	158	139	144
593:	149	176	140	155	159	150	139	154
601:	161	163	142	163	184	146	209	1819
609:	11483	10177	1233	145	127	120	154	147
617:	158	125	129	130	144	135	131	100
625:	116	123	119	122	109	131	136	131
633:	132	120	100	120	131	106	118	124
641:	111	111	104	109	103	98	129	144
649:	128	123	109	114	128	118	106	126
657:	112	106	113	130	133	189	123	142
665:	413	458	170	108	111	127	101	106
673:	110	113	110	116	123	106	128	128
681:	119	117	143	120	119	101	127	124
689:	112	116	111	114	97	110	97	104
697:	112	139	120	100	121	159	220	186
705:	138	128	123	126	106	121	123	108
713:	116	127	98	126	125	121	160	197
721:	171	126	115	114	107	109	121	120
729:	107	95	115	130	147	137	109	108
737:	119	99	102	107	120	141	157	126
745:	115	101	108	110	87	113	96	109
753:	131	131	98	114	96	100	108	111
761:	100	91	119	102	130	176	308	1063
769:	973	258	101	90	121	104	104	102
777:	99	88	98	115	113	108	99	108
785:	209	382	227	119	108	115	90	100
793:	100	102	102	102	109	117	100	110
801:	119	104	105	96	144	367	296	135
809:	89	86	87	107	94	104	112	123
817:	115	107	93	86	122	145	102	97
825:	133	130	127	102	116	91	122	146
833:	142	103	113	108	113	161	264	185
841:	124	109	115	104	115	126	112	110
849:	111	97	102	110	96	105	94	98
857:	104	122	109	116	108	115	118	104
865:	114	125	112	112	131	107	98	112
873:	105	96	116	125	111	99	106	113
881:	105	111	110	123	101	113	101	108
889:	122	103	108	96	121	127	114	109
897:	114	128	106	98	114	112	134	119
905:	120	106	110	111	102	120	126	146

913:	106	93	109	97	82	120	113	107
921:	107	107	90	105	92	99	91	91
929:	114	89	109	126	262	695	472	148
937:	104	88	112	90	93	92	102	95
945:	86	86	94	81	108	119	83	101
953:	84	91	91	81	102	101	79	103
961:	102	97	124	131	123	104	94	95
969:	124	94	97	100	93	94	87	85
977:	90	85	92	90	74	76	85	75
985:	91	77	82	88	81	92	88	76
993:	76	72	89	82	83	82	102	118
1001:	178	161	81	91	99	75	87	86
1009:	83	80	83	90	71	91	84	81
1017:	90	84	71	67	69	79	96	73
1025:	76	83	87	86	78	70	75	86
1033:	95	83	72	68	72	74	71	53
1041:	73	67	70	76	76	78	64	82
1049:	76	84	89	116	93	71	68	64
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1065:	79	62	69	67	79	124	87	87
1073:	66	71	80	72	67	72	70	76
1081:	87	69	79	70	81	51	70	68
1089:	80	73	77	60	75	59	57	66
1097:	59	64	76	72	81	77	78	86
1105:	88	88	79	76	63	69	76	65
1113:	68	70	55	67	75	104	562	2084
1121:	2066	566	105	68	64	73	61	69
1129:	85	66	80	78	112	111	93	65
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1145:	66	85	74	70	90	67	78	85
1153:	83	140	254	291	120	61	54	71
1161:	70	73	65	73	77	71	70	59
1169:	57	68	59	65	73	67	58	61
1177:	57	62	70	79	73	96	84	60
1185:	57	56	66	74	67	62	68	62
1193:	69	60	56	56	68	62	59	66
1201:	65	53	70	63	59	66	116	134
1209:	89	59	69	55	55	77	65	61
1217:	63	50	70	74	61	54	71	58
1225:	58	61	59	76	60	54	52	74
1233:	60	74	56	96	352	875	654	240
1241:	72	59	65	56	44	54	59	67
1249:	56	58	65	65	71	85	83	74
1257:	65	70	57	54	44	65	68	46
1265:	70	67	47	46	54	53	50	51
1273:	50	56	61	54	59	62	79	157
1281:	207	181	72	50	59	58	53	57
1289:	45	48	39	48	45	53	45	50
1297:	57	54	60	55	53	41	48	81
1305:	62	35	56	40	44	49	61	56
1313:	53	49	58	64	53	49	52	43
1321:	40	51	51	55	46	30	48	51
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1337:	52	70	55	48	45	44	49	51
1345:	42	50	48	48	46	41	38	52
1353:	49	52	54	44	43	54	50	55
1361:	58	53	64	29	48	50	48	50
1369:	43	53	48	43	42	56	49	130
1377:	398	594	312	101	39	52	57	70
1385:	149	140	60	60	44	52	50	49

1393:	47	54	37	54	48	41	48	95
1401:	175	226	118	54	49	58	153	299
1409:	252	83	56	54	60	46	54	58
1417:	58	44	46	47	52	47	42	53
1425:	58	54	46	46	61	52	51	40
1433:	50	56	40	47	52	53	64	42
1441:	52	55	55	58	50	40	36	34
1449:	46	48	51	54	51	52	50	47
1457:	65	42	83	252	415	229	85	53
1465:	48	46	58	59	55	53	54	49
1473:	36	51	48	50	58	52	47	57
1481:	48	54	53	37	55	47	58	41
1489:	59	48	53	56	47	56	58	53
1497:	39	61	66	63	57	54	41	55
1505:	52	52	67	148	281	257	107	66
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1521:	59	52	35	57	56	47	54	57
1529:	42	46	52	58	51	52	56	52
1537:	63	73	115	71	64	61	101	87
1545:	65	48	49	42	38	28	35	44
1553:	40	44	31	32	31	41	39	41
1561:	40	40	40	43	34	36	28	49
1569:	40	38	26	38	39	41	39	33
1577:	35	35	44	28	37	50	110	109
1585:	57	39	29	42	37	43	39	29
1593:	36	43	70	50	36	48	63	70
1601:	50	33	26	38	45	38	41	36
1609:	32	31	46	31	36	31	27	30
1617:	37	37	30	32	24	34	40	25
1625:	24	29	30	32	20	31	26	27
1633:	20	36	27	29	27	23	23	21
1641:	20	31	24	27	23	30	24	16
1649:	24	15	16	23	26	25	24	24
1657:	34	32	32	54	122	109	46	18
1665:	19	27	17	7	23	11	12	14
1673:	14	15	16	19	23	15	12	16
1681:	19	23	31	41	26	24	17	11
1689:	22	21	18	43	43	35	35	12
1697:	20	14	13	16	23	14	16	14
1705:	13	14	15	12	15	16	11	9
1713:	16	13	18	20	18	18	13	11
1721:	10	15	22	16	12	17	39	89
1729:	278	370	177	43	16	15	16	15
1737:	13	15	19	19	15	15	17	17
1745:	11	12	12	21	15	21	11	10
1753:	11	11	14	17	14	18	25	10
1761:	23	95	434	1263	1468	785	147	29
1769:	13	10	11	8	15	16	8	12
1777:	8	11	10	10	13	13	16	10
1785:	13	9	16	10	8	13	17	11
1793:	15	11	13	6	14	8	9	16
1801:	13	13	16	10	11	15	13	9
1809:	10	13	19	12	12	13	11	10
1817:	18	11	17	17	12	11	15	11
1825:	15	22	16	12	15	11	13	13
1833:	18	11	16	13	23	37	26	36
1841:	13	14	16	12	21	84	181	215
1849:	113	38	15	10	12	17	6	11
1857:	11	11	16	12	15	10	8	10
1865:	13	3	12	13	9	12	13	20

1873:	34	38	16	11	9	13	13	22
1881:	13	17	14	14	13	15	12	14
1889:	18	30	23	21	11	14	19	20
1897:	24	10	21	13	19	19	12	10
1905:	5	12	10	14	7	15	13	13
1913:	15	13	15	10	8	7	9	10
1921:	13	11	11	9	12	11	13	10
1929:	6	7	7	9	16	13	23	27
1937:	20	25	18	17	15	14	12	9
1945:	10	13	13	10	12	13	13	12
1953:	8	19	12	11	10	11	12	16
1961:	12	11	18	11	10	17	9	16
1969:	10	8	13	11	9	10	6	9
1977:	15	13	7	8	7	8	5	7
1985:	6	12	9	13	5	12	4	9
1993:	10	8	9	10	6	8	14	7
2001:	12	11	3	14	10	13	8	17
2009:	10	16	9	10	14	9	10	8
2017:	9	5	11	3	5	10	11	8
2025:	3	7	5	11	4	6	16	11
2033:	9	12	6	8	10	12	10	8
2041:	10	3	7	6	9	6	7	9
2049:	5	2	10	9	11	14	9	10
2057:	5	9	6	7	5	0	6	5
2065:	4	9	7	8	10	4	8	7
2073:	6	2	7	5	8	10	4	6
2081:	8	4	11	7	5	6	4	13
2089:	11	8	6	6	6	1	1	8
2097:	4	2	1	3	9	9	5	6
2105:	3	8	1	7	6	10	9	8
2113:	3	5	7	16	33	83	102	46
2121:	22	7	3	3	4	12	6	3
2129:	1	11	9	3	5	2	1	8
2137:	10	5	2	2	3	5	5	1
2145:	6	4	8	6	1	3	2	5
2153:	10	3	1	3	2	5	4	2
2161:	5	8	4	5	2	4	1	3
2169:	5	4	5	5	3	8	3	4
2177:	9	1	3	2	5	6	4	7
2185:	5	4	4	0	5	4	4	5
2193:	7	4	1	5	4	6	4	7
2201:	22	59	214	368	306	119	32	9
2209:	5	5	6	6	9	4	4	5
2217:	4	4	1	2	2	5	3	3
2225:	1	2	1	2	4	1	5	3
2233:	2	4	2	2	3	2	8	2
2241:	0	3	2	3	3	4	4	1
2249:	0	1	2	3	3	1	1	3
2257:	3	4	2	3	3	7	2	1
2265:	0	2	4	2	4	4	2	0
2273:	1	4	3	3	2	3	1	1
2281:	0	3	3	3	5	6	2	4
2289:	1	2	4	16	22	20	10	7
2297:	1	0	1	6	1	2	1	2
2305:	0	3	1	1	1	1	0	5
2313:	1	1	0	2	2	3	3	0
2321:	3	0	2	2	1	4	3	2
2329:	3	2	2	5	2	0	3	0
2337:	1	0	0	1	0	2	1	1
2345:	1	0	2	0	3	3	1	0

2353:	1	2	2	2	1	0	2	0
2361:	0	1	3	0	3	1	1	2
2369:	1	2	3	1	0	1	2	1
2377:	1	1	1	1	0	1	0	2
2385:	1	0	2	1	1	0	0	1
2393:	0	1	1	1	4	0	1	0
2401:	1	1	0	1	1	1	3	4
2409:	1	2	1	2	0	1	0	1
2417:	1	3	2	1	0	0	0	1
2425:	2	0	1	1	0	0	0	1
2433:	1	1	2	0	1	1	0	0
2441:	3	3	2	2	14	36	78	104
2449:	62	24	8	0	0	3	0	0
2457:	0	0	0	1	0	0	0	2
2465:	1	1	0	2	0	0	2	0
2473:	0	0	1	0	1	0	0	1
2481:	0	1	4	2	1	2	0	2
2489:	0	3	0	1	0	0	1	0
2497:	0	1	1	1	0	2	0	0
2505:	2	0	1	1	0	0	0	1
2513:	0	0	0	2	0	0	0	1
2521:	2	1	1	0	1	1	0	0
2529:	1	0	0	0	0	0	1	0
2537:	0	0	1	0	1	0	0	0
2545:	0	0	0	1	0	0	1	0
2553:	0	0	0	1	1	1	1	0
2561:	0	0	1	2	2	0	1	0
2569:	0	1	1	0	0	0	0	1
2577:	1	2	0	0	1	0	1	1
2585:	0	1	0	1	0	0	0	0
2593:	1	0	1	1	1	1	1	2
2601:	1	1	1	4	0	1	0	1
2609:	1	0	1	1	6	13	20	12
2617:	1	2	0	0	1	1	0	0
2625:	0	1	0	0	0	0	2	1
2633:	1	0	1	0	0	0	0	1
2641:	0	0	1	0	0	0	0	0
2649:	1	0	0	0	0	0	0	1
2657:	0	0	0	1	0	1	0	0
2665:	0	0	1	0	1	0	1	2
2673:	1	1	2	0	0	1	0	2
2681:	0	0	0	0	0	0	0	1
2689:	0	0	0	1	4	1	6	1
2697:	0	3	2	1	0	3	0	0
2705:	1	1	0	0	0	0	0	0
2713:	0	0	0	0	1	0	1	1
2721:	0	0	0	0	0	1	1	3
2729:	0	0	0	1	1	0	0	0
2737:	0	0	0	0	1	0	1	0
2745:	1	0	0	0	0	1	1	1
2753:	0	1	1	0	1	0	0	0
2761:	2	0	0	0	0	0	1	1
2769:	2	1	0	1	0	0	0	1
2777:	1	1	0	0	0	0	0	0
2785:	1	0	0	0	1	2	0	0
2793:	0	0	0	0	0	0	0	2
2801:	0	0	0	0	0	0	0	0
2809:	1	1	1	0	0	0	0	1
2817:	0	1	0	0	0	0	0	1
2825:	0	0	1	1	0	0	0	0

2833:	0	1	0	1	0	0	1	1
2841:	0	0	0	0	0	1	0	0
2849:	0	1	0	1	0	0	0	0
2857:	0	0	0	1	0	0	1	0
2865:	2	0	0	0	0	1	0	0
2873:	0	1	0	0	0	0	1	1
2881:	3	0	0	0	0	1	0	1
2889:	0	0	0	1	0	0	1	0
2897:	1	0	0	0	0	0	0	0
2905:	1	0	1	0	0	0	0	0
2913:	0	0	0	0	1	0	0	1
2921:	0	0	1	0	2	0	1	1
2929:	1	0	1	0	0	1	1	1
2937:	0	0	1	0	0	0	0	1
2945:	0	0	0	0	0	0	0	0
2953:	0	0	0	0	0	0	0	1
2961:	0	1	0	1	1	0	0	0
2969:	0	0	0	1	0	0	0	0
2977:	1	1	3	1	0	0	0	1
2985:	0	1	2	0	0	0	0	0
2993:	0	0	0	0	1	0	0	0
3001:	1	0	0	0	0	0	0	0
3009:	0	0	0	1	1	0	0	0
3017:	0	0	1	0	0	0	0	0
3025:	0	0	0	0	1	1	0	0
3033:	0	0	0	0	0	0	0	0
3041:	1	0	0	1	0	0	0	0
3049:	0	0	0	4	1	2	0	0
3057:	0	1	0	0	0	1	0	1
3065:	0	0	0	1	0	1	0	0
3073:	0	0	0	0	0	0	0	0
3081:	1	0	0	0	0	1	0	1
3089:	0	0	0	0	0	0	0	0
3097:	0	0	0	0	0	0	0	0
3105:	0	0	0	1	0	0	1	0
3113:	0	0	1	0	0	1	0	1
3121:	0	0	0	0	0	0	0	0
3129:	0	0	0	0	0	0	0	0
3137:	0	0	0	0	0	0	0	0
3145:	0	0	1	0	0	0	0	0
3153:	0	0	0	0	0	0	0	1
3161:	0	0	1	0	0	0	1	0
3169:	0	0	1	0	0	0	1	0
3177:	0	0	0	0	0	0	0	0
3185:	0	0	0	0	0	0	0	1
3193:	0	0	0	0	1	0	0	0
3201:	0	0	0	1	1	0	0	0
3209:	0	1	0	0	0	0	0	0
3217:	0	0	0	0	0	2	0	0
3225:	0	1	0	0	0	0	0	1
3233:	0	0	0	1	0	0	0	1
3241:	0	0	2	0	0	0	0	0
3249:	0	0	0	0	0	0	0	1
3257:	0	0	0	0	1	0	0	1
3265:	0	0	0	0	0	0	1	0
3273:	0	0	0	0	0	1	0	1
3281:	0	0	0	1	0	1	0	0
3289:	0	0	0	0	0	0	1	1
3297:	0	1	0	0	0	0	0	0
3305:	2	1	0	0	0	0	1	0

3313:	0	0	0	0	0	0	1	0
3321:	0	0	0	0	0	0	0	0
3329:	0	0	1	0	0	0	0	0
3337:	0	0	0	0	0	0	0	1
3345:	0	0	0	0	0	0	1	0
3353:	0	0	0	0	0	0	0	0
3361:	0	1	0	0	0	0	0	0
3369:	0	0	0	0	1	0	0	0
3377:	1	0	1	0	0	0	0	0
3385:	0	0	0	1	0	0	1	0
3393:	0	0	0	0	0	0	0	0
3401:	0	0	0	1	0	0	0	0
3409:	1	1	0	0	0	0	0	0
3417:	0	0	0	0	0	0	1	0
3425:	0	1	1	0	0	0	0	0
3433:	0	0	0	0	0	0	0	0
3441:	0	0	0	0	0	0	0	0
3449:	0	0	0	0	0	1	1	0
3457:	0	0	0	0	0	0	0	0
3465:	0	0	1	0	0	1	0	0
3473:	0	1	0	0	0	1	0	0
3481:	0	1	0	0	0	0	0	0
3489:	0	0	0	1	0	0	1	1
3497:	0	0	0	1	0	0	1	0
3505:	0	0	0	0	0	0	1	0
3513:	0	0	0	0	0	0	0	0
3521:	0	0	0	0	0	0	0	1
3529:	0	1	1	0	0	0	0	0
3537:	0	0	0	1	0	1	0	0
3545:	0	0	0	0	0	0	0	0
3553:	0	0	0	0	0	0	1	0
3561:	0	0	0	0	0	1	0	0
3569:	0	0	2	0	0	0	0	0
3577:	0	0	0	0	0	0	0	0
3585:	0	0	0	0	0	1	0	0
3593:	0	0	1	1	0	0	0	1
3601:	0	1	0	1	0	0	0	1
3609:	0	0	2	0	0	0	0	0
3617:	0	0	0	0	0	0	0	0
3625:	0	0	0	0	1	1	0	1
3633:	1	0	0	0	0	0	0	0
3641:	0	0	0	0	0	0	0	0
3649:	1	0	0	0	0	0	0	0
3657:	0	0	0	0	0	0	0	0
3665:	0	0	0	0	0	0	0	0
3673:	1	0	0	0	0	0	0	0
3681:	0	0	1	0	0	1	0	0
3689:	0	0	0	0	0	0	0	1
3697:	0	0	0	0	0	0	0	2
3705:	1	0	0	1	1	0	0	0
3713:	0	0	0	0	1	0	0	0
3721:	0	0	0	0	1	0	0	2
3729:	0	0	0	1	0	0	0	0
3737:	0	0	1	0	1	0	0	0
3745:	0	0	0	0	0	0	0	0
3753:	0	0	0	0	0	1	0	0
3761:	0	0	0	0	0	0	0	0
3769:	0	0	0	1	0	0	0	1
3777:	0	0	0	0	0	0	0	0
3785:	0	0	0	0	0	0	0	1

3793:	0	0	0	1	0	2	0	0
3801:	1	0	0	0	0	1	0	0
3809:	0	0	0	1	0	0	0	0
3817:	0	0	0	1	0	1	0	0
3825:	0	0	0	1	0	0	0	0
3833:	0	0	0	0	0	0	0	1
3841:	0	0	1	0	0	0	0	0
3849:	0	0	1	0	0	0	1	0
3857:	1	1	0	0	0	0	0	0
3865:	0	0	0	0	0	0	0	0
3873:	0	0	0	0	0	0	0	1
3881:	0	0	0	0	0	0	0	0
3889:	1	0	0	0	0	0	0	0
3897:	0	1	1	0	0	0	0	0
3905:	0	0	0	0	0	0	0	0
3913:	0	0	0	0	0	0	1	0
3921:	0	0	0	0	0	0	0	0
3929:	1	0	0	0	0	0	0	1
3937:	0	0	0	0	0	1	0	0
3945:	0	0	0	0	0	1	0	1
3953:	0	0	2	0	0	0	0	0
3961:	1	0	0	0	0	0	0	0
3969:	0	1	0	0	0	1	0	0
3977:	0	0	0	0	0	0	0	0
3985:	0	0	0	0	0	0	0	0
3993:	1	0	2	0	0	0	1	0
4001:	0	0	0	0	0	0	0	0
4009:	0	0	0	0	1	1	0	1
4017:	0	0	0	0	0	0	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	1	0	0	0	0	0
4041:	1	0	0	0	0	0	0	0
4049:	0	0	0	1	0	0	0	0
4057:	0	1	0	0	0	0	0	0
4065:	0	0	0	1	0	1	0	0
4073:	0	0	0	1	0	0	0	0
4081:	0	0	0	0	0	0	1	0
4089:	0	0	0	0	0	0	0	1

Sample ID : 1111065-09 Acquisition date : 10-DEC-2011 14:54:01

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VAX/VMS Peak Search Report Generated 10-DEC-2011 15:55:54.48

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106509_GE3_GAS1102_172255.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-41-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 10-DEC-2011 14:54:01
Sample ID : 1111065-09 Sample Quantity : 4.88020E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE3 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:01:30.90 2.5%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	16.38	1134	9888	1.72	16.66	15	5	27.0		NB-93M
0	27.33	325	6510	1.19	27.61	26	4	71.3		
0	32.28	229	6658	2.06	32.56	32	4	101.7		
0	46.58*	4794	12347	1.10	46.86	45	5	7.5		PB-210
0	53.41	413	12719	0.94	53.69	52	4	76.2		
0	63.49*	7519	24415	1.17	63.77	61	6	7.0		TH-234
1	67.60	1187	8432	1.34	67.88	67	13	19.8	2.50E+03	
1	74.72*	10744	17637	1.23	75.00	67	13	4.1		AM-243
0	87.77	3733	16620	1.13	88.05	86	4	10.3		NP-237
										SN-126
										CD-109
0	92.89*	12744	22942	1.22	93.18	90	7	4.4		
0	98.29	875	11542	1.44	98.57	98	5	37.6		
0	113.02	829	13709	2.07	113.31	111	6	45.3		
0	121.79	247	8676	1.67	122.08	121	4	107.5		CO-57
0	144.05*	1317	18475	1.80	144.34	141	8	36.2		U-235
										CE-141
0	154.41	691	13353	1.21	154.70	153	6	53.5		
0	163.43	419	11858	1.49	163.71	162	6	82.8		U-235
0	186.36*	15289	17736	1.67	186.65	182	10	3.6		RA-226
0	205.77	423	8723	1.38	206.06	204	6	70.8		U-235
4	237.11*	1508	6871	2.11	237.40	231	16	18.0	3.54E+01	
4	242.35*	11084	4310	1.34	242.65	231	16	2.5		RA-224
0	258.08	1371	8632	3.92	258.38	254	9	25.1		
6	270.36	2132	7098	2.61	270.66	267	12	14.3	2.85E+01	
6	274.91	654	5254	1.99	275.21	267	12	36.9		
0	287.07	445	4883	2.33	287.37	285	6	50.7		
0	295.56*	23572	6780	1.29	295.86	292	8	1.8		PB-214
0	324.05	283	3201	1.79	324.35	323	5	61.0		RA-223
0	329.69	313	3959	1.91	329.98	328	6	64.6		LA-140
0	338.39*	236	3149	1.18	338.69	337	5	72.7		
3	352.30*	40602	2305	1.43	352.60	347	15	1.0	1.06E+01	PB-214
3	355.35	530	3025	2.06	355.65	347	15	67.9		
0	388.11	418	4258	3.52	388.41	385	8	54.9		
0	403.47	785	5072	4.67	403.77	399	10	34.7		
0	455.08	169	2237	1.38	455.39	453	6	90.2		

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Sample ID : 1111065-09 Acquisition date : 10-DEC-2011 14:54:01

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	462.03	263	2396	2.24	462.34	459	7	63.0		
0	470.42	105	1641	1.72	470.73	469	5	117.7		
0	481.31	308	2152	1.72	481.61	479	7	51.2		
0	487.33	264	1820	1.57	487.64	485	6	52.6		LA-140
0	510.59*	238	2570	2.23	510.90	506	9	78.1		
0	533.80	127	1630	1.87	534.11	532	6	101.5		
1	580.52	314	1376	1.88	580.83	577	11	39.1	4.43E+00	
1	583.86*	231	1358	1.88	584.17	577	11	53.3		TL-208
0	609.77*	28345	2274	1.48	610.09	606	9	1.3		BI-214
0	666.00	769	1532	1.59	666.32	662	9	19.7		
0	683.79	151	1445	4.37	684.11	680	9	92.1		
0	703.77	333	1095	1.95	704.09	701	7	34.8		
0	720.66	212	1298	1.61	720.98	717	8	60.5		
2	740.02	61	296	1.47	740.34	739	9	70.1	2.11E+00	
2	742.90	219	1054	2.19	743.22	739	9	51.4		
0	768.73*	2875	1667	1.82	769.05	764	11	6.7		
0	786.35	664	1136	2.01	786.68	783	8	19.2		
0	806.90	647	1291	1.63	807.23	803	9	21.5		
0	815.72	125	965	2.31	816.05	813	7	84.3		LA-140
0	821.63	74	741	2.70	821.96	820	5	111.7		
0	839.26	313	1231	1.50	839.59	836	8	40.3		
0	911.38	122	991	2.63	911.72	909	7	87.7		
0	934.62	1316	1394	1.63	934.95	930	10	11.9		
0	964.18	187	840	1.67	964.51	962	7	53.5		
0	1001.60	477	1175	1.98	1001.94	997	10	28.4		PA-234M
0	1052.83	105	722	1.84	1053.18	1050	7	87.0		
0	1070.74	141	777	1.92	1071.08	1067	8	70.7		
0	1095.22	104	721	3.18	1095.57	1092	8	91.4		
0	1103.29	86	755	4.59	1103.63	1101	8	111.9		
0	1120.84*	5867	1185	1.96	1121.19	1115	12	3.5		BI-214
0	1134.44	148	710	2.68	1134.78	1131	8	64.7		
0	1155.62	647	857	1.85	1155.97	1152	9	18.1		
0	1183.02	82	479	3.27	1183.37	1181	6	88.2		
0	1208.90	135	787	1.90	1209.25	1205	9	76.9		
0	1238.70	2085	880	2.01	1239.06	1234	11	7.0		
0	1253.58	132	772	2.69	1253.93	1249	10	80.5		
0	1281.55	524	680	2.07	1281.90	1278	9	20.0		
3	1378.25	1590	393	2.15	1378.61	1373	19	6.4	8.40E-01	
3	1385.86	290	453	2.32	1386.22	1373	19	26.9		
4	1402.12	386	457	1.92	1402.48	1398	16	20.2	1.10E+00	
4	1408.72	732	458	2.08	1409.08	1398	16	11.8		
0	1461.48*	711	596	1.91	1461.85	1457	9	14.5		K-40
0	1510.01	720	544	2.27	1510.38	1506	8	13.5		
5	1539.31	194	505	3.46	1539.69	1535	14	41.9	2.50E+00	
5	1543.75	171	414	2.43	1544.12	1535	14	43.9		
0	1583.80	228	419	2.53	1584.18	1580	9	34.8		
1	1595.41	106	327	2.43	1595.78	1591	13	59.6	1.81E+00	LA-140
1	1599.85	100	267	2.01	1600.22	1591	13	56.1		
0	1662.05	338	319	2.25	1662.43	1657	12	23.9		
0	1690.52	234	490	11.28	1690.90	1681	23	50.8		
0	1730.88	1038	523	2.27	1731.26	1726	26	14.1		

Sample ID : 1111065-09 Acquisition date : 10-DEC-2011 14:54:01

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	1765.32*	4644	292	2.33	1765.71	1759	14	3.3		BI-214
2	1838.76	110	128	2.79	1839.15	1835	22	40.0	1.52E+00	
2	1848.28	615	112	2.40	1848.67	1835	22	9.9		
0	1873.72	78	147	2.45	1874.11	1869	11	63.8		
0	1891.97	31	107	1.63	1892.37	1889	7	117.4		
0	1897.65	31	87	2.97	1898.05	1896	6	101.5		
0	1937.29	67	130	2.56	1937.68	1933	9	66.3		
0	2054.50	29	67	3.92	2054.90	2049	9	110.2		
0	2119.48	328	71	2.79	2119.88	2115	13	15.4		
0	2183.54	12	17	1.18	2183.95	2182	6	121.3		
0	2205.14	1238	47	2.63	2205.56	2200	13	6.1		BI-214
1	2294.47	85	17	2.61	2294.89	2283	18	28.8	2.31E+00	
1	2297.93	7	5	2.44	2298.35	2283	18	195.7		
0	2331.81	8	6	3.09	2332.23	2329	7	129.2		
0	2448.70	334	10	2.50	2449.13	2445	11	11.5		
0	2478.74	4	2	2.56	2479.17	2475	7	136.3		
0	2615.90*	44	5	3.52	2616.34	2611	12	38.8		TL-208
0	2924.56	5	2	1.08	2925.01	2920	8	130.8		
0	2979.34	5	0	2.41	2979.80	2976	7	89.4		

Sample ID : 1111065-09 Acquisition date : 10-DEC-2011 14:54:01

Total number of lines in spectrum 103
Number of unidentified lines 54
Number of lines tentatively identified by NID 49 47.57%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.706E+01	2.706E+01	0.474E+01	17.51	
TL-208	1.41E+10Y	1.00	7.020E-01	7.020E-01	2.401E-01	34.20	
PB-210	22.26Y	1.00	1.041E+02	1.044E+02	0.138E+02	13.19	
BI-214	1602.00Y	1.00	1.269E+02	1.269E+02	0.070E+02	5.50	
PB-214	1602.00Y	1.00	1.295E+02	1.295E+02	0.088E+02	6.83	
RA-223	3.28E+04Y	1.00	8.195E+00	8.195E+00	5.064E+00	61.79	
RA-224	1.41E+10Y	1.00	2.493E+02	2.493E+02	0.254E+02	10.18	
RA-226	1602.00Y	1.00	3.502E+02	3.502E+02	6.418E+02	183.27	
PA-234M	4.47E+09Y	1.00	1.605E+02	1.605E+02	0.482E+02	30.03	
TH-234	4.47E+09Y	1.00	1.373E+02	1.373E+02	0.167E+02	12.14	
U-235	7.04E+08Y	1.00	6.713E+00	6.713E+00	3.748E+00	55.83	
			---	---			
	Total Activity :		1.300E+03	1.301E+03			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CO-57	270.90D	1.08	1.827E-01	1.981E-01	2.143E-01	108.17	
NB-93M	14.60Y	1.00	7.763E+01	7.795E+01	6.145E+01	78.83	
CD-109	464.00D	1.05	6.242E+01	6.544E+01	1.279E+01	19.55	
SN-126	1.00E+05Y	1.00	6.280E+00	6.280E+00	1.164E+00	18.54	
CE-141	32.50D	1.96	1.817E+00	3.567E+00	1.591E+00	44.60	
NP-237	2.14E+06Y	1.00	1.847E+01	1.847E+01	0.338E+01	18.32	
			---	---			
	Total Activity :		1.668E+02	1.719E+02			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
LA-140	12.79D	5.56	6.738E-01	3.744E+00	1.327E+00	35.45	
AM-243	7380.00Y	1.00	1.051E+01	1.051E+01	0.137E+01	13.07	
			---	---			
	Total Activity :		1.118E+01	1.425E+01			

Grand Total Activity : 1.478E+03 1.487E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-09 Acquisition date : 10-DEC-2011 14:54:01

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	3.789E-01	2.706E+01	2.706E+01	17.51	OK
Final Mean for 1 Valid Peaks = 2.706E+01+/- 4.736E+00 (17.51%)							
TL-208	583.14	30.22*	8.029E-01	1.465E+00	1.465E+00	54.38	OK
	860.37	4.48	5.645E-01	----- Line Not Found		-----	Absent
	2614.66	35.85	3.019E-01	6.258E-01	6.258E-01	40.23	OK
Final Mean for 2 Valid Peaks = 7.020E-01+/- 2.401E-01 (34.20%)							
PB-210	46.50	4.05*	1.750E+00	1.041E+02	1.044E+02	13.19	OK
Final Mean for 1 Valid Peaks = 1.044E+02+/- 1.377E+01 (13.19%)							
BI-214	609.31	46.30*	7.707E-01	1.222E+02	1.222E+02	10.65	OK
	1120.29	15.10	4.552E-01	1.313E+02	1.313E+02	11.13	OK
	1764.49	15.80	3.416E-01	1.324E+02	1.324E+02	10.35	OK
	2204.22	4.98	3.132E-01	1.221E+02	1.221E+02	12.06	OK
Final Mean for 4 Valid Peaks = 1.269E+02+/- 6.980E+00 (5.50%)							
PB-214	295.21	19.19	1.480E+00	1.276E+02	1.277E+02	9.41	OK
	351.92	37.19*	1.276E+00	1.317E+02	1.317E+02	9.94	OK
Final Mean for 2 Valid Peaks = 1.295E+02+/- 8.849E+00 (6.83%)							
RA-223	323.87	3.88*	1.370E+00	8.195E+00	8.195E+00	61.79	OK
Final Mean for 1 Valid Peaks = 8.195E+00+/- 5.064E+00 (61.79%)							
RA-224	240.98	3.95*	1.732E+00	2.493E+02	2.493E+02	10.18	OK
Final Mean for 1 Valid Peaks = 2.493E+02+/- 2.539E+01 (10.18%)							
RA-226	186.21	3.28*	2.048E+00	3.502E+02	3.502E+02	183.27	OK
Final Mean for 1 Valid Peaks = 3.502E+02+/- 6.418E+02 (183.27%)							
PA-234M	1001.03	0.92*	4.973E-01	1.605E+02	1.605E+02	30.03	OK
Final Mean for 1 Valid Peaks = 1.605E+02+/- 4.818E+01 (30.03%)							
TH-234	63.29	3.80*	2.218E+00	1.373E+02	1.373E+02	12.14	OK
Final Mean for 1 Valid Peaks = 1.373E+02+/- 1.666E+01 (12.14%)							
U-235	143.76	10.50*	2.314E+00	8.337E+00	8.337E+00	40.91	<<WM Interf
	163.35	4.70	2.193E+00	6.253E+00	6.253E+00	85.25	OK
	205.31	4.70	1.931E+00	7.163E+00	7.163E+00	73.58	OK
Final Mean for 2 Valid Peaks = 6.713E+00+/- 3.748E+00 (55.83%)							

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Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CO-57	122.06	85.51*	2.430E+00	1.827E-01	1.981E-01	108.17	OK
	136.48	10.60	2.357E+00	-----	Line Not Found	-----	Absent
Final Mean for 1 Valid Peaks = 1.981E-01+/- 2.143E-01 (108.17%)							
NB-93M	16.57	9.43*	2.383E-01	7.763E+01	7.795E+01	78.83	OK
Final Mean for 1 Valid Peaks = 7.795E+01+/- 6.145E+01 (78.83%)							
CD-109	88.03	3.72*	2.473E+00	6.242E+01	6.544E+01	19.55	OK
Final Mean for 1 Valid Peaks = 6.544E+01+/- 1.279E+01 (19.55%)							
SN-126	87.57	37.00*	2.471E+00	6.280E+00	6.280E+00	18.54	OK
Final Mean for 1 Valid Peaks = 6.280E+00+/- 1.164E+00 (18.54%)							
CE-141	145.44	48.40*	2.304E+00	1.817E+00	3.567E+00	44.60	OK
Final Mean for 1 Valid Peaks = 3.567E+00+/- 1.591E+00 (44.60%)							
NP-237	86.50	12.60*	2.467E+00	1.847E+01	1.847E+01	18.32	OK
Final Mean for 1 Valid Peaks = 1.847E+01+/- 3.384E+00 (18.32%)							

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
LA-140	328.77	20.50	1.353E+00	1.733E+00	9.630E+00	65.33	OK
	487.03	45.50	9.497E-01	9.413E-01	5.230E+00	53.64	OK
	815.85	23.50	5.913E-01	1.387E+00	7.704E+00	84.84	OK
	1596.49	95.49*	3.597E-01	4.763E-01	2.646E+00	60.37	OK
Final Mean for 4 Valid Peaks = 3.744E+00+/- 1.327E+00 (35.45%)							
AM-243	74.67	66.00*	2.383E+00	1.051E+01	1.051E+01	13.07	OK
Final Mean for 1 Valid Peaks = 1.051E+01+/- 1.373E+00 (13.07%)							

Flag: "*" = Keyline

Sample ID : 1111065-09 Acquisition date : 10-DEC-2011 14:54:01

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.706E+01	4.736E+00	3.837E+00	3.441E-01	7.052
CO-57	1.981E-01	2.143E-01	3.509E-01	4.076E-02	0.565
NB-93M	7.795E+01	6.145E+01	2.594E+01	1.918E+01	3.005
CD-109	6.544E+01	1.279E+01	1.111E+01	1.791E+00	5.891
SN-126	6.280E+00	1.164E+00	1.088E+00	1.620E-01	5.770
LA-140	3.744E+00	1.327E+00	2.119E+00	1.882E-01	1.767
CE-141	3.567E+00	1.591E+00	1.217E+00	3.136E-01	2.931
TL-208	7.020E-01	2.401E-01	1.057E+00	1.047E-01	0.664
PB-210	1.044E+02	1.377E+01	9.667E+00	9.736E-01	10.795
BI-214	1.269E+02	6.980E+00	6.986E-01	6.832E-02	181.639
PB-214	1.295E+02	8.849E+00	7.765E-01	7.022E-02	166.750
RA-223	8.195E+00	5.064E+00	7.510E+00	6.536E-01	1.091
RA-224	2.493E+02	2.539E+01	7.294E+00	6.573E-01	34.178
RA-226	3.502E+02	6.418E+02	9.131E+00	1.673E+01	38.351
PA-234M	1.605E+02	4.818E+01	4.260E+01	3.770E+00	3.767
TH-234	1.373E+02	1.666E+01	1.010E+01	9.188E-01	13.595
U-235	6.713E+00	3.748E+00	2.842E+00	5.305E-01	2.362
NP-237	1.847E+01	3.384E+00	3.054E+00	4.463E-01	6.048
AM-243	1.051E+01	1.373E+00	5.910E-01	6.935E-02	17.780

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	-8.294E-02		3.404E+00	4.311E+00	4.289E-01	-0.019
NA-22	2.339E-01		2.689E-01	4.145E-01	3.798E-02	0.564
AL-26	-2.073E-02		1.345E-01	2.232E-01	1.997E-02	-0.093
TI-44	8.431E-01	+	1.904E-01	4.280E-01	4.346E-02	1.970
SC-46	2.777E-02		2.989E-01	5.091E-01	4.126E-02	0.055
V-48	-2.014E-01		8.985E-01	1.512E+00	1.317E-01	-0.133
CR-51	-1.351E+00		4.391E+00	6.463E+00	5.889E-01	-0.209
MN-54	1.384E-01		2.614E-01	4.059E-01	3.494E-02	0.341
CO-56	7.253E-03		3.283E-01	5.024E-01	4.274E-02	0.014
CO-58	1.079E-01		3.974E-01	4.913E-01	4.330E-02	0.220
FE-59	5.072E-01		8.875E-01	1.094E+00	1.121E-01	0.464
CO-60	-1.197E-01		2.347E-01	3.873E-01	3.937E-02	-0.309
ZN-65	9.520E-02		5.790E-01	8.760E-01	8.536E-02	0.109
SE-75	-2.812E-02		4.357E-01	5.705E-01	4.879E-02	-0.049
RB-82	9.625E-01		4.364E+00	6.201E+00	5.589E-01	0.155
RB-83	-1.944E-02		4.820E-01	8.394E-01	1.381E-01	-0.023
KR-85	7.564E+01		4.623E+01	7.407E+01	7.418E+00	1.021
SR-85	4.612E-01		2.819E-01	4.516E-01	4.523E-02	1.021
Y-88	3.577E-01		2.247E-01	3.696E-01	3.304E-02	0.968
NB-94	-6.341E-02		2.257E-01	3.814E-01	3.161E-02	-0.166
NB-95	5.231E+00		7.309E-01	9.641E-01	8.753E-02	5.425
ZR-95	2.003E-01		4.989E-01	8.629E-01	8.585E-02	0.232
RU-103	1.851E-01		3.686E-01	5.856E-01	8.806E-02	0.316
RU-106	2.551E-01		1.816E+00	3.156E+00	4.444E-01	0.081

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
AG-108M	3.269E-01		2.436E-01	3.870E-01	3.584E-02	0.845
AG-110M	1.644E-01		2.270E-01	3.596E-01	3.390E-02	0.457
SN-113	2.530E-01		4.023E-01	5.949E-01	5.776E-02	0.425
TE123M	1.793E-01		3.171E-01	4.284E-01	4.370E-02	0.418
SB-124	-1.401E-01		3.108E-01	4.790E-01	4.702E-02	-0.292
I-125	-5.866E-01		6.106E+00	9.755E+00	1.367E+00	-0.060
SB-125	7.763E-01		7.233E-01	1.159E+00	1.144E-01	0.670
SB-126	5.374E+00	+	3.297E+00	3.927E+00	3.640E-01	1.369
I-129	4.298E-01		6.898E-01	9.863E-01	1.834E-01	0.436
I-131	1.227E+00		3.604E+00	5.337E+00	4.901E-01	0.230
BA-133	1.083E+00	+	7.503E-01	5.823E-01	7.869E-02	1.859
CS-134	-2.287E-02		2.231E-01	3.470E-01	3.409E-02	-0.066
CS-135	5.327E+00		1.352E+00	1.984E+00	1.667E-01	2.685
CS-136	-2.931E-01		1.695E+00	2.543E+00	2.408E-01	-0.115
CS-137	-5.626E-02		2.342E-01	3.617E-01	3.404E-02	-0.156
LA-138	-2.005E-01		3.595E-01	5.844E-01	5.078E-02	-0.343
CE-139	1.205E-01		2.860E-01	4.368E-01	4.338E-02	0.276
BA-140	8.460E-01		4.477E+00	7.040E+00	2.361E+00	0.120
CE-144	-1.898E+00		1.720E+00	2.804E+00	3.128E-01	-0.677
PM-144	3.324E-02		2.186E-01	3.403E-01	3.182E-02	0.098
PM-145	-1.436E+00		1.555E+00	1.947E+00	1.283E+00	-0.737
PM-146	6.479E-01	+	5.887E-01	8.169E-01	8.055E-02	0.793
ND-147	1.570E+00		1.089E+01	1.717E+01	1.719E+00	0.091
EU-152	1.952E+01	+	3.235E+00	4.381E+00	4.789E-01	4.456
GD-153	-1.053E+00		8.646E-01	1.306E+00	1.741E-01	-0.806
EU-154	6.497E-01		7.448E-01	1.148E+00	1.052E-01	0.566
EU-155	7.624E+00	+	1.397E+00	1.356E+00	1.982E-01	5.621
EU-156	2.391E+00		1.182E+01	1.455E+01	3.332E+00	0.164
HO-166M	4.904E-01		4.948E-01	6.343E-01	5.897E-02	0.773
HF-172	-3.306E-01		1.642E+00	2.522E+00	2.889E-01	-0.131
LU-172	1.017E+01		1.076E+01	1.671E+01	1.599E+00	0.609
LU-173	7.139E+00		1.154E+00	1.655E+00	1.374E-01	4.314
HF-175	3.431E-02		3.748E-01	4.852E-01	4.339E-02	0.071
LU-176	-9.204E-02		1.908E-01	3.047E-01	2.584E-02	-0.302
TA-182	6.887E+01	+	7.669E+00	4.405E+00	4.308E-01	15.637
IR-192	1.733E-01		6.679E-01	8.540E-01	8.469E-02	0.203
HG-203	5.299E-02		3.984E-01	5.947E-01	4.975E-02	0.089
BI-207	1.164E-02		1.871E-01	3.252E-01	3.235E-02	0.036
BI-210M	3.603E-01		4.257E-01	6.417E-01	5.492E-02	0.561
PB-211	3.700E+01	+	1.339E+01	1.205E+01	1.153E+00	3.070
BI-212	-2.961E-01		1.792E+00	2.757E+00	2.549E-01	-0.107
PB-212	2.479E+00		4.858E-01	7.211E-01	6.530E-02	3.438
RN-219	1.054E+01		3.347E+00	5.282E+00	5.042E-01	1.995
RA-225	-4.842E+00		3.365E+00	5.606E+00	6.687E-01	-0.864
TH-227	1.148E+01	+	2.363E+00	2.797E+00	2.546E-01	4.103
AC-228	1.261E+00	+	1.112E+00	1.506E+00	1.223E-01	0.837
TH-230	2.152E+02	+	4.856E+01	1.091E+02	1.103E+01	1.973
PA-231	-1.451E+00		8.743E+00	1.294E+01	1.090E+00	-0.112

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
TH-231	2.146E+00		3.233E+00	5.159E+00	1.277E+00	0.416
PA-233	4.367E-01		1.048E+00	1.687E+00	3.784E-01	0.259
PA-234	6.213E-01		8.282E-01	1.376E+00	1.548E-01	0.451
AM-241	3.045E+00		7.219E-01	1.083E+00	8.920E-02	2.811
CM-243	7.045E-01		1.408E+00	2.111E+00	1.721E-01	0.334

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Total number of lines in spectrum 103
Number of unidentified lines 54
Number of lines tentatively identified by NID 49 47.57%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.706E+01	2.706E+01	0.474E+01	17.51	
TL-208	1.41E+10Y	1.00	7.020E-01	7.020E-01	2.401E-01	34.20	
PB-210	22.26Y	1.00	1.041E+02	1.044E+02	0.138E+02	13.19	
BI-214	1602.00Y	1.00	1.269E+02	1.269E+02	0.070E+02	5.50	
PB-214	1602.00Y	1.00	1.295E+02	1.295E+02	0.088E+02	6.83	
RA-223	3.28E+04Y	1.00	8.195E+00	8.195E+00	5.064E+00	61.79	
RA-224	1.41E+10Y	1.00	2.493E+02	2.493E+02	0.254E+02	10.18	
RA-226	1602.00Y	1.00	3.502E+02	3.502E+02	6.418E+02	183.27	
PA-234M	4.47E+09Y	1.00	1.605E+02	1.605E+02	0.482E+02	30.03	
TH-234	4.47E+09Y	1.00	1.373E+02	1.373E+02	0.167E+02	12.14	
U-235	7.04E+08Y	1.00	6.713E+00	6.713E+00	3.748E+00	55.83	
			---	---			
	Total Activity :		1.300E+03	1.301E+03			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CO-57	270.90D	1.08	1.827E-01	1.981E-01	2.143E-01	108.17	
NB-93M	14.60Y	1.00	7.763E+01	7.795E+01	6.145E+01	78.83	
CD-109	464.00D	1.05	6.242E+01	6.544E+01	1.279E+01	19.55	
SN-126	1.00E+05Y	1.00	6.280E+00	6.280E+00	1.164E+00	18.54	
CE-141	32.50D	1.96	1.817E+00	3.567E+00	1.591E+00	44.60	
NP-237	2.14E+06Y	1.00	1.847E+01	1.847E+01	0.338E+01	18.32	
			---	---			
	Total Activity :		1.668E+02	1.719E+02			

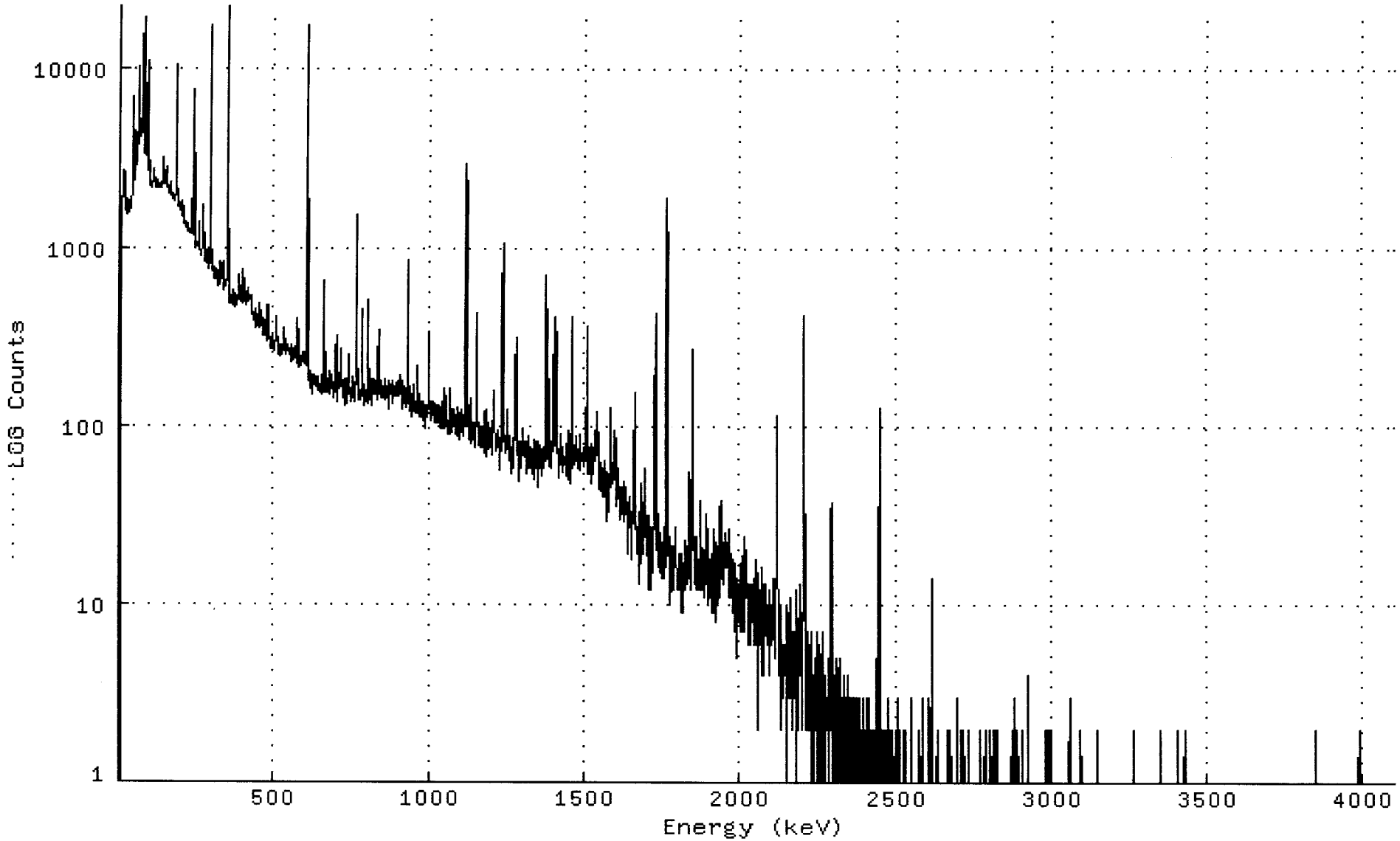
Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
LA-140	12.79D	5.56	6.738E-01	3.744E+00	1.327E+00	35.45	
AM-243	7380.00Y	1.00	1.051E+01	1.051E+01	0.137E+01	13.07	
			---	---			
	Total Activity :		1.118E+01	1.425E+01			

Grand Total Activity : 1.478E+03 1.487E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106509_GE3_GAS1102_172255.CNF;1
Title :
Sample Title: DY2-41-31-111109
Start Time: 10-DEC-2011 14:54 Sample Time: 9-NOV-2011 00:00: Energy Offset: -2.78447E-01
Real Time : 0 01:01:30.90 Sample ID : 1111065-09 Energy Slope : 9.99940E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



9265

Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106509_GE3_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	113	1752	2010	1864	2278	2185	1933	2658
17:	2571	1856	2004	1848	1657	1604	1610	1497
25:	1650	1722	1676	1816	1621	1565	1568	1813
33:	1739	1678	1657	1642	1849	1725	1784	1855
41:	1959	2006	2136	2219	2361	2822	6788	2893
49:	2338	2840	3050	2637	3314	4327	2854	3006
57:	3005	3228	3494	3867	3978	4074	5519	10063
65:	4232	4125	4236	5109	4517	4318	4406	4334
73:	4569	4780	12695	9419	12582	18920	4251	5094
81:	4393	4743	3322	5977	5029	3213	5292	8159
89:	3689	4667	4322	3641	11023	5398	3730	2994
97:	2305	2655	2976	2436	2193	2157	2257	2138
105:	2185	2285	2282	2270	2280	2449	2340	2487
113:	2693	2507	2313	2198	2220	2300	2211	2125
121:	2168	2300	2339	2116	2249	2155	2154	2159
129:	2129	2192	2243	2158	2166	2152	2121	2225
137:	2211	2267	2227	2313	2325	2251	2243	3136
145:	3065	2295	2270	2212	2392	2272	2349	2379
153:	2336	2405	2780	2262	2146	2115	2158	2102
161:	2035	1969	2108	2284	2048	1925	1943	1974
169:	1983	1967	1889	1832	1866	1854	1844	1876
177:	1879	1912	1845	1788	1825	1907	1938	1920
185:	2153	6951	10435	2394	1831	1812	1721	1674
193:	1687	1755	1676	1761	1738	1641	1608	1592
201:	1569	1533	1647	1484	1576	1808	1546	1361
209:	1371	1386	1470	1357	1286	1353	1306	1260
217:	1358	1324	1312	1324	1306	1277	1265	1221
225:	1220	1228	1251	1251	1217	1195	1175	1191
233:	1230	1191	1190	1604	1822	1156	1500	1304
241:	1271	5202	7596	1430	1064	1087	989	1012
249:	991	1011	1046	989	987	1009	1015	1039
257:	1364	1020	1369	1308	949	930	926	910
265:	939	909	890	919	977	1691	1283	1489
273:	986	997	1175	1067	921	847	888	813
281:	826	946	797	855	864	936	974	885
289:	850	819	746	831	796	874	5730	17340
297:	3095	854	846	956	913	755	827	718
305:	759	771	667	717	664	695	689	690
313:	739	706	741	718	661	727	647	683
321:	665	656	603	817	796	662	606	688
329:	700	751	805	673	655	683	710	665
337:	679	657	826	659	570	636	637	620
345:	604	637	605	662	704	750	1381	16672
353:	22675	2142	737	706	554	511	526	485
361:	481	511	483	492	516	535	466	487
369:	502	504	514	564	534	514	462	525
377:	492	476	490	474	498	509	531	513
385:	552	501	622	657	629	693	526	496
393:	568	488	514	511	515	496	508	485
401:	550	681	752	546	610	664	571	490
409:	533	466	517	520	534	519	529	578
417:	531	541	499	502	487	500	524	517
425:	502	523	515	535	467	481	449	446

433:	414	399	429	415	415	410	387	383
441:	368	350	387	381	392	445	389	377
449:	389	389	361	397	392	394	428	482
457:	359	351	365	373	362	417	436	374
465:	332	329	342	353	315	396	377	338
473:	320	329	349	340	321	312	297	328
481:	463	393	352	321	306	313	395	473
489:	315	282	310	284	302	270	296	290
497:	296	269	324	296	270	292	283	289
505:	270	262	281	294	307	331	380	409
513:	313	294	311	301	249	266	251	283
521:	276	271	267	243	260	258	262	279
529:	262	264	262	251	272	352	342	279
537:	261	304	266	277	249	270	290	302
545:	270	263	266	278	266	283	258	266
553:	253	251	258	252	245	249	242	280
561:	251	225	258	264	253	241	247	230
569:	257	266	237	261	274	264	252	221
577:	246	250	235	294	394	276	247	341
585:	239	238	209	238	236	240	233	214
593:	244	223	225	235	257	232	240	245
601:	228	220	227	253	246	213	234	392
609:	4669	17290	6713	504	313	305	239	181
617:	210	177	171	165	168	201	161	183
625:	163	169	149	161	189	180	177	187
633:	186	192	171	167	169	184	163	176
641:	187	182	174	187	183	172	171	158
649:	159	162	167	152	152	160	152	189
657:	186	147	167	175	176	177	167	151
665:	261	636	398	168	178	165	165	160
673:	153	152	170	151	181	173	155	147
681:	164	178	201	185	183	192	176	170
689:	167	162	169	174	143	155	155	157
697:	163	170	187	166	167	151	251	314
705:	217	194	134	164	188	197	191	167
713:	175	191	173	161	163	168	166	215
721:	268	184	169	177	148	158	142	177
729:	181	129	164	151	150	148	181	146
737:	163	161	133	181	182	181	251	226
745:	150	163	152	155	156	159	137	136
753:	162	161	149	163	184	152	146	136
761:	173	156	147	161	151	183	295	626
769:	1527	879	236	176	174	139	160	146
777:	164	140	156	156	139	146	148	154
785:	166	374	450	223	156	129	147	159
793:	141	150	142	167	142	134	156	145
801:	143	156	133	139	153	266	498	294
809:	142	176	137	148	138	152	182	178
817:	151	149	140	128	175	181	183	148
825:	168	169	175	148	164	163	148	169
833:	191	175	137	147	160	156	225	337
841:	203	165	151	176	149	156	142	175
849:	162	172	158	163	161	149	144	141
857:	144	139	155	158	151	177	182	152
865:	162	143	161	159	156	134	177	150
873:	123	171	151	148	168	161	170	147
881:	163	159	177	164	149	144	131	156
889:	163	157	161	144	148	150	155	165
897:	148	166	146	173	167	144	168	150
905:	167	177	155	154	149	155	182	189

913:	165	150	123	146	153	147	136	138
921:	139	132	163	137	124	160	148	144
929:	136	125	150	132	164	451	843	362
937:	162	158	163	132	140	136	124	111
945:	130	133	148	134	137	133	128	139
953:	120	168	126	126	123	122	131	135
961:	116	116	144	164	215	150	125	113
969:	133	149	125	133	128	110	130	122
977:	110	135	120	119	125	106	111	116
985:	134	132	109	118	117	127	128	97
993:	124	118	124	129	113	124	125	145
1001:	245	334	198	121	136	111	118	119
1009:	121	106	117	113	120	126	134	124
1017:	121	103	132	111	107	129	116	123
1025:	105	103	128	112	111	109	124	123
1033:	122	128	107	97	109	115	113	125
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1049:	103	101	97	128	161	131	106	103
1057:	105	112	100	103	90	95	91	103
1065:	102	106	90	102	104	143	160	108
1073:	110	101	92	115	121	97	103	114
1081:	105	120	121	113	100	114	95	99
1089:	96	90	86	97	90	112	107	126
1097:	108	93	92	86	82	108	105	117
1105:	120	123	95	91	114	106	94	114
1113:	88	104	92	104	105	116	176	1034
1121:	2928	1888	285	112	119	99	100	100
1129:	100	98	100	83	124	131	143	97
1137:	96	84	78	84	96	104	94	99
1145:	94	103	101	75	95	92	102	89
1153:	111	106	215	427	272	117	81	86
1161:	104	90	84	77	91	97	95	83
1169:	75	98	82	88	99	85	89	76
1177:	83	101	89	106	70	117	122	86
1185:	99	67	82	71	102	88	85	73
1193:	83	104	77	75	83	88	83	97
1201:	96	90	75	79	91	68	89	127
1209:	158	113	93	92	91	88	71	88
1217:	84	88	83	85	84	76	75	94
1225:	84	68	84	82	67	56	77	77
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1249:	69	85	73	74	103	123	114	94
1257:	82	87	82	72	82	72	54	76
1265:	61	70	66	74	57	76	80	85
1273:	70	72	104	90	83	83	94	100
1281:	199	308	192	87	69	72	68	67
1289:	68	72	49	66	81	80	63	58
1297:	70	79	66	82	68	72	74	81
1305:	95	70	69	74	68	66	69	76
1313:	74	67	53	68	76	88	81	80
1321:	57	61	67	67	57	75	74	65
1329:	67	57	71	64	53	65	73	66
1337:	83	75	80	60	50	78	78	66
1345:	57	64	80	63	68	77	45	72
1353:	68	80	73	77	62	75	67	57
1361:	68	69	57	61	52	68	73	71
1369:	71	76	67	74	58	67	73	76
1377:	210	634	689	290	82	75	65	76
1385:	106	183	155	70	67	67	59	70

1393:	67	57	64	71	80	72	71	72
1401:	103	249	209	125	77	77	94	235
1409:	400	278	92	71	79	74	69	69
1417:	73	51	71	66	62	67	63	60
1425:	69	64	90	83	61	68	60	75
1433:	67	55	65	65	64	60	64	61
1441:	73	69	78	58	69	52	94	61
1449:	62	50	68	80	47	71	63	67
1457:	71	62	72	115	247	401	196	89
1465:	58	69	66	77	77	70	60	73
1473:	64	87	65	75	66	69	57	73
1481:	73	66	62	63	59	56	72	90
1489:	67	67	67	64	67	65	70	68
1497:	66	68	75	75	72	59	66	76
1505:	78	79	69	95	165	359	301	143
1513:	53	63	74	76	65	54	68	68
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1537:	63	77	113	120	84	68	103	106
1545:	116	72	54	44	67	54	62	48
1553:	59	59	62	58	43	49	53	43
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1569:	40	41	55	47	38	41	29	53
1577:	54	33	39	47	44	54	85	124
1585:	126	68	54	45	54	51	47	56
1593:	51	52	75	92	58	56	50	93
1601:	78	35	39	47	40	45	49	50
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1617:	34	36	45	32	37	44	44	35
1625:	31	47	33	48	29	46	33	43
1633:	33	32	32	35	45	29	19	37
1641:	33	25	26	35	28	31	30	33
1649:	40	18	31	33	31	21	32	28
1657:	33	32	36	40	78	115	153	57
1665:	31	30	27	25	22	27	19	25
1673:	22	20	22	30	27	33	13	24
1681:	17	24	29	38	47	40	35	32
1689:	26	19	26	33	37	57	58	29
1697:	24	33	26	31	21	22	20	24
1705:	14	31	21	12	17	19	12	22
1713:	26	20	27	20	15	18	26	22
1721:	22	26	27	26	28	28	26	29
1729:	116	315	429	190	50	26	24	16
1737:	17	26	32	19	22	21	15	20
1745:	21	21	25	18	22	19	14	20
1753:	19	14	16	20	17	27	20	29
1761:	16	28	90	449	1427	1860	793	129
1769:	33	21	24	20	17	15	21	24
1777:	10	11	12	15	16	18	21	17
1785:	17	14	18	18	21	12	21	20
1793:	27	18	20	17	15	12	14	13
1801:	13	13	19	14	17	12	17	13
1809:	19	19	11	9	10	13	17	9
1817:	11	13	15	15	15	19	14	23
1825:	22	18	12	17	15	16	13	21
1833:	15	18	14	19	23	27	55	46
1841:	31	12	12	19	25	28	80	194
1849:	267	107	29	20	24	16	19	15
1857:	17	13	24	18	12	18	15	13
1865:	18	14	13	12	12	16	12	21

1873:	25	38	29	23	19	18	12	17
1881:	15	13	15	14	20	11	16	16
1889:	13	14	23	32	20	20	16	16
1897:	23	25	26	18	10	17	14	11
1905:	18	15	12	13	15	13	19	18
1913:	9	26	15	9	13	10	18	12
1921:	8	19	16	22	16	20	10	10
1929:	21	13	14	14	16	17	11	25
1937:	33	38	23	20	14	14	20	21
1945:	17	19	22	13	15	16	22	16
1953:	18	19	25	25	20	21	18	18
1961:	16	17	26	21	24	11	21	13
1969:	13	16	12	14	11	19	13	12
1977:	18	17	15	9	14	10	10	8
1985:	17	12	7	9	9	5	7	10
1993:	14	8	10	11	13	8	12	7
2001:	13	17	9	12	13	12	11	7
2009:	16	12	15	24	17	12	18	13
2017:	7	20	13	14	15	11	17	10
2025:	8	7	9	11	10	6	13	6
2033:	10	12	8	9	9	13	8	11
2041:	11	11	13	11	8	6	10	14
2049:	6	9	12	13	18	11	14	11
2057:	2	9	15	6	10	10	7	6
2065:	8	12	9	14	8	10	7	16
2073:	4	13	9	8	10	10	4	11
2081:	7	12	7	13	8	6	7	7
2089:	10	10	9	4	7	12	9	5
2097:	7	6	8	8	7	6	9	11
2105:	10	14	8	9	8	5	11	14
2113:	6	8	6	8	19	33	95	115
2121:	73	21	7	4	8	6	4	5
2129:	6	6	3	10	9	2	5	4
2137:	3	6	5	5	5	5	5	4
2145:	4	6	5	4	7	1	8	10
2153:	3	6	6	5	9	7	8	3
2161:	5	6	11	11	4	4	7	4
2169:	2	4	6	3	5	7	6	5
2177:	4	7	4	8	2	0	12	6
2185:	4	5	2	6	5	4	5	7
2193:	12	13	5	4	3	9	7	2
2201:	5	13	46	191	370	413	162	46
2209:	22	9	2	4	2	7	7	5
2217:	3	5	2	5	2	3	5	5
2225:	6	3	5	3	7	1	5	0
2233:	3	4	0	3	3	2	4	3
2241:	3	5	2	5	4	5	2	1
2249:	7	2	1	3	6	1	5	4
2257:	2	0	1	3	1	5	4	7
2265:	0	7	2	5	3	2	1	4
2273:	1	3	4	2	2	3	2	3
2281:	3	3	5	2	2	0	3	2
2289:	8	2	2	3	11	32	37	18
2297:	2	5	2	0	2	0	2	0
2305:	1	4	1	4	1	1	4	5
2313:	4	1	1	2	3	4	2	3
2321:	1	1	5	2	3	1	2	2
2329:	1	2	4	3	3	1	0	1
2337:	1	3	0	3	3	2	2	4
2345:	1	0	1	1	1	1	1	2

2353:	0	1	3	0	3	1	1	2
2361:	1	3	3	1	1	3	1	3
2369:	1	1	1	0	2	2	1	3
2377:	1	0	0	2	2	1	1	3
2385:	1	1	1	1	2	0	0	0
2393:	1	2	3	0	3	2	1	1
2401:	2	0	2	0	2	0	2	3
2409:	1	2	1	1	3	3	1	2
2417:	0	1	2	0	0	0	2	1
2425:	0	1	0	2	1	0	0	1
2433:	1	2	2	0	5	1	0	2
2441:	1	1	0	0	0	6	19	67
2449:	125	85	33	6	1	1	1	2
2457:	2	0	2	0	1	1	1	2
2465:	0	1	1	0	1	1	2	1
2473:	0	0	0	0	0	3	1	2
2481:	0	1	0	1	1	1	0	1
2489:	0	2	0	0	1	0	1	0
2497:	0	2	1	0	0	0	1	0
2505:	3	0	1	1	0	2	0	1
2513:	1	0	1	0	1	0	0	0
2521:	0	1	1	1	0	0	2	2
2529:	0	1	1	0	1	0	1	0
2537:	0	0	1	1	1	0	0	0
2545:	0	1	3	0	0	0	0	0
2553:	1	0	0	0	0	0	0	0
2561:	0	1	0	1	0	0	1	0
2569:	0	1	1	0	1	0	0	2
2577:	0	1	0	0	0	0	0	0
2585:	1	0	3	0	0	0	0	0
2593:	0	0	0	0	0	0	1	1
2601:	0	1	3	0	0	0	0	1
2609:	0	1	1	0	0	7	14	13
2617:	11	5	1	1	1	0	0	0
2625:	1	1	0	1	0	0	0	2
2633:	0	2	0	1	0	0	0	0
2641:	0	0	1	0	0	1	1	0
2649:	1	0	0	0	0	0	0	0
2657:	0	1	0	1	0	1	1	0
2665:	1	2	1	0	0	0	1	0
2673:	0	2	0	0	0	0	0	0
2681:	0	0	0	1	0	0	0	0
2689:	0	0	0	0	0	0	0	1
2697:	3	0	0	1	1	0	1	1
2705:	0	0	0	0	0	2	0	1
2713:	1	1	0	0	2	1	0	1
2721:	1	0	0	0	0	1	0	1
2729:	0	1	2	0	1	0	0	0
2737:	0	0	0	0	0	0	0	0
2745:	0	0	0	1	0	1	0	0
2753:	1	0	1	0	0	0	0	1
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2769:	0	0	2	1	1	0	1	1
2777:	0	0	0	0	0	0	0	0
2785:	0	2	1	0	1	0	1	0
2793:	0	1	0	0	1	0	0	2
2801:	1	0	0	0	0	1	1	1
2809:	1	2	0	2	0	0	0	2
2817:	0	0	0	0	0	0	1	0
2825:	0	1	2	0	0	0	1	0

2833:	0	0	0	1	0	0	1	0
2841:	0	0	0	0	0	0	0	0
2849:	0	0	0	0	0	0	0	0
2857:	0	0	1	0	0	0	0	0
2865:	0	1	0	0	0	0	0	2
2873:	0	0	0	0	0	0	1	0
2881:	0	3	1	0	0	0	0	1
2889:	2	0	0	0	1	0	0	1
2897:	0	0	0	0	0	0	0	0
2905:	0	0	2	1	0	1	0	1
2913:	0	1	0	0	0	0	1	0
2921:	0	0	4	1	1	1	0	0
2929:	0	0	0	0	0	0	0	0
2937:	1	0	0	0	0	0	0	0
2945:	0	0	0	0	1	0	0	0
2953:	0	1	0	0	0	1	0	0
2961:	0	0	0	0	0	0	0	0
2969:	0	0	0	0	0	0	0	0
2977:	0	0	2	2	1	0	0	0
2985:	2	0	0	0	0	0	0	2
2993:	0	2	0	0	0	1	0	0
3001:	0	0	0	0	0	0	0	0
3009:	0	0	0	0	0	0	0	0
3017:	0	0	0	0	0	0	0	0
3025:	0	0	0	0	1	0	0	0
3033:	0	0	0	0	0	0	0	0
3041:	0	0	0	0	0	0	0	0
3049:	0	0	0	1	0	1	0	3
3057:	0	0	1	0	0	0	0	0
3065:	0	0	0	1	0	0	0	1
3073:	0	0	0	1	0	0	0	0
3081:	0	0	0	1	0	1	0	0
3089:	0	0	0	2	0	0	0	0
3097:	0	0	0	0	0	0	0	0
3105:	0	0	0	0	1	0	0	0
3113:	0	1	0	0	0	0	0	0
3121:	0	0	1	1	0	0	1	0
3129:	0	0	0	0	1	0	0	1
3137:	0	1	1	0	0	0	0	2
3145:	0	0	0	0	0	0	0	0
3153:	0	0	0	1	0	0	0	0
3161:	0	0	0	1	0	0	0	0
3169:	1	0	0	0	1	0	0	0
3177:	0	1	0	0	0	1	0	0
3185:	0	0	0	0	0	0	0	0
3193:	0	0	0	0	0	0	0	0
3201:	0	0	0	0	1	0	0	0
3209:	0	0	0	1	0	0	0	1
3217:	0	0	0	1	0	0	1	0
3225:	0	0	0	0	0	1	0	0
3233:	0	0	0	1	0	0	1	0
3241:	0	0	0	0	0	0	0	0
3249:	0	0	1	0	0	0	0	0
3257:	0	0	2	0	0	0	1	1
3265:	0	0	0	0	0	0	0	0
3273:	0	0	0	0	0	0	0	1
3281:	0	0	0	0	0	0	0	0
3289:	0	0	0	0	0	0	0	1
3297:	0	0	0	0	0	0	0	0
3305:	0	0	0	0	0	0	0	0

3313:	0	0	0	0	0	0	0	0
3321:	0	0	0	0	0	0	1	0
3329:	1	0	0	0	0	0	0	0
3337:	0	0	0	0	0	0	0	0
3345:	0	0	0	2	0	0	0	1
3353:	0	0	0	0	0	0	0	0
3361:	0	0	0	0	1	0	0	0
3369:	0	0	0	0	0	0	1	0
3377:	0	0	0	0	0	1	0	0
3385:	0	0	0	0	0	0	0	0
3393:	0	0	0	0	0	0	0	0
3401:	0	0	2	0	0	0	0	0
3409:	1	0	0	0	0	0	0	1
3417:	0	0	0	0	0	0	1	2
3425:	0	0	0	0	0	0	0	0
3433:	0	0	1	1	1	0	1	0
3441:	0	1	0	0	0	0	0	0
3449:	0	0	1	0	0	0	0	0
3457:	0	0	0	0	0	0	0	0
3465:	0	0	0	0	0	0	0	0
3473:	1	0	0	0	0	0	0	0
3481:	0	0	1	0	0	1	0	0
3489:	0	0	1	0	0	0	0	0
3497:	0	0	0	0	0	0	0	0
3505:	0	0	0	1	0	0	0	0
3513:	1	0	0	1	0	0	0	0
3521:	0	0	0	1	0	0	0	0
3529:	0	0	0	0	1	0	0	0
3537:	0	0	0	1	0	0	0	0
3545:	0	0	0	0	0	0	0	0
3553:	1	0	0	0	0	0	0	0
3561:	0	0	1	0	0	0	0	0
3569:	0	0	0	0	0	0	0	0
3577:	0	0	0	0	0	0	0	0
3585:	0	0	0	0	1	0	0	0
3593:	0	0	0	1	0	1	1	0
3601:	0	0	0	0	0	0	0	0
3609:	1	0	0	0	0	0	0	1
3617:	0	0	0	0	1	0	1	0
3625:	1	0	0	0	0	0	0	0
3633:	0	0	0	0	0	0	0	0
3641:	1	1	1	0	0	0	0	0
3649:	0	0	0	0	0	0	0	0
3657:	0	0	0	0	0	0	0	0
3665:	0	0	0	0	0	0	0	0
3673:	0	0	0	1	1	0	0	0
3681:	0	0	0	0	0	0	0	0
3689:	0	0	1	0	0	0	1	0
3697:	0	0	0	0	0	0	0	0
3705:	0	0	0	0	0	0	0	0
3713:	0	0	1	0	0	0	1	0
3721:	0	0	0	0	1	1	0	0
3729:	0	0	0	0	0	0	0	0
3737:	0	0	0	0	1	0	0	0
3745:	0	0	0	0	0	0	0	0
3753:	0	0	0	0	1	0	0	0
3761:	0	0	0	0	0	0	0	0
3769:	0	0	0	0	0	0	0	0
3777:	0	0	0	0	0	0	0	0
3785:	0	0	0	1	1	0	0	0

3793:	0	0	0	0	0	0	0	1
3801:	1	0	0	0	0	0	0	0
3809:	1	0	0	0	0	0	0	0
3817:	0	0	0	0	0	0	0	0
3825:	0	0	0	0	0	0	0	0
3833:	0	0	0	0	0	0	0	0
3841:	1	0	1	0	2	0	0	0
3849:	0	1	0	0	0	0	0	0
3857:	0	0	0	0	0	0	0	0
3865:	0	0	0	0	0	0	0	0
3873:	0	0	0	0	0	0	0	0
3881:	0	0	0	0	0	0	0	0
3889:	0	0	0	0	0	0	0	0
3897:	0	0	0	1	0	0	1	0
3905:	1	0	0	0	0	0	1	0
3913:	0	0	0	0	0	0	0	0
3921:	0	0	0	0	0	0	0	0
3929:	1	0	0	0	1	1	0	0
3937:	1	0	1	0	0	0	0	0
3945:	0	0	0	0	0	0	0	0
3953:	0	0	0	0	0	0	0	0
3961:	0	0	0	0	0	0	0	0
3969:	0	0	0	0	0	0	0	0
3977:	0	0	0	0	0	0	2	0
3985:	0	0	1	0	0	0	1	0
3993:	0	0	0	0	0	0	0	1
4001:	0	0	0	0	0	1	0	0
4009:	0	0	0	0	1	0	0	0
4017:	0	1	0	0	0	0	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	1	1	0	0	0
4041:	0	0	0	0	0	0	0	0
4049:	0	0	1	0	0	0	0	0
4057:	1	0	0	0	0	0	0	1
4065:	0	1	0	0	0	0	1	0
4073:	0	0	0	0	0	0	0	0
4081:	0	0	1	0	0	0	0	0
4089:	0	1	1	0	0	0	0	0

Sample ID : 1111065-10 Acquisition date : 10-DEC-2011 14:54:54

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VAX/VMS Peak Search Report Generated 10-DEC-2011 15:55:34.84

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106510_GE4_GAS1102_172256.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-44-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 10-DEC-2011 14:54:54
Sample ID : 1111065-10 Sample Quantity : 5.25000E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE4 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:27.43 0.8%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.54*	3610	11732	1.79	45.88	43	6	10.0		PB-210
0	53.25	414	14257	1.31	52.60	51	6	91.4		
0	63.26*	2456	18506	2.05	62.61	60	6	18.0		TH-234
7	68.29	1585	12765	3.91	67.65	66	16	20.6	1.31E+02	
7	76.55*	30099	37544	3.93	75.91	66	16	2.8		
5	84.11*	1574	9202	1.51	83.48	82	9	16.8	2.20E+01	
5	87.50	3403	15221	1.77	86.87	82	9	11.4		NP-237
										SN-126
										CD-109
0	93.21*	3088	16661	2.14	92.58	90	7	14.6		
0	143.93	868	12495	2.19	143.34	141	7	43.2		
0	154.76	495	12596	2.45	154.18	151	7	75.8		
0	186.37*	7843	14127	2.10	185.81	181	10	6.1		RA-226
3	236.53	1151	8208	2.85	236.00	231	16	28.9	1.64E+00	
3	242.27*	7489	5071	1.98	241.75	231	16	3.8		RA-224
0	257.76	1196	7476	4.95	257.25	253	10	27.7		
0	270.69	1049	6033	2.93	270.19	266	8	26.4		LU-173
0	295.51*	15223	5843	2.06	295.03	290	9	2.4		PB-214
0	329.19	162	3175	2.70	328.73	327	6	110.9		
0	352.22*	25539	5354	2.11	351.78	346	12	1.7		PB-214
0	388.38	412	3576	3.22	387.97	384	9	53.3		
0	403.06	423	4460	5.50	402.66	398	11	61.9		RN-219
0	413.12	155	2356	1.31	412.72	411	6	100.2		
0	427.45	155	2135	2.33	427.07	425	6	96.5		
0	434.66	160	1838	2.99	434.28	432	6	86.6		
0	455.19	284	2075	2.84	454.82	451	8	56.8		
0	462.70	152	1446	2.75	462.35	460	6	80.6		
0	480.17	186	1649	3.21	479.83	478	7	73.5		
0	487.59	325	1722	3.24	487.25	484	8	45.7		
0	496.98	112	1224	3.65	496.64	494	6	101.0		RU-103
0	511.08*	209	1702	3.07	510.76	507	8	70.1		
0	581.80	271	1886	4.79	581.53	576	11	63.5		TL-208
0	609.71*	17876	1741	2.26	609.46	603	11	1.7		BI-214
0	665.71	496	1233	2.47	665.50	661	10	28.0		
0	703.71	124	959	3.31	703.52	700	8	88.1		
0	720.73	140	898	2.74	720.56	717	8	76.1		

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Sample ID : 1111065-10 Acquisition date : 10-DEC-2011 14:54:54

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	742.35	166	846	2.61	742.19	739	8	62.4		
0	768.81	1544	1228	2.23	768.67	762	11	10.2		
0	786.51	439	999	2.98	786.38	782	10	28.6		
0	806.85	351	923	2.10	806.74	803	9	33.0		
0	822.47	67	628	1.84	822.37	820	6	121.6		
0	839.25	169	879	2.02	839.16	836	8	62.7		
0	934.56	738	1036	2.30	934.54	930	10	17.9		
0	964.82	124	1082	3.83	964.83	960	12	108.0		
0	1001.24	73	559	2.10	1001.28	998	7	109.2		PA-234M
6	1010.69	51	205	1.63	1010.73	1009	10	77.3	2.04E+00	
6	1014.87	131	566	2.80	1014.91	1009	10	65.1		
0	1120.91	3206	703	2.48	1121.03	1116	11	4.8		BI-214
0	1155.83	365	637	2.61	1155.97	1152	10	28.0		
0	1194.71	84	478	5.15	1194.88	1191	10	99.1		
0	1238.67	1191	535	2.76	1238.87	1234	10	9.3		
0	1281.70	321	346	2.95	1281.94	1278	8	23.0		
0	1296.56	70	334	4.89	1296.80	1293	8	93.7		
0	1378.22	796	466	2.53	1378.52	1374	11	12.7		
0	1385.90	109	350	1.34	1386.21	1384	8	62.0		
0	1401.11	245	544	2.30	1401.43	1396	11	38.9		
0	1408.67	469	353	2.15	1409.00	1406	8	16.7		
0	1461.68*	365	354	2.38	1462.04	1459	8	20.7		K-40
0	1509.95	348	485	2.31	1510.35	1506	9	25.2		
0	1539.05	59	367	2.33	1539.46	1536	7	110.1		
0	1584.04	151	380	2.88	1584.49	1578	13	55.5		
0	1660.92	238	283	3.11	1661.43	1652	17	35.0		
0	1685.69	76	146	3.15	1686.21	1683	10	64.0		
0	1694.38	46	137	2.67	1694.91	1692	9	95.8		
0	1730.22	497	129	2.82	1730.78	1725	11	12.6		
0	1765.28	2550	114	2.62	1765.86	1761	13	4.3		BI-214
0	1839.38	48	110	1.79	1840.01	1836	9	83.9		
0	1848.25	380	133	2.43	1848.89	1844	11	15.7		
0	1874.02	67	102	3.40	1874.68	1870	11	63.3		
0	1917.48	21	41	1.89	1918.17	1915	7	111.1		
0	1939.11	46	94	2.20	1939.82	1934	11	86.9		
0	1966.26	33	68	3.21	1966.98	1964	8	93.3		
0	1987.75	43	54	4.81	1988.49	1984	10	70.6		
1	2037.20	22	33	2.99	2037.98	2035	15	79.7	2.47E+00	
0	2053.88	47	42	2.00	2054.67	2050	11	60.0		
0	2119.38	139	67	2.83	2120.22	2115	10	27.9		
0	2205.01	665	56	2.65	2205.91	2200	12	9.0		BI-214
0	2294.83	48	13	2.23	2295.79	2291	12	41.2		
0	2360.51	11	7	6.87	2361.52	2355	13	117.6		
0	2378.20	12	10	4.99	2379.22	2371	12	131.9		
0	2448.79	197	6	2.61	2449.87	2444	11	15.0		
0	2615.03*	23	0	3.71	2616.23	2611	11	45.5		TL-208
0	2695.53	5	2	2.55	2696.78	2692	8	127.2		
0	2770.55	7	0	1.98	2771.86	2767	8	75.6		

Sample ID : 1111065-10 Acquisition date : 10-DEC-2011 14:54:54

Total number of lines in spectrum	82	
Number of unidentified lines	47	
Number of lines tentatively identified by NID	35	42.68%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.720E+01	2.720E+01	0.627E+01	23.05	
TL-208	1.41E+10Y	1.00	7.515E-01	7.515E-01	3.180E-01	42.31	
PB-210	22.26Y	1.00	9.057E+01	9.082E+01	1.239E+01	13.65	
BI-214	1602.00Y	1.00	1.392E+02	1.392E+02	0.083E+02	5.97	
PB-214	1602.00Y	1.00	1.370E+02	1.370E+02	0.112E+02	8.20	
RN-219	3.28E+04Y	1.00	1.503E+01	1.503E+01	0.952E+01	63.36	
RA-224	1.41E+10Y	1.00	2.701E+02	2.701E+02	0.291E+02	10.77	
RA-226	1602.00Y	1.00	2.782E+02	2.783E+02	5.100E+02	183.28	
PA-234M	4.47E+09Y	1.00	4.617E+01	4.617E+01	5.076E+01	109.96	
TH-234	4.47E+09Y	1.00	5.639E+01	5.639E+01	1.122E+01	19.90	
			---	---			
	Total Activity :		1.061E+03	1.061E+03			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
RU-103	39.35D	1.75	3.606E-01	6.296E-01	6.456E-01	102.55	
CD-109	464.00D	1.05	7.730E+01	8.104E+01	1.367E+01	16.87	
SN-126	1.00E+05Y	1.00	7.768E+00	7.768E+00	1.224E+00	15.76	
NP-237	2.14E+06Y	1.00	2.279E+01	2.279E+01	0.357E+01	15.68	
			---	---			
	Total Activity :		1.082E+02	1.122E+02			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
LU-173	1.37Y	1.04	7.843E+00	8.195E+00	2.315E+00	28.25	
			---	---			
	Total Activity :		7.843E+00	8.195E+00			

Grand Total Activity : 1.177E+03 1.181E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-10 Acquisition date : 10-DEC-2011 14:54:54

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	1.798E-01	2.720E+01	2.720E+01	23.05	OK
	Final Mean for 1 Valid Peaks = 2.720E+01+/- 6.272E+00 (23.05%)						
TL-208	583.14	30.22*	4.216E-01	3.037E+00	3.037E+00	64.68	OK
	860.37	4.48	2.847E-01	----- Line Not Found		-----	Absent
	2614.66	35.85	1.318E-01	6.900E-01	6.900E-01	46.70	OK
	Final Mean for 2 Valid Peaks = 7.515E-01+/- 3.180E-01 (42.31%)						
PB-210	46.50	4.05*	1.407E+00	9.057E+01	9.082E+01	13.65	OK
	Final Mean for 1 Valid Peaks = 9.082E+01+/- 1.239E+01 (13.65%)						
BI-214	609.31	46.30*	4.029E-01	1.370E+02	1.370E+02	11.67	OK
	1120.29	15.10	2.230E-01	1.361E+02	1.361E+02	12.75	OK
	1764.49	15.80	1.582E-01	1.459E+02	1.459E+02	10.47	OK
	2204.22	4.98	1.404E-01	1.359E+02	1.359E+02	13.53	OK
	Final Mean for 4 Valid Peaks = 1.392E+02+/- 8.314E+00 (5.97%)						
PB-214	295.21	19.19	8.368E-01	1.356E+02	1.356E+02	10.88	OK
	351.92	37.19*	7.067E-01	1.390E+02	1.390E+02	12.46	OK
	Final Mean for 2 Valid Peaks = 1.370E+02+/- 1.123E+01 (8.20%)						
RN-219	401.80	6.50*	6.189E-01	1.503E+01	1.503E+01	63.36	OK
	Final Mean for 1 Valid Peaks = 1.503E+01+/- 9.524E+00 (63.36%)						
RA-224	240.98	3.95*	1.004E+00	2.701E+02	2.701E+02	10.77	OK
	Final Mean for 1 Valid Peaks = 2.701E+02+/- 2.910E+01 (10.77%)						
RA-226	186.21	3.28*	1.229E+00	2.782E+02	2.783E+02	183.28	OK
	Final Mean for 1 Valid Peaks = 2.783E+02+/- 5.100E+02 (183.28%)						
PA-234M	1001.03	0.92*	2.467E-01	4.617E+01	4.617E+01	109.96	OK
	Final Mean for 1 Valid Peaks = 4.617E+01+/- 5.076E+01 (109.96%)						
TH-234	63.29	3.80*	1.639E+00	5.639E+01	5.639E+01	19.90	OK
	Final Mean for 1 Valid Peaks = 5.639E+01+/- 1.122E+01 (19.90%)						

Sample ID : 1111065-10 Acquisition date : 10-DEC-2011 14:54:54

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
RU-103	497.08	89.00*	4.975E-01	3.606E-01	6.296E-01	102.55	OK
Final Mean for 1 Valid Peaks = 6.296E-01+/- 6.456E-01 (102.55%)							
CD-109	88.03	3.72*	1.693E+00	7.730E+01	8.104E+01	16.87	OK
Final Mean for 1 Valid Peaks = 8.104E+01+/- 1.367E+01 (16.87%)							
SN-126	87.57	37.00*	1.693E+00	7.768E+00	7.768E+00	15.76	OK
Final Mean for 1 Valid Peaks = 7.768E+00+/- 1.224E+00 (15.76%)							
NP-237	86.50	12.60*	1.695E+00	2.279E+01	2.279E+01	15.68	OK
Final Mean for 1 Valid Peaks = 2.279E+01+/- 3.573E+00 (15.68%)							

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
LU-173	100.72	5.24	1.657E+00	----- Line Not Found		-----	Absent
	272.11	21.20*	9.019E-01	7.843E+00	8.195E+00	28.25	OK
Final Mean for 1 Valid Peaks = 8.195E+00+/- 2.315E+00 (28.25%)							

Flag: "*" = Keyline

Sample ID : 1111065-10 Acquisition date : 10-DEC-2011 14:54:54

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.720E+01	6.272E+00	6.962E+00	6.544E-01	3.908
RU-103	6.296E-01	6.456E-01	1.030E+00	1.755E-01	0.611
CD-109	8.104E+01	1.367E+01	1.528E+01	1.794E+00	5.302
SN-126	7.768E+00	1.224E+00	1.465E+00	1.477E-01	5.303
LU-173	8.195E+00	2.315E+00	2.498E+00	2.330E-01	3.280
TL-208	7.515E-01	3.180E-01	1.877E+00	2.151E-01	0.400
PB-210	9.082E+01	1.239E+01	1.233E+01	1.026E+00	7.368
BI-214	1.392E+02	8.314E+00	1.208E+00	1.308E-01	115.241
PB-214	1.370E+02	1.123E+01	1.397E+00	1.630E-01	98.095
RN-219	1.503E+01	9.524E+00	8.630E+00	1.127E+00	1.742
RA-224	2.701E+02	2.910E+01	1.279E+01	1.183E+00	21.115
RA-226	2.783E+02	5.100E+02	1.562E+01	2.861E+01	17.813
PA-234M	4.617E+01	5.076E+01	7.528E+01	9.464E+00	0.613
TH-234	5.639E+01	1.122E+01	1.392E+01	1.056E+00	4.050
NP-237	2.279E+01	3.573E+00	4.296E+00	4.275E-01	5.305

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	4.898E+00		5.388E+00	7.843E+00	1.017E+00	0.624
NA-22	-2.352E-01		4.581E-01	6.723E-01	6.480E-02	-0.350
AL-26	6.242E-04		2.459E-01	4.291E-01	3.659E-02	0.001
TI-44	1.441E+00	+	3.232E-01	6.097E-01	4.866E-02	2.364
SC-46	-1.241E-01		5.310E-01	9.064E-01	1.193E-01	-0.137
V-48	-7.284E-01		1.556E+00	2.633E+00	3.352E-01	-0.277
CR-51	-6.854E+00		7.158E+00	1.139E+01	1.253E+00	-0.602
MN-54	4.477E-01		4.752E-01	7.366E-01	8.994E-02	0.608
CO-56	-9.916E-02		5.852E-01	8.825E-01	1.096E-01	-0.112
CO-57	6.944E-02		3.472E-01	5.701E-01	5.255E-02	0.122
CO-58	5.268E-01		5.838E-01	9.061E-01	1.070E-01	0.581
FE-59	-3.873E-01		1.166E+00	1.978E+00	2.367E-01	-0.196
CO-60	2.652E-02		3.942E-01	6.774E-01	6.977E-02	0.039
ZN-65	2.145E+00		1.060E+00	1.673E+00	1.875E-01	1.282
SE-75	-3.125E-01		8.850E-01	9.983E-01	9.359E-02	-0.313
RB-82	1.042E+01		9.399E+00	1.104E+01	1.236E+00	0.944
RB-83	-3.466E-01		9.793E-01	1.485E+00	2.689E-01	-0.233
KR-85	1.434E+02		9.041E+01	1.319E+02	1.667E+01	1.088
SR-85	8.746E-01		5.512E-01	8.041E-01	1.016E-01	1.088
Y-88	7.247E-01		3.665E-01	6.472E-01	5.463E-02	1.120
NB-93M	1.306E+02		5.492E+01	1.999E+01	8.206E+00	6.532
NB-94	-1.151E-01		4.017E-01	6.851E-01	8.798E-02	-0.168
NB-95	9.664E+00		1.421E+00	1.735E+00	1.912E-01	5.571
ZR-95	-8.906E-01		9.990E-01	1.468E+00	1.698E-01	-0.607
RU-106	-3.629E+00		3.494E+00	5.404E+00	7.907E-01	-0.671
AG-108M	6.068E-01		4.295E-01	6.743E-01	6.933E-02	0.900
AG-110M	1.273E-01		4.187E-01	6.451E-01	6.050E-02	0.197
SN-113	1.258E+00		8.044E-01	1.065E+00	1.406E-01	1.181

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
TE123M	5.503E-01		4.960E-01	7.269E-01	6.304E-02	0.757
SB-124	3.121E-01		5.930E-01	8.581E-01	9.437E-02	0.364
I-125	-8.733E+00		7.558E+00	1.234E+01	1.312E+00	-0.708
SB-125	1.326E+00	+	1.293E+00	2.041E+00	2.701E-01	0.650
SB-126	6.430E+00	+	4.942E+00	6.666E+00	6.826E-01	0.965
I-129	1.576E-02		7.154E-01	1.191E+00	1.578E-01	0.013
I-131	1.916E+00		5.897E+00	9.586E+00	1.159E+00	0.200
BA-133	2.664E+01		4.339E+00	1.634E+00	2.528E-01	16.310
CS-134	4.098E+00		6.854E-01	8.373E-01	9.180E-02	4.894
CS-135	8.379E+00		2.977E+00	3.449E+00	3.216E-01	2.429
CS-136	-1.292E-01		2.552E+00	4.376E+00	5.368E-01	-0.030
CS-137	6.500E-01		4.423E-01	6.958E-01	6.445E-02	0.934
LA-138	6.302E-01		6.346E-01	1.116E+00	1.025E-01	0.565
CE-139	6.585E-02		4.506E-01	7.368E-01	6.301E-02	0.089
BA-140	2.798E+00		7.709E+00	1.241E+01	4.256E+00	0.225
LA-140	4.424E+00		2.586E+00	4.360E+00	3.937E-01	1.015
CE-141	1.693E+00		1.600E+00	2.077E+00	5.204E-01	0.816
CE-144	-1.696E+00		2.865E+00	4.667E+00	4.225E-01	-0.363
PM-144	-8.445E-03		4.013E-01	6.117E-01	6.021E-02	-0.014
PM-145	-3.218E+00		2.597E+00	2.484E+00	1.623E+00	-1.295
PM-146	1.882E+00	+	1.100E+00	1.406E+00	1.840E-01	1.338
ND-147	1.207E+01		1.888E+01	3.072E+01	3.814E+00	0.393
EU-152	2.440E+01	+	5.015E+00	7.050E+00	8.013E-01	3.461
GD-153	-2.963E+00		1.397E+00	2.098E+00	2.027E-01	-1.412
EU-154	-6.688E-01		1.270E+00	1.864E+00	1.797E-01	-0.359
EU-155	9.406E+00	+	1.475E+00	1.945E+00	1.936E-01	4.836
EU-156	-7.138E+00		1.702E+01	2.537E+01	6.145E+00	-0.281
HO-166M	8.125E-02		9.300E-01	1.040E+00	1.049E-01	0.078
HF-172	-7.063E-01		2.535E+00	4.147E+00	3.797E-01	-0.170
LU-172	9.996E+00		1.689E+01	2.937E+01	3.379E+00	0.340
HF-175	-9.667E-01		6.334E-01	8.730E-01	9.943E-02	-1.107
LU-176	-3.117E-01		3.398E-01	5.422E-01	5.528E-02	-0.575
TA-182	7.140E+01	+	9.098E+00	6.348E+00	7.056E-01	11.248
IR-192	1.783E-01		1.032E+00	1.486E+00	1.936E-01	0.120
HG-203	-7.974E-01		7.472E-01	1.057E+00	1.010E-01	-0.754
BI-207	3.926E-02		3.807E-01	5.836E-01	6.855E-02	0.067
BI-210M	1.676E+00		9.799E-01	1.141E+00	1.063E-01	1.469
PB-211	3.576E+01		1.402E+01	2.104E+01	2.752E+00	1.699
BI-212	-2.624E+00		3.253E+00	4.813E+00	4.983E-01	-0.545
PB-212	1.083E+01		1.343E+00	1.418E+00	1.309E-01	7.638
RA-223	6.881E+00		9.205E+00	1.340E+01	1.441E+00	0.513
RA-225	7.344E+00		4.953E+00	7.380E+00	6.947E-01	0.995
TH-227	1.401E+01	+	4.283E+00	4.792E+00	4.416E-01	2.924
AC-228	-3.088E-01		1.526E+00	2.605E+00	3.450E-01	-0.119
TH-230	3.676E+02	+	8.241E+01	1.557E+02	1.239E+01	2.361
PA-231	3.161E+01		1.572E+01	2.288E+01	2.303E+00	1.381
TH-231	-4.974E-01		3.481E+00	5.791E+00	9.647E-01	-0.086
PA-233	-3.389E-01		1.829E+00	2.956E+00	6.852E-01	-0.115

Sample ID : 1111065-10 Acquisition date : 10-DEC-2011 14:54:54

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PA-234	7.871E-02		1.387E+00	2.274E+00	2.065E-01	0.035
U-235	8.180E+00	+	3.833E+00	4.841E+00	8.546E-01	1.690
AM-241	2.702E+00		1.290E+00	1.521E+00	1.109E-01	1.777
AM-243	2.906E+01		2.876E+00	1.208E+00	1.043E-01	24.046
CM-243	-4.232E-01		2.561E+00	3.694E+00	3.445E-01	-0.115

Sample ID : 1111065-10 Acquisition date : 10-DEC-2011 14:54:54

Total number of lines in spectrum	82	
Number of unidentified lines	47	
Number of lines tentatively identified by NID	35	42.68%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.720E+01	2.720E+01	0.627E+01	23.05	
TL-208	1.41E+10Y	1.00	7.515E-01	7.515E-01	3.180E-01	42.31	
PB-210	22.26Y	1.00	9.057E+01	9.082E+01	1.239E+01	13.65	
BI-214	1602.00Y	1.00	1.392E+02	1.392E+02	0.083E+02	5.97	
PB-214	1602.00Y	1.00	1.370E+02	1.370E+02	0.112E+02	8.20	
RN-219	3.28E+04Y	1.00	1.503E+01	1.503E+01	0.952E+01	63.36	
RA-224	1.41E+10Y	1.00	2.701E+02	2.701E+02	0.291E+02	10.77	
RA-226	1602.00Y	1.00	2.782E+02	2.783E+02	5.100E+02	183.28	
PA-234M	4.47E+09Y	1.00	4.617E+01	4.617E+01	5.076E+01	109.96	
TH-234	4.47E+09Y	1.00	5.639E+01	5.639E+01	1.122E+01	19.90	
			---	---			
	Total Activity :		1.061E+03	1.061E+03			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
RU-103	39.35D	1.75	3.606E-01	6.296E-01	6.456E-01	102.55	
CD-109	464.00D	1.05	7.730E+01	8.104E+01	1.367E+01	16.87	
SN-126	1.00E+05Y	1.00	7.768E+00	7.768E+00	1.224E+00	15.76	
NP-237	2.14E+06Y	1.00	2.279E+01	2.279E+01	0.357E+01	15.68	
			---	---			
	Total Activity :		1.082E+02	1.122E+02			

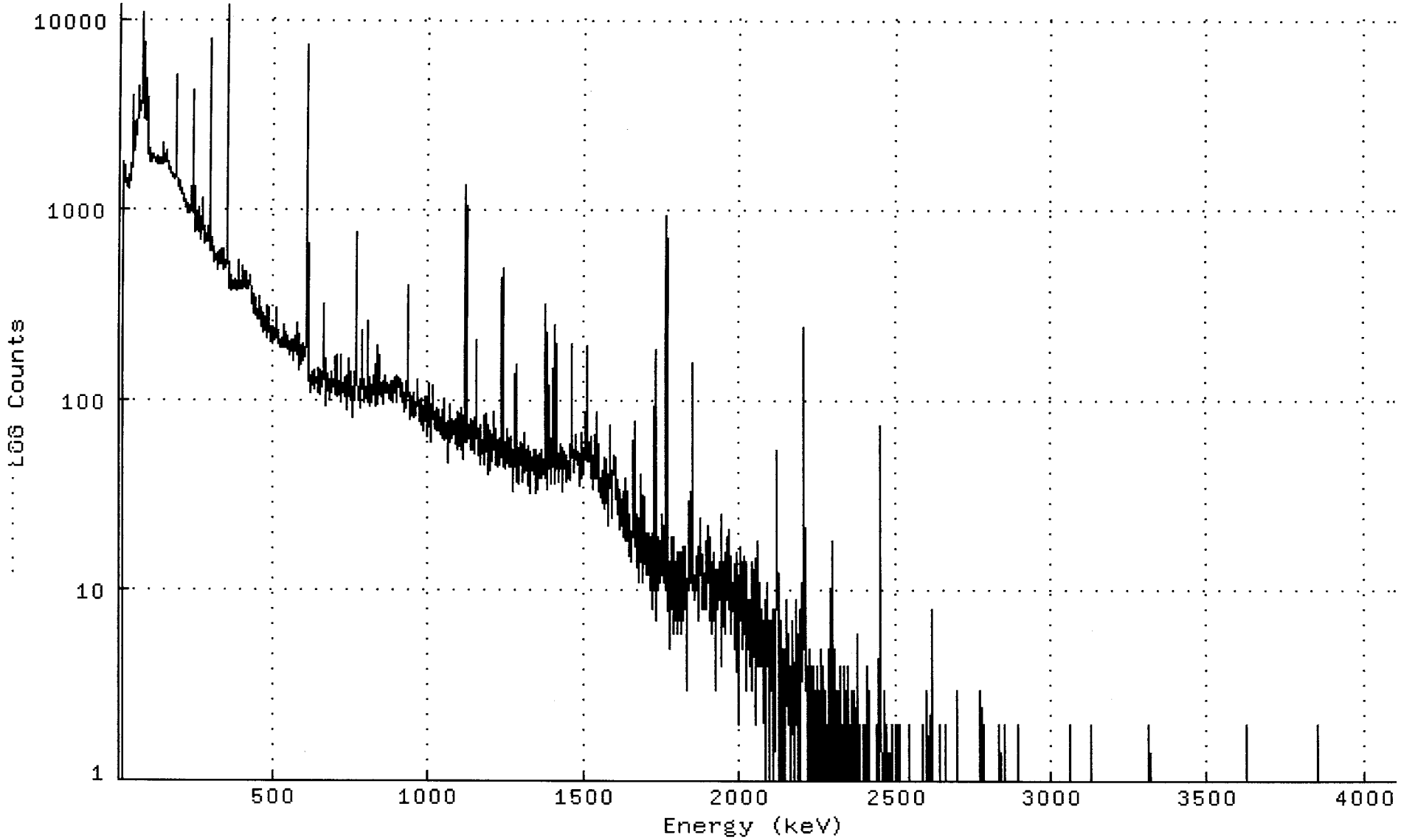
Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
LU-173	1.37Y	1.04	7.843E+00	8.195E+00	2.315E+00	28.25	
			---	---			
	Total Activity :		7.843E+00	8.195E+00			

Grand Total Activity : 1.177E+03 1.181E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106510_GE4_GAS1102_172256.CNF;1
Title :
Sample Title: DY2-44-31-111109
Start Time: 10-DEC-2011 14:54 Sample Time: 9-NOV-2011 00:00: Energy Offset: 6.91748E-01
Real Time : 0 01:00:27.43 Sample ID : 1111065-10 Energy Slope : 9.99279E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106510_GE4_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	4	1106	1765
17:	1585	1513	1503	1378	1353	1366	1310	1428
25:	1353	1361	1396	1375	1349	1259	1413	1491
33:	1369	1312	1447	1418	1512	1489	1494	1695
41:	1640	1703	1893	1933	2740	3898	2908	2004
49:	2156	2351	2166	2502	2812	2389	2394	2408
57:	2514	2735	2870	2975	3183	3837	4321	3590
65:	3097	3312	3617	3598	3494	3372	3533	3585
73:	4521	7752	7865	9538	10680	5155	3475	3409
81:	3231	2932	3855	3723	2881	3992	4823	3416
89:	3149	3058	2972	3770	3236	2605	2269	1898
97:	1957	2053	1899	1754	1779	1779	1877	1813
105:	1753	1743	1737	1936	1839	1843	1847	1933
113:	1883	1887	1773	1813	1766	1814	1791	1762
121:	1709	1873	1787	1749	1745	1774	1731	1759
129:	1775	1795	1837	1728	1745	1751	1720	1783
137:	1847	1799	1837	1814	1722	1883	2141	2221
145:	1911	1745	1740	1855	1844	1907	1775	1844
153:	1987	2027	1911	1757	1790	1747	1719	1589
161:	1667	1652	1678	1649	1563	1586	1576	1515
169:	1553	1510	1515	1495	1451	1477	1453	1472
177:	1428	1462	1441	1478	1489	1446	1453	1818
185:	3856	4969	2755	1462	1395	1350	1357	1298
193:	1347	1367	1401	1397	1376	1277	1372	1232
201:	1252	1274	1192	1267	1255	1198	1146	1113
209:	1177	1136	1088	1149	1087	1113	1066	1080
217:	1010	1094	1046	1029	953	1022	1042	945
225:	1061	1014	979	963	964	961	953	987
233:	958	1019	1241	1305	1158	954	986	1257
241:	3289	4214	2014	860	821	835	754	855
249:	834	814	779	776	779	782	944	1019
257:	928	976	949	823	754	718	730	713
265:	749	693	723	769	1084	1135	1028	883
273:	767	797	811	672	678	711	660	691
281:	721	684	704	733	670	721	682	668
289:	681	664	684	707	955	4148	7786	4493
297:	1037	603	644	696	608	615	607	599
305:	628	534	551	567	542	521	557	552
313:	556	538	566	542	537	515	492	536
321:	480	534	583	593	514	507	511	586
329:	573	615	516	536	551	538	547	495
337:	540	606	541	517	480	533	486	515
345:	511	484	491	527	586	1824	8241	11933
353:	4885	712	381	443	400	400	383	402
361:	382	382	440	408	367	415	407	414
369:	378	383	379	409	380	382	418	383
377:	421	395	399	392	416	409	374	408
385:	381	451	482	492	533	432	407	402
393:	403	410	383	389	380	400	441	380
401:	474	496	464	469	465	467	438	389
409:	448	386	426	432	430	470	376	377
417:	390	404	414	402	381	449	399	400
425:	395	427	404	373	350	341	316	342

433:	341	352	348	315	300	282	306	308
441:	305	291	282	277	342	304	295	288
449:	295	261	265	273	278	345	344	320
457:	265	269	244	242	263	302	294	273
465:	224	255	256	267	255	280	249	238
473:	250	267	262	246	211	231	273	291
481:	309	277	224	230	262	271	299	300
489:	244	238	203	210	219	202	236	233
497:	233	238	194	205	241	212	212	210
505:	234	223	207	211	247	301	299	281
513:	213	204	218	230	200	219	194	206
521:	201	195	195	194	188	194	207	208
529:	196	186	199	192	221	247	209	199
537:	185	212	226	187	214	206	187	219
545:	187	183	206	215	196	194	199	171
553:	186	200	180	171	195	205	193	184
561:	179	187	175	207	188	159	191	183
569:	189	196	193	214	188	180	197	178
577:	196	170	211	221	249	195	205	207
585:	183	142	175	152	189	188	157	159
593:	182	197	161	171	162	158	176	165
601:	171	184	171	187	184	185	331	2230
609:	7168	6883	1945	220	124	141	150	143
617:	141	133	120	132	115	119	108	118
625:	130	126	119	123	123	138	143	139
633:	114	124	123	115	124	129	120	127
641:	128	126	121	122	119	145	107	108
649:	138	134	135	105	128	143	116	123
657:	127	137	139	128	137	129	126	169
665:	301	316	211	126	121	93	139	111
673:	125	120	136	110	117	122	120	120
681:	126	115	122	121	98	114	123	127
689:	140	115	121	116	117	127	124	123
697:	121	132	132	106	109	162	163	172
705:	147	111	113	128	120	103	124	112
713:	112	114	105	113	116	97	141	172
721:	159	138	107	108	113	110	117	112
729:	103	116	124	129	108	125	133	108
737:	133	88	110	118	112	155	162	140
745:	103	112	110	117	114	116	99	138
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761:	115	120	100	99	126	155	266	585
769:	749	339	135	98	112	112	112	104
777:	114	95	128	114	89	107	104	117
785:	181	229	209	149	121	120	101	102
793:	97	107	109	127	103	114	110	116
801:	115	102	97	107	120	218	255	151
809:	112	113	101	109	91	97	98	105
817:	118	114	110	96	132	128	112	121
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841:	121	109	105	110	125	117	103	107
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857:	113	108	134	110	115	113	131	113
865:	115	109	107	119	116	110	101	111
873:	108	112	119	98	121	114	113	123
881:	105	116	112	96	125	105	106	110
889:	109	111	107	118	131	116	115	97
897:	127	128	109	132	120	130	124	116
905:	119	128	106	113	117	124	128	108

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937:	106	99	103	107	87	108	78	87
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961:	96	91	105	128	120	109	110	87
969:	90	84	91	84	76	94	101	87
977:	91	83	74	84	78	88	68	90
985:	77	93	76	78	82	104	91	96
993:	92	90	102	82	78	64	79	89
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1169:	74	57	52	58	60	59	61	59
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1889:	8	10	16	16	16	11	18	11
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1905:	16	8	7	7	6	11	10	14
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1961:	10	19	8	9	14	15	21	11
1969:	15	8	8	9	11	6	10	10
1977:	8	9	11	9	9	5	8	5
1985:	12	8	12	16	15	9	6	7
1993:	7	2	12	7	7	9	8	9
2001:	9	7	9	9	17	5	14	11
2009:	8	6	6	9	13	6	6	6
2017:	15	11	14	9	3	8	8	5
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2033:	9	8	7	6	9	14	8	3
2041:	4	4	5	12	13	9	5	12
2049:	2	5	7	6	10	12	18	4
2057:	8	7	8	4	4	6	6	4
2065:	11	5	5	8	7	4	4	8
2073:	8	3	7	3	7	6	4	1
2081:	9	3	8	6	7	7	7	11
2089:	5	4	7	5	3	3	7	0
2097:	6	3	3	3	7	4	6	4
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2113:	6	7	7	8	8	13	38	55
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2137:	2	1	5	3	4	4	4	5
2145:	1	2	3	4	3	9	3	3
2153:	5	5	2	3	5	6	6	2
2161:	4	2	4	0	1	3	4	7
2169:	2	2	2	4	2	1	1	2
2177:	2	9	2	6	3	6	7	5
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2193:	2	8	1	11	6	4	8	4
2201:	5	5	16	74	174	241	136	51
2209:	9	3	3	4	5	3	4	2
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2225:	2	4	2	3	2	1	4	2
2233:	4	1	0	3	1	2	2	1
2241:	1	1	3	2	3	3	2	1
2249:	1	2	4	0	3	3	0	2
2257:	3	3	2	1	1	5	0	2
2265:	2	3	4	1	0	2	0	1
2273:	0	3	3	1	1	2	2	2
2281:	2	1	2	2	0	5	2	1
2289:	4	0	1	2	4	7	15	18
2297:	4	3	1	1	5	0	3	0
2305:	2	2	3	2	1	3	1	1
2313:	2	2	2	1	3	3	0	3
2321:	4	1	4	1	1	2	0	1
2329:	2	1	1	1	4	1	1	0
2337:	3	0	0	0	3	0	1	1
2345:	0	0	2	4	0	1	0	2

2353:	0	0	1	1	1	3	1	0
2361:	1	2	3	2	1	1	0	1
2369:	2	2	2	1	1	6	0	0
2377:	2	4	2	2	2	0	0	2
2385:	1	0	1	1	1	0	1	1
2393:	0	1	2	0	1	0	1	2
2401:	1	0	0	1	1	4	0	1
2409:	1	1	1	1	1	3	0	0
2417:	0	0	0	1	0	0	0	1
2425:	0	1	1	0	0	1	0	1
2433:	1	1	1	0	0	0	0	0
2441:	2	0	0	1	0	1	1	20
2449:	51	74	43	9	2	0	1	1
2457:	0	1	0	1	0	0	1	3
2465:	0	1	0	1	0	1	1	2
2473:	0	0	1	1	0	0	0	1
2481:	0	1	0	0	2	1	0	0
2489:	0	0	1	0	1	0	1	0
2497:	0	0	0	1	0	2	0	0
2505:	0	0	2	0	0	0	0	2
2513:	0	0	0	0	0	1	0	0
2521:	1	1	1	0	1	1	1	1
2529:	0	1	0	0	1	1	0	0
2537:	0	0	0	0	2	0	0	2
2545:	1	0	0	0	0	0	0	0
2553:	0	1	0	0	0	0	0	0
2561:	1	0	0	1	0	0	0	0
2569:	0	1	0	0	0	0	1	0
2577:	0	0	0	1	0	1	0	2
2585:	0	0	1	1	1	0	1	1
2593:	0	0	0	0	0	0	0	0
2601:	3	0	0	0	0	0	0	0
2609:	0	0	0	0	0	5	2	8
2617:	7	2	1	1	0	0	0	0
2625:	1	1	0	0	1	1	0	0
2633:	0	1	0	0	1	1	0	0
2641:	2	0	0	0	0	0	0	0
2649:	0	0	0	1	0	1	0	0
2657:	0	0	0	0	2	0	0	1
2665:	0	0	0	1	0	0	0	0
2673:	0	0	0	1	0	0	1	1
2681:	0	0	1	0	0	0	0	0
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2697:	1	2	0	1	0	0	0	0
2705:	0	0	0	0	0	0	1	0
2713:	1	1	0	1	1	0	0	0
2721:	1	0	0	0	0	1	0	0
2729:	0	0	0	1	0	0	0	1
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2745:	0	0	1	0	1	0	0	0
2753:	0	0	0	0	0	0	0	1
2761:	0	1	0	0	0	0	0	0
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2777:	0	1	0	0	0	1	0	2
2785:	1	0	1	1	0	0	0	1
2793:	0	1	0	0	0	0	0	0
2801:	0	1	0	0	1	0	1	0
2809:	0	0	0	1	0	0	0	0
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2841:	0	0	0	0	0	0	0	0
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2857:	0	1	0	0	0	0	0	0
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2873:	0	0	0	0	0	0	0	0
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2889:	0	0	0	1	2	0	0	0
2897:	1	1	0	0	0	0	0	1
2905:	1	0	0	0	0	0	0	0
2913:	0	1	0	0	0	0	0	0
2921:	0	0	0	1	1	0	0	0
2929:	0	0	0	0	0	0	0	0
2937:	0	1	1	1	0	1	0	0
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2969:	0	1	0	0	0	0	0	0
2977:	1	0	0	0	0	1	0	1
2985:	0	0	0	0	0	0	0	0
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3009:	0	0	0	0	0	0	0	1
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3049:	0	0	0	0	0	0	1	1
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3073:	0	1	0	0	0	0	0	0
3081:	0	1	0	1	0	0	0	0
3089:	0	0	0	0	0	0	0	0
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3145:	0	0	0	0	0	0	0	0
3153:	0	0	1	0	0	0	0	0
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3177:	0	0	1	0	0	0	0	0
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3193:	0	0	1	0	1	0	0	0
3201:	0	1	0	0	1	0	1	0
3209:	0	0	0	0	0	0	0	0
3217:	1	0	0	1	0	0	0	1
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3241:	1	0	0	0	0	1	0	0
3249:	0	0	0	1	0	1	0	0
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3265:	0	0	0	0	0	0	0	0
3273:	0	0	0	0	0	0	0	0
3281:	0	0	0	0	0	1	0	0
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3345:	1	0	0	0	0	1	0	0
3353:	0	0	0	0	0	0	1	0
3361:	1	0	1	0	1	0	0	0
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3377:	0	1	0	0	0	0	0	0
3385:	0	0	0	0	0	0	0	0
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3489:	0	0	0	0	0	0	1	0
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3537:	0	1	0	0	0	0	0	0
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3601:	0	0	0	1	0	0	0	0
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3809:	0	0	1	0	1	0	0	0
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3825:	0	0	1	0	0	0	0	0
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3841:	0	0	0	0	0	0	0	0
3849:	0	0	0	2	0	0	0	0
3857:	0	0	0	0	0	0	0	0
3865:	1	1	0	0	0	0	0	0
3873:	0	0	0	0	0	0	0	0
3881:	0	0	0	0	0	0	0	0
3889:	0	0	0	0	0	0	1	0
3897:	0	0	0	0	0	0	0	0
3905:	0	0	0	1	0	0	0	0
3913:	0	0	1	0	0	0	0	0
3921:	0	1	0	0	0	0	0	0
3929:	0	0	0	0	0	0	0	0
3937:	0	0	0	0	0	0	0	0
3945:	0	0	0	0	0	0	0	0
3953:	0	0	0	0	0	0	0	0
3961:	0	0	1	0	0	0	0	0
3969:	0	0	0	0	0	0	0	0
3977:	0	0	0	0	0	1	0	0
3985:	0	0	0	0	0	0	0	0
3993:	0	0	1	0	0	0	0	0
4001:	0	0	0	0	0	0	0	0
4009:	0	0	0	0	0	0	0	0
4017:	0	0	0	0	0	0	1	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	0	0	1	0	0
4041:	0	0	0	0	0	0	0	0
4049:	0	0	0	0	0	0	1	0
4057:	0	0	0	0	0	0	0	0
4065:	1	1	0	0	0	0	0	0
4073:	0	0	0	0	0	0	0	0
4081:	0	0	0	1	0	0	0	0
4089:	1	1	0	0	0	1	0	0

Sample ID : 1111065-11 Acquisition date : 10-DEC-2011 15:23:33

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VAX/VMS Peak Search Report Generated 10-DEC-2011 16:24:30.77

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106511_GE1_GAS1102_172257.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-48-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 10-DEC-2011 15:23:33
Sample ID : 1111065-11 Sample Quantity : 4.15300E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE1 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:01.97 0.1%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.62*	302	790	1.92	46.25	43	6	32.1		PB-210
0	62.86*	398	1858	1.74	62.49	58	9	40.6		TH-234
0	76.51*	2168	2106	2.98	76.15	72	9	8.8		
8	87.77	357	1005	1.64	87.41	82	16	28.2	6.80E+00	NP-237
										SN-126
										CD-109
8	93.22	726	989	2.02	92.85	82	16	16.3		
0	144.28*	84	701	1.38	143.92	142	6	103.0		CE-141
0	154.82	145	887	2.51	154.47	150	8	73.0		
0	186.53*	584	775	1.39	186.18	182	7	18.2		RA-226
1	239.17*	687	340	1.76	238.84	235	14	11.3	7.87E+00	PB-212
1	242.43	565	295	1.76	242.09	235	14	15.0		RA-224
0	258.75	83	443	2.17	258.42	254	8	90.7		
0	269.77	79	483	2.39	269.44	266	9	103.0		
2	295.60*	1119	246	1.59	295.28	290	13	7.4	1.91E+00	PB-214
2	300.05	80	257	1.79	299.73	290	13	64.1		PB-212
0	310.31	41	186	2.50	309.99	308	5	104.5		
0	328.60	60	225	2.06	328.28	326	6	82.7		
0	339.34*	138	345	1.94	339.02	335	8	50.2		AC-228
0	352.27*	1850	299	1.44	351.95	348	7	5.6		PB-214
0	386.75	59	266	5.68	386.45	383	9	101.8		
0	455.83	54	145	2.74	455.54	452	8	81.5		
0	463.16	59	137	1.90	462.87	460	7	70.7		
0	510.84*	96	226	2.29	510.56	506	11	67.4		
0	583.42*	190	149	2.00	583.16	580	9	27.4		TL-208
0	609.85*	1433	216	2.03	609.60	605	11	6.7		BI-214
0	664.94	43	126	1.74	664.70	660	9	98.9		
0	727.72	56	88	2.00	727.49	724	8	64.5		BI-212
0	769.14	133	160	1.98	768.91	763	11	40.9		
3	783.41	20	52	2.13	783.19	781	17	99.2	3.87E+00	
3	795.33	33	63	1.99	795.11	781	17	86.3		
0	839.53	54	95	3.82	839.32	834	9	71.3		
0	862.57	35	79	6.10	862.36	858	9	97.8		
0	911.85*	115	113	1.96	911.66	908	9	38.5		AC-228
0	934.78	62	85	1.21	934.59	931	8	57.8		
3	964.80	28	87	2.69	964.62	960	13	116.6	4.57E+00	

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Sample ID : 1111065-11 Acquisition date : 10-DEC-2011 15:23:33

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	969.47	76	54	2.16	969.28	960	13	38.9		AC-228
4	984.12	30	14	2.97	983.94	982	29	41.4	3.16E+00	
4	990.78	20	46	2.97	990.60	982	29	137.1		
0	1120.69	336	99	2.19	1120.54	1115	12	16.1		BI-214
0	1156.49	31	79	1.78	1156.35	1151	9	109.6		
0	1209.12	26	59	2.87	1208.98	1205	8	111.9		
3	1232.83	19	17	2.83	1232.70	1231	15	57.9	1.29E+00	
3	1238.40	121	60	2.28	1238.28	1231	15	27.8		
0	1352.02	20	29	3.18	1351.91	1349	7	100.0		
0	1377.95	112	30	2.19	1377.86	1373	10	26.3		
6	1385.66	20	17	2.70	1385.56	1383	10	81.1	9.96E-01	
6	1389.35	12	21	3.87	1389.25	1383	10	165.7		
0	1408.79	41	27	2.68	1408.70	1406	8	52.8		
3	1461.14*	701	21	2.41	1461.06	1455	16	7.8	2.83E+00	K-40
3	1467.35	21	11	2.95	1467.27	1455	16	84.5		
0	1509.55	36	22	2.17	1509.48	1507	7	54.5		
0	1539.37	22	32	1.93	1539.30	1534	11	111.0		
1	1587.28	16	24	2.48	1587.23	1583	15	103.4	2.44E+00	
1	1592.28	12	14	2.48	1592.23	1583	15	131.6		
0	1601.44	14	15	1.23	1601.38	1597	9	118.6		
0	1663.61	36	8	10.34	1663.57	1657	16	48.4		
0	1692.11	26	9	2.31	1692.08	1688	10	59.4		
1	1729.79	73	6	2.53	1729.77	1724	16	25.4	4.17E+00	
1	1734.25	16	5	2.53	1734.23	1724	16	107.4		
2	1764.85*	240	5	2.46	1764.84	1758	15	13.4	9.04E-01	BI-214
2	1769.93	8	3	2.80	1769.91	1758	15	131.8		
0	1847.46	51	16	2.24	1847.46	1842	12	41.7		
0	1927.98	8	0	3.00	1928.00	1926	5	70.7		
0	1979.14	10	4	2.91	1979.16	1975	9	94.2		
0	1986.14	6	0	1.98	1986.17	1984	5	81.6		
0	1996.33	5	1	2.72	1996.36	1994	5	120.0		
0	2010.83	8	2	1.54	2010.86	2007	8	90.2		
0	2017.84	8	0	2.22	2017.88	2015	7	70.7		
0	2119.46	18	6	3.66	2119.51	2114	11	70.6		
0	2158.14	6	2	2.37	2158.21	2155	6	110.6		
0	2203.84	61	0	2.39	2203.92	2200	8	25.6		BI-214
0	2275.04	8	0	2.59	2275.13	2272	6	70.7		
0	2319.85	7	2	1.55	2319.95	2315	8	103.8		
0	2448.14	23	0	2.14	2448.26	2444	10	41.7		
0	2614.83*	86	2	3.18	2614.99	2610	11	23.5		TL-208

Sample ID : 1111065-11 Acquisition date : 10-DEC-2011 15:23:33

Total number of lines in spectrum	74	
Number of unidentified lines	40	
Number of lines tentatively identified by NID	34	45.95%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.362E+01	2.362E+01	0.288E+01	12.20	
TL-208	1.41E+10Y	1.00	1.164E+00	1.164E+00	0.225E+00	19.32	
PB-210	22.26Y	1.00	5.164E+00	5.178E+00	1.721E+00	33.24	
BI-212	1.41E+10Y	1.00	9.939E-01	9.939E-01	6.492E-01	65.32	
PB-212	1.41E+10Y	1.00	1.409E+00	1.409E+00	0.200E+00	14.22	
BI-214	1602.00Y	1.00	5.927E+00	5.927E+00	0.486E+00	8.20	
PB-214	1602.00Y	1.00	5.966E+00	5.966E+00	0.473E+00	7.93	
RA-224	1.41E+10Y	1.00	1.300E+01	1.300E+01	0.228E+01	17.52	
RA-226	1602.00Y	1.00	1.393E+01	1.393E+01	2.565E+01	184.05	
AC-228	1.41E+10Y	1.00	1.161E+00	1.161E+00	0.287E+00	24.75	
TH-234	4.47E+09Y	1.00	6.565E+00	6.565E+00	2.721E+00	41.45	
			---	---			
	Total Activity :		7.891E+01	7.892E+01			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	5.917E+00	6.203E+00	1.908E+00	30.76	
SN-126	1.00E+05Y	1.00	5.946E-01	5.946E-01	1.794E-01	30.17	
CE-141	32.50D	1.96	1.205E-01	2.368E-01	2.511E-01	106.03	
NP-237	2.14E+06Y	1.00	1.745E+00	1.745E+00	0.526E+00	30.13	
			---	---			
	Total Activity :		8.377E+00	8.780E+00			

Grand Total Activity : 8.729E+01 8.770E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-11
Acquisition date : 10-DEC-2011 15:23:33

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	5.027E-01	2.362E+01	2.362E+01	12.20	OK
	Final Mean for 1 Valid Peaks = 2.362E+01+/- 2.882E+00 (12.20%)						
TL-208	583.14	30.22*	1.029E+00	1.103E+00	1.103E+00	29.23	OK
	860.37	4.48	7.505E-01	----- Line Not Found		-----	Absent
	2614.66	35.85	3.563E-01	1.222E+00	1.222E+00	25.69	OK
	Final Mean for 2 Valid Peaks = 1.164E+00+/- 2.248E-01 (19.32%)						
PB-210	46.50	4.05*	2.613E+00	5.164E+00	5.178E+00	33.24	OK
	Final Mean for 1 Valid Peaks = 5.178E+00+/- 1.721E+00 (33.24%)						
BI-212	727.17	11.80*	8.597E-01	9.939E-01	9.939E-01	65.32	OK
	1620.62	2.75	4.684E-01	----- Line Not Found		-----	Absent
	Final Mean for 1 Valid Peaks = 9.939E-01+/- 6.492E-01 (65.32%)						
PB-212	238.63	44.60*	2.000E+00	1.392E+00	1.392E+00	14.50	OK
	300.09	3.41	1.716E+00	2.483E+00	2.483E+00	64.75	OK
	Final Mean for 2 Valid Peaks = 1.409E+00+/- 2.003E-01 (14.22%)						
BI-214	609.31	46.30*	9.927E-01	5.636E+00	5.636E+00	12.12	OK
	1120.29	15.10	6.104E-01	6.585E+00	6.585E+00	18.51	OK
	1764.49	15.80	4.432E-01	6.198E+00	6.198E+00	16.11	OK
	2204.22	4.98	3.885E-01	5.700E+00	5.700E+00	27.38	OK
	Final Mean for 4 Valid Peaks = 5.927E+00+/- 4.863E-01 (8.20%)						
PB-214	295.21	19.19	1.736E+00	6.073E+00	6.073E+00	11.70	OK
	351.92	37.19*	1.529E+00	5.881E+00	5.881E+00	10.77	OK
	Final Mean for 2 Valid Peaks = 5.966E+00+/- 4.728E-01 (7.93%)						
RA-224	240.98	3.95*	1.987E+00	1.300E+01	1.300E+01	17.52	OK
	Final Mean for 1 Valid Peaks = 1.300E+01+/- 2.278E+00 (17.52%)						
RA-226	186.21	3.28*	2.308E+00	1.393E+01	1.393E+01	184.05	OK
	Final Mean for 1 Valid Peaks = 1.393E+01+/- 2.565E+01 (184.05%)						
AC-228	338.32	11.40	1.575E+00	1.391E+00	1.391E+00	51.02	OK
	911.07	27.70*	7.170E-01	1.046E+00	1.046E+00	39.53	OK
	969.11	16.60	6.829E-01	1.211E+00	1.211E+00	39.90	OK
	Final Mean for 3 Valid Peaks = 1.161E+00+/- 2.873E-01 (24.75%)						

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Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
TH-234	63.29	3.80*	2.884E+00	6.565E+00	6.565E+00	41.45	OK

Final Mean for 1 Valid Peaks = 6.565E+00+/- 2.721E+00 (41.45%)

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CD-109	88.03	3.72*	2.931E+00	5.917E+00	6.203E+00	30.76	OK

Final Mean for 1 Valid Peaks = 6.203E+00+/- 1.908E+00 (30.76%)

SN-126	87.57	37.00*	2.932E+00	5.946E-01	5.946E-01	30.17	OK

Final Mean for 1 Valid Peaks = 5.946E-01+/- 1.794E-01 (30.17%)

CE-141	145.44	48.40*	2.589E+00	1.205E-01	2.368E-01	106.03	OK

Final Mean for 1 Valid Peaks = 2.368E-01+/- 2.511E-01 (106.03%)

NP-237	86.50	12.60*	2.935E+00	1.745E+00	1.745E+00	30.13	OK

Final Mean for 1 Valid Peaks = 1.745E+00+/- 5.256E-01 (30.13%)

Flag: "*" = Keyline

Sample ID : 1111065-11 Acquisition date : 10-DEC-2011 15:23:33

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.362E+01	2.882E+00	9.634E-01	8.169E-02	24.521
CD-109	6.203E+00	1.908E+00	2.354E+00	2.733E-01	2.636
SN-126	5.946E-01	1.794E-01	2.255E-01	2.242E-02	2.636
CE-141	2.368E-01	2.511E-01	3.074E-01	7.698E-02	0.770
TL-208	1.164E+00	2.248E-01	2.822E-01	2.610E-02	4.124
PB-210	5.178E+00	1.721E+00	1.967E+00	1.518E-01	2.633
BI-212	9.939E-01	6.492E-01	7.631E-01	6.974E-02	1.302
PB-212	1.409E+00	2.003E-01	1.750E-01	1.433E-02	8.050
BI-214	5.927E+00	4.863E-01	1.801E-01	1.675E-02	32.903
PB-214	5.966E+00	4.728E-01	2.385E-01	1.973E-02	25.011
RA-224	1.300E+01	2.278E+00	1.989E+00	1.629E-01	6.536
RA-226	1.393E+01	2.565E+01	2.617E+00	4.792E+00	5.324
AC-228	1.161E+00	2.873E-01	4.120E-01	3.274E-02	2.817
TH-234	6.565E+00	2.721E+00	2.304E+00	1.707E-01	2.850
NP-237	1.745E+00	5.256E-01	6.614E-01	6.492E-02	2.638

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	-1.451E-01		6.852E-01	1.205E+00	1.062E-01	-0.120
NA-22	-8.495E-02		7.119E-02	1.085E-01	8.881E-03	-0.783
AL-26	5.654E-03		4.280E-02	8.088E-02	6.460E-03	0.070
TI-44	9.492E-03		7.372E-02	9.953E-02	7.798E-03	0.095
SC-46	2.711E-02		7.416E-02	1.346E-01	1.077E-02	0.201
V-48	3.206E-01	+	1.360E-01	4.039E-01	3.264E-02	0.794
CR-51	4.890E-01		1.144E+00	1.881E+00	1.640E-01	0.260
MN-54	4.118E-02		6.842E-02	1.143E-01	9.699E-03	0.360
CO-56	-2.522E-04		8.229E-02	1.301E-01	1.091E-02	-0.002
CO-57	-4.282E-02		5.786E-02	9.239E-02	8.918E-03	-0.463
CO-58	-5.241E-02		7.397E-02	1.232E-01	1.070E-02	-0.425
FE-59	9.713E-03		1.943E-01	3.408E-01	3.039E-02	0.029
CO-60	2.300E-02		6.605E-02	1.192E-01	9.744E-03	0.193
ZN-65	1.060E-01		1.616E-01	2.698E-01	2.211E-02	0.393
SE-75	7.247E-02		1.038E-01	1.434E-01	1.177E-02	0.505
RB-82	-6.275E-01		1.317E+00	1.521E+00	1.353E-01	-0.412
RB-83	-2.716E-02		1.404E-01	2.216E-01	3.516E-02	-0.123
KR-85	2.811E+01		1.291E+01	2.464E+01	2.219E+00	1.141
SR-85	1.714E-01		7.872E-02	1.502E-01	1.353E-02	1.141
Y-88	1.641E-05		6.000E-02	1.040E-01	8.265E-03	0.000
NB-93M	-4.748E+00		1.242E+00	5.756E-02	1.281E-02	-82.484
NB-94	9.074E-03		6.400E-02	1.025E-01	8.381E-03	0.089
NB-95	3.464E-01		1.297E-01	2.524E-01	2.261E-02	1.373
ZR-95	-1.164E-01		1.363E-01	2.247E-01	2.211E-02	-0.518
RU-103	1.458E-02		8.364E-02	1.512E-01	2.169E-02	0.096
RU-106	2.886E-01		4.988E-01	9.224E-01	1.275E-01	0.313
AG-108M	-4.066E-02		6.798E-02	1.014E-01	9.286E-03	-0.401
AG-110M	-1.382E-02		6.586E-02	1.029E-01	9.605E-03	-0.134

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
SN-113	4.344E-02		9.284E-02	1.535E-01	1.302E-02	0.283
TE123M	-2.824E-03		7.448E-02	1.117E-01	9.247E-03	-0.025
SB-124	-5.722E-02		8.501E-02	1.273E-01	1.182E-02	-0.450
I-125	-2.839E-01		1.103E+00	1.843E+00	1.672E-01	-0.154
SB-125	6.961E-02		1.690E-01	3.059E-01	2.649E-02	0.228
SB-126	3.599E-01		6.218E-01	1.043E+00	9.557E-02	0.345
I-129	-3.730E-02		9.824E-02	1.639E-01	1.721E-02	-0.227
I-131	5.832E-01		8.271E-01	1.520E+00	1.256E-01	0.384
BA-133	3.526E-01		1.068E-01	1.793E-01	2.326E-02	1.967
CS-134	1.793E-02		6.158E-02	1.002E-01	9.329E-03	0.179
CS-135	4.057E-01		3.168E-01	5.036E-01	4.098E-02	0.806
CS-136	8.143E-02		3.750E-01	6.765E-01	5.705E-02	0.120
CS-137	-1.283E-02		6.919E-02	1.081E-01	1.011E-02	-0.119
LA-138	3.210E-02		7.436E-02	1.417E-01	1.164E-02	0.227
CE-139	-1.857E-02		7.093E-02	1.144E-01	9.148E-03	-0.162
BA-140	-7.786E-01		1.042E+00	1.711E+00	5.694E-01	-0.455
LA-140	4.881E-01		2.132E-01	5.450E-01	4.471E-02	0.896
CE-144	-3.360E-01		4.730E-01	7.545E-01	6.973E-02	-0.445
PM-144	-1.633E-02		5.643E-02	9.788E-02	9.067E-03	-0.167
PM-145	-2.885E-01		2.942E-01	3.650E-01	2.377E-01	-0.790
PM-146	7.438E-02		1.199E-01	2.015E-01	1.747E-02	0.369
ND-147	1.582E+00		2.559E+00	4.726E+00	4.291E-01	0.335
EU-152	9.608E-01	+	5.190E-01	9.321E-01	9.870E-02	1.031
GD-153	-2.017E-01		2.199E-01	3.502E-01	3.426E-02	-0.576
EU-154	-2.353E-01		1.972E-01	3.005E-01	2.460E-02	-0.783
EU-155	7.201E-01	+	2.169E-01	3.357E-01	3.295E-02	2.145
EU-156	-2.029E+00		2.268E+00	3.636E+00	8.312E-01	-0.558
HO-166M	-4.203E-02		9.314E-02	1.597E-01	1.469E-02	-0.263
HF-172	-6.319E-02		4.306E-01	7.019E-01	6.678E-02	-0.090
LU-172	-9.153E-01		2.689E+00	4.569E+00	3.737E-01	-0.200
LU-173	3.919E-01		2.498E-01	4.272E-01	3.472E-02	0.917
HF-175	-5.175E-03		1.024E-01	1.314E-01	1.087E-02	-0.039
LU-176	-3.423E-02		6.575E-02	8.119E-02	6.663E-03	-0.422
TA-182	3.454E+00	+	6.395E-01	9.452E-01	7.737E-02	3.654
IR-192	-9.633E-02		1.399E-01	2.122E-01	1.859E-02	-0.454
HG-203	1.241E-02		1.103E-01	1.648E-01	1.377E-02	0.075
BI-207	5.289E-03		5.109E-02	9.125E-02	8.407E-03	0.058
BI-210M	6.308E-02		1.265E-01	1.709E-01	1.394E-02	0.369
PB-211	1.527E-01		1.745E+00	3.108E+00	2.585E-01	0.049
RN-219	8.257E-01		7.545E-01	1.397E+00	1.158E-01	0.591
RA-223	-5.114E-01		1.420E+00	2.049E+00	1.690E-01	-0.250
RA-225	-2.495E-01		7.349E-01	1.128E+00	9.437E-02	-0.221
TH-227	1.427E+00		5.247E-01	8.497E-01	6.958E-02	1.680
TH-230	4.564E+00		1.649E+01	2.535E+01	1.981E+00	0.180
PA-231	1.888E+00		2.407E+00	3.721E+00	3.049E-01	0.507
TH-231	8.024E-01		5.633E-01	9.679E-01	1.183E-01	0.829
PA-233	4.816E-02		3.082E-01	4.611E-01	1.028E-01	0.104
PA-234	6.203E-02		2.318E-01	3.823E-01	3.565E-02	0.162

Sample ID : 1111065-11 Acquisition date : 10-DEC-2011 15:23:33

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PA-234M	1.111E+01		7.446E+00	1.438E+01	1.165E+00	0.773
U-235	5.530E-01	+	5.781E-01	7.707E-01	1.359E-01	0.718
AM-241	2.235E-01		1.535E-01	2.447E-01	1.733E-02	0.913
AM-243	8.757E-01		1.366E-01	1.948E-01	1.658E-02	4.495
CM-243	8.405E-02		3.832E-01	5.759E-01	4.668E-02	0.146

Sample ID : 1111065-11 Acquisition date : 10-DEC-2011 15:23:33

Total number of lines in spectrum	74	
Number of unidentified lines	40	
Number of lines tentatively identified by NID	34	45.95%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.362E+01	2.362E+01	0.288E+01	12.20	
TL-208	1.41E+10Y	1.00	1.164E+00	1.164E+00	0.225E+00	19.32	
PB-210	22.26Y	1.00	5.164E+00	5.178E+00	1.721E+00	33.24	
BI-212	1.41E+10Y	1.00	9.939E-01	9.939E-01	6.492E-01	65.32	
PB-212	1.41E+10Y	1.00	1.409E+00	1.409E+00	0.200E+00	14.22	
BI-214	1602.00Y	1.00	5.927E+00	5.927E+00	0.486E+00	8.20	
PB-214	1602.00Y	1.00	5.966E+00	5.966E+00	0.473E+00	7.93	
RA-224	1.41E+10Y	1.00	1.300E+01	1.300E+01	0.228E+01	17.52	
RA-226	1602.00Y	1.00	1.393E+01	1.393E+01	2.565E+01	184.05	
AC-228	1.41E+10Y	1.00	1.161E+00	1.161E+00	0.287E+00	24.75	
TH-234	4.47E+09Y	1.00	6.565E+00	6.565E+00	2.721E+00	41.45	
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	Total Activity :		7.891E+01	7.892E+01			

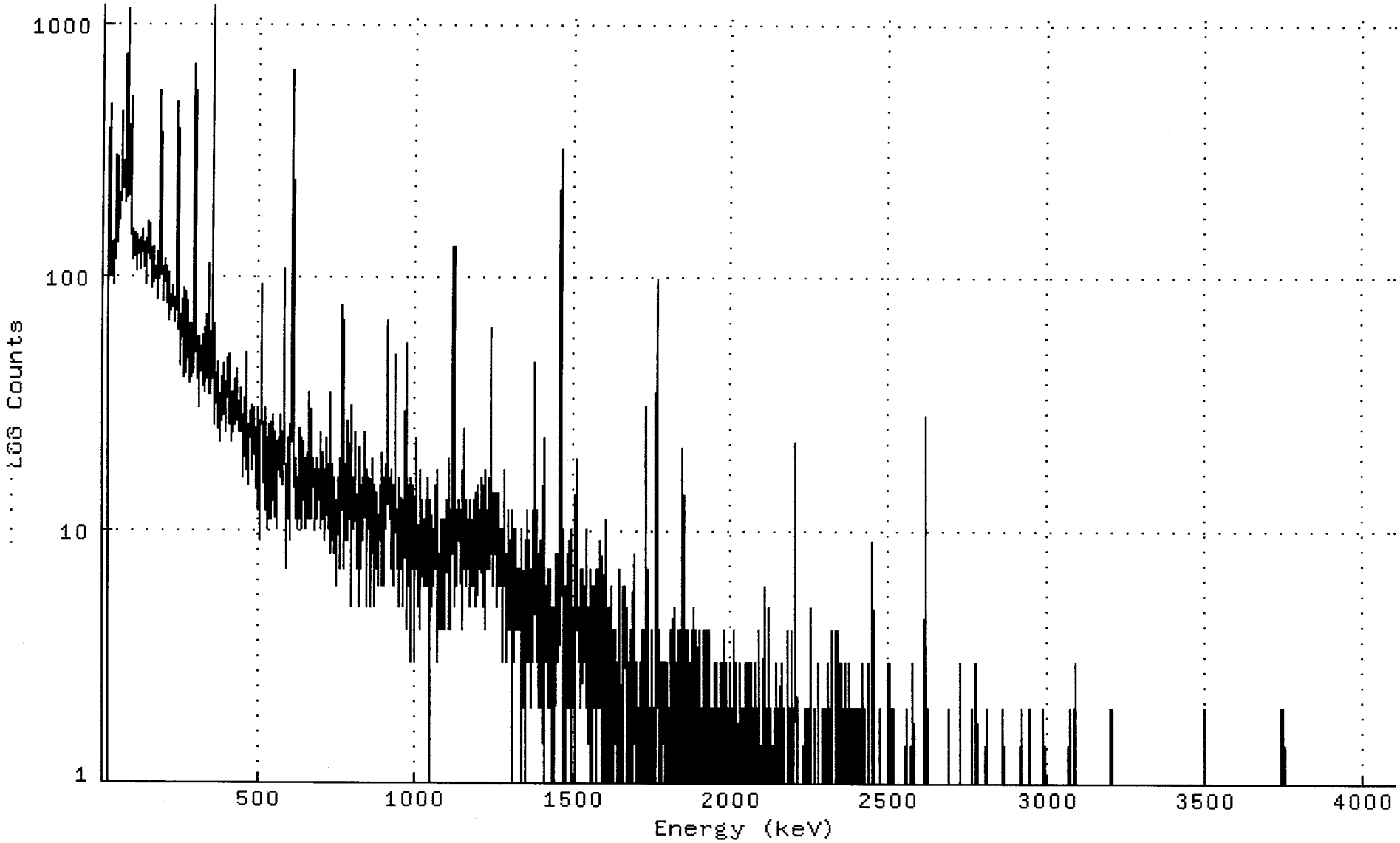
Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	5.917E+00	6.203E+00	1.908E+00	30.76	
SN-126	1.00E+05Y	1.00	5.946E-01	5.946E-01	1.794E-01	30.17	
CE-141	32.50D	1.96	1.205E-01	2.368E-01	2.511E-01	106.03	
NP-237	2.14E+06Y	1.00	1.745E+00	1.745E+00	0.526E+00	30.13	
			---	---			
	Total Activity :		8.377E+00	8.780E+00			

Grand Total Activity : 8.729E+01 8.770E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106511_GE1_GAS1102_172257.CNF;1
Title :
Sample Title: DY2-48-31-111109
Start Time: 10-DEC-2011 15:23 Sample Time: 9-NOV-2011 00:00: Energy Offset: 3.84457E-01
Real Time : 0 01:00:01.97 Sample ID : 1111065-11 Energy Slope : 9.99792E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106511_GE1_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	0	0	0
17:	0	0	82	149	140	306	475	355
25:	108	101	111	101	101	115	117	135
33:	112	121	96	116	127	92	126	137
41:	128	115	138	138	147	299	290	136
49:	136	189	147	182	210	166	176	179
57:	167	175	218	220	225	262	444	350
65:	231	230	248	235	262	224	231	195
73:	276	464	744	459	1131	514	264	240
81:	264	206	223	305	233	207	394	318
89:	199	290	230	352	513	275	149	137
97:	133	153	151	151	116	121	134	131
105:	146	148	122	126	122	104	144	124
113:	145	130	134	123	137	125	123	123
121:	125	133	106	126	139	134	140	139
129:	132	152	137	109	136	120	116	123
137:	127	109	117	118	93	125	123	163
145:	134	127	123	122	125	115	118	121
153:	142	160	136	123	117	90	127	112
161:	114	117	131	126	94	96	109	105
169:	107	108	99	101	98	96	107	124
177:	80	100	92	99	127	100	106	116
185:	200	539	256	105	111	118	112	110
193:	89	79	87	90	108	92	108	98
201:	102	115	97	101	87	102	80	78
209:	108	108	84	75	102	67	98	81
217:	81	75	73	80	84	84	75	91
225:	85	85	77	83	68	82	66	69
233:	67	77	73	96	101	285	483	122
241:	206	382	200	82	66	72	51	44
249:	56	70	62	59	66	57	57	73
257:	61	74	90	74	40	61	48	52
265:	41	44	48	54	75	87	73	62
273:	62	57	70	47	55	65	56	49
281:	53	55	38	64	60	55	45	40
289:	52	41	54	52	60	137	683	420
297:	82	55	68	99	52	47	57	49
305:	46	46	43	35	51	57	54	30
313:	42	44	49	42	47	47	47	58
321:	48	49	48	44	37	35	53	62
329:	48	49	38	39	55	54	48	42
337:	45	111	101	53	47	40	34	49
345:	34	52	49	41	58	62	403	1184
353:	376	39	41	64	47	43	26	34
361:	36	35	41	37	38	34	32	37
369:	26	32	46	37	25	27	34	22
377:	26	29	30	27	33	27	27	39
385:	35	36	45	41	45	29	28	35
393:	38	31	33	24	30	36	33	34
401:	41	43	47	38	41	35	26	30
409:	49	42	29	22	23	33	31	35
417:	26	35	33	29	26	24	27	39
425:	35	35	28	30	43	28	33	33

433:	27	29	29	30	32	25	26	24
441:	25	29	27	26	36	24	28	24
449:	17	25	16	18	25	21	33	31
457:	27	23	21	17	20	39	50	28
465:	27	15	25	18	22	22	26	25
473:	25	29	25	23	24	31	17	29
481:	27	29	19	21	25	20	30	22
489:	20	19	17	19	17	25	17	12
497:	30	16	19	28	20	9	27	22
505:	18	17	22	29	27	78	93	53
513:	30	23	22	21	25	19	17	13
521:	30	12	24	19	18	21	10	22
529:	19	23	20	19	20	26	17	11
537:	20	23	11	14	18	21	25	28
545:	13	17	23	22	14	23	24	21
553:	18	19	22	12	10	12	17	17
561:	22	20	19	18	19	23	19	17
569:	19	28	18	20	20	16	22	17
577:	24	16	15	15	23	43	107	82
585:	20	18	18	17	18	16	17	7
593:	18	11	21	17	14	23	21	17
601:	12	9	18	26	22	22	27	120
609:	647	610	96	29	36	32	18	15
617:	14	11	15	15	19	18	13	13
625:	14	14	10	16	12	13	21	11
633:	25	11	15	16	13	10	23	17
641:	17	18	18	22	18	13	18	19
649:	15	12	16	19	10	18	11	20
657:	13	16	17	11	16	21	15	18
665:	35	26	16	11	17	15	14	15
673:	17	18	18	19	16	16	11	15
681:	10	17	10	12	19	11	16	17
689:	12	17	17	15	16	16	13	15
697:	18	14	10	11	24	12	20	19
705:	16	11	17	17	15	13	11	13
713:	9	14	12	13	16	13	23	14
721:	12	13	15	10	18	16	34	35
729:	12	11	8	12	10	16	18	15
737:	11	10	8	12	12	16	8	9
745:	9	8	13	10	9	6	15	15
753:	11	11	15	16	7	9	11	13
761:	19	18	18	13	12	19	28	76
769:	58	23	17	13	16	7	12	9
777:	10	11	9	18	9	12	21	9
785:	19	27	18	17	19	14	11	15
793:	11	14	31	22	5	15	14	13
801:	15	13	16	10	13	24	13	11
809:	12	14	8	7	11	10	8	12
817:	16	11	15	14	13	21	5	11
825:	14	12	15	7	9	9	14	13
833:	14	11	16	16	15	22	20	20
841:	24	5	13	7	17	10	9	11
849:	16	12	10	12	13	15	13	13
857:	12	5	14	18	17	19	13	8
865:	15	5	13	13	15	12	13	14
873:	8	7	10	12	11	10	10	6
881:	9	10	11	12	15	15	12	9
889:	10	16	7	20	9	6	10	6
897:	16	12	8	9	11	10	18	14
905:	14	15	12	13	14	13	67	61

913:	23	16	13	13	12	16	15	11
921:	17	7	12	7	10	10	6	15
929:	8	11	12	11	13	49	21	16
937:	12	13	7	12	10	9	12	12
945:	9	5	8	15	9	16	11	11
953:	12	7	13	10	11	12	12	13
961:	11	5	12	14	24	11	9	16
969:	54	30	8	4	11	13	9	8
977:	9	10	15	6	6	3	13	11
985:	16	9	10	10	7	9	15	9
993:	11	3	6	9	13	13	14	19
1001:	23	18	12	7	11	10	9	10
1009:	8	5	8	7	11	4	17	9
1017:	6	7	12	11	12	13	8	6
1025:	11	10	10	6	6	7	12	8
1033:	13	6	8	6	16	8	13	11
1041:	10	7	6	6	1	10	13	10
1049:	5	10	6	9	9	9	10	8
1057:	6	10	6	11	10	13	15	8
1065:	7	8	12	3	10	17	9	6
1073:	7	8	8	4	7	9	10	11
1081:	11	7	4	7	4	6	11	8
1089:	6	8	4	9	7	11	11	11
1097:	8	13	13	9	9	11	4	16
1105:	13	19	12	11	9	9	10	4
1113:	12	8	8	15	13	16	36	131
1121:	130	40	13	13	15	5	12	6
1129:	11	12	7	9	9	10	13	12
1137:	9	13	11	9	11	8	8	9
1145:	4	10	17	7	8	7	9	7
1153:	8	9	24	25	6	11	11	8
1161:	13	12	10	7	11	11	8	10
1169:	10	8	13	11	5	7	11	10
1177:	7	6	8	10	7	7	11	6
1185:	11	13	11	14	9	12	13	11
1193:	5	6	8	8	15	12	12	12
1201:	7	11	12	8	8	10	9	16
1209:	15	13	9	5	9	7	9	9
1217:	15	9	4	17	14	8	9	11
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1233:	12	15	12	8	30	62	39	14
1241:	12	10	10	7	6	11	14	12
1249:	13	14	10	8	11	14	8	5
1257:	6	11	10	7	11	9	6	14
1265:	7	9	10	8	7	6	7	7
1273:	3	5	10	6	7	7	11	13
1281:	17	6	9	6	6	7	3	8
1289:	8	6	8	4	12	11	8	9
1297:	6	6	7	4	9	4	6	5
1305:	6	1	12	7	10	3	7	7
1313:	8	6	8	8	4	10	7	7
1321:	4	6	5	5	7	7	7	6
1329:	7	4	6	5	4	7	0	10
1337:	6	5	2	6	4	4	6	6
1345:	8	9	6	0	6	8	4	12
1353:	8	8	3	7	6	9	7	3
1361:	6	5	2	4	5	4	7	6
1369:	5	7	8	3	3	3	12	7
1377:	28	46	25	8	7	3	3	4
1385:	12	11	6	6	4	8	3	3

1393:	2	8	3	2	9	3	6	6
1401:	12	15	10	6	2	1	12	14
1409:	23	9	3	3	3	6	5	6
1417:	5	3	7	4	4	2	4	5
1425:	6	4	7	2	4	5	2	3
1433:	5	1	5	5	5	4	1	2
1441:	1	4	5	4	7	5	8	6
1449:	3	3	6	8	3	4	4	4
1457:	5	9	36	151	318	153	40	13
1465:	10	6	5	10	2	2	1	8
1473:	4	3	1	6	5	5	4	2
1481:	3	5	8	5	2	4	5	8
1489:	5	9	7	1	6	3	10	7
1497:	3	3	2	5	2	3	7	5
1505:	7	4	0	10	19	13	6	6
1513:	4	4	5	4	3	5	3	3
1521:	7	2	5	2	6	2	3	3
1529:	7	5	4	6	4	3	6	5
1537:	4	3	10	9	4	5	2	3
1545:	2	2	5	2	2	5	2	0
1553:	7	5	4	1	6	4	1	4
1561:	5	5	6	6	5	3	3	2
1569:	4	3	1	7	1	0	3	2
1577:	2	3	3	4	7	4	6	6
1585:	2	3	9	7	6	1	3	7
1593:	3	4	3	4	0	2	4	11
1601:	3	1	4	2	2	1	2	1
1609:	3	3	5	1	1	5	0	2
1617:	3	5	2	4	6	4	1	1
1625:	2	4	1	1	3	2	4	2
1633:	4	4	2	1	0	2	3	1
1641:	2	3	0	7	1	2	1	2
1649:	2	2	2	2	0	2	3	1
1657:	0	2	3	6	4	6	3	3
1665:	3	4	2	1	5	1	1	0
1673:	1	3	3	2	1	1	2	2
1681:	1	4	1	3	5	1	2	1
1689:	4	4	8	7	2	4	2	2
1697:	1	0	3	3	1	3	1	2
1705:	2	0	2	0	0	1	3	3
1713:	2	2	1	4	0	1	1	1
1721:	3	1	1	1	1	4	4	7
1729:	16	31	10	1	2	7	1	3
1737:	3	2	0	1	2	2	1	2
1745:	1	0	2	4	3	0	1	1
1753:	0	0	1	2	2	0	1	2
1761:	2	4	17	71	98	40	15	2
1769:	2	4	1	0	1	3	1	1
1777:	1	2	1	1	3	3	2	3
1785:	2	3	2	1	3	1	1	3
1793:	2	0	2	0	0	3	1	1
1801:	0	2	1	1	0	1	3	4
1809:	0	2	3	0	1	4	1	2
1817:	4	5	1	1	1	2	1	0
1825:	2	0	2	3	2	2	4	2
1833:	1	2	2	1	1	3	4	2
1841:	0	1	1	3	2	6	15	21
1849:	9	3	2	2	1	3	1	0
1857:	0	2	4	1	2	0	4	0
1865:	4	3	3	1	2	2	0	2

1873:	1	4	1	3	0	3	1	0
1881:	0	5	2	0	1	4	2	0
1889:	1	0	3	0	2	1	1	3
1897:	4	1	2	1	2	1	0	2
1905:	0	1	0	2	2	4	0	3
1913:	1	3	0	1	4	2	0	1
1921:	0	0	1	3	0	0	4	0
1929:	4	0	0	1	3	1	0	1
1937:	1	0	2	1	2	0	2	1
1945:	1	2	2	3	1	1	1	0
1953:	0	2	1	3	1	0	0	2
1961:	1	1	1	0	3	1	2	2
1969:	2	2	2	1	3	1	1	2
1977:	1	3	1	4	1	1	0	0
1985:	1	3	2	0	0	1	2	1
1993:	0	0	2	1	3	0	1	0
2001:	0	2	0	1	0	0	1	1
2009:	0	2	4	1	1	0	0	1
2017:	2	3	1	1	0	0	1	0
2025:	1	3	1	0	1	1	1	1
2033:	1	1	2	1	0	2	2	0
2041:	2	2	1	3	3	1	2	1
2049:	1	1	3	1	3	1	0	1
2057:	0	0	1	3	1	2	3	0
2065:	2	0	1	0	2	0	0	1
2073:	1	3	0	0	0	1	2	1
2081:	1	1	1	1	4	0	0	3
2089:	0	2	0	0	1	0	1	0
2097:	1	2	2	0	1	1	2	5
2105:	2	6	0	5	3	0	2	0
2113:	1	0	1	0	3	5	5	4
2121:	2	2	1	0	1	1	2	1
2129:	1	1	0	1	1	2	0	2
2137:	0	1	1	0	1	1	0	3
2145:	0	2	0	0	1	0	0	0
2153:	1	0	0	0	2	3	2	0
2161:	1	1	0	1	2	1	1	2
2169:	1	1	1	1	0	0	1	1
2177:	0	2	0	0	4	0	0	1
2185:	2	2	0	0	1	0	3	0
2193:	2	4	1	1	2	0	0	0
2201:	3	5	11	22	15	5	0	0
2209:	0	2	1	1	1	1	1	0
2217:	0	0	0	0	0	1	0	0
2225:	1	0	0	0	1	1	2	1
2233:	0	0	1	1	1	0	2	1
2241:	0	2	1	1	0	0	1	2
2249:	1	1	0	5	2	0	1	1
2257:	0	0	1	0	1	2	1	1
2265:	2	0	0	0	0	1	0	0
2273:	0	2	3	3	0	0	0	1
2281:	1	1	0	1	1	1	1	2
2289:	0	1	2	0	2	2	2	2
2297:	2	2	0	1	2	1	0	1
2305:	2	1	0	2	3	0	1	1
2313:	2	1	0	1	1	0	2	4
2321:	1	0	0	1	0	1	0	1
2329:	0	0	4	2	1	1	0	1
2337:	1	4	0	1	1	2	0	1
2345:	3	1	1	3	0	0	1	2

2353:	1	2	1	2	1	0	0	0
2361:	0	3	1	0	0	2	1	1
2369:	0	1	1	2	3	2	2	0
2377:	1	0	2	1	2	0	1	1
2385:	0	0	1	2	2	0	0	0
2393:	1	1	1	2	0	1	1	0
2401:	1	1	0	2	1	0	0	1
2409:	2	0	2	0	3	0	1	0
2417:	0	0	2	0	1	0	2	1
2425:	1	1	0	1	0	0	1	0
2433:	0	0	3	0	1	1	0	0
2441:	0	0	0	0	0	0	9	6
2449:	4	2	1	1	0	0	0	0
2457:	0	1	1	0	0	0	0	0
2465:	1	0	0	0	0	2	1	0
2473:	1	1	0	0	1	0	0	0
2481:	0	0	0	1	0	0	1	1
2489:	0	1	0	1	0	0	1	3
2497:	0	1	1	3	0	1	0	0
2505:	1	2	1	0	0	0	0	1
2513:	2	0	0	0	0	0	0	0
2521:	0	1	1	0	1	1	1	0
2529:	0	1	0	0	1	0	0	0
2537:	0	0	1	0	0	0	0	0
2545:	0	1	0	0	0	0	0	0
2553:	2	0	1	0	0	0	0	0
2561:	0	0	0	0	0	0	0	0
2569:	0	1	2	1	0	0	0	3
2577:	1	0	0	0	0	0	1	1
2585:	0	1	0	0	0	1	1	0
2593:	0	0	0	1	0	0	1	0
2601:	0	0	1	0	0	0	0	0
2609:	1	0	1	2	10	22	28	21
2617:	8	1	1	0	0	2	0	0
2625:	0	1	0	0	0	0	0	0
2633:	0	0	1	0	0	0	1	0
2641:	0	0	0	1	1	1	0	0
2649:	0	0	0	0	0	0	0	0
2657:	0	0	0	0	1	0	1	0
2665:	0	1	1	0	1	0	0	0
2673:	0	0	1	0	0	0	0	1
2681:	0	0	1	0	0	0	0	0
2689:	2	0	0	0	0	0	1	0
2697:	1	0	0	0	0	0	1	0
2705:	1	0	1	0	0	0	0	1
2713:	0	0	0	0	0	1	0	1
2721:	0	1	0	0	3	2	0	0
2729:	1	0	0	0	0	1	1	1
2737:	0	1	1	0	1	0	0	0
2745:	0	0	0	0	1	0	0	0
2753:	1	1	0	0	1	0	0	0
2761:	0	0	2	0	1	0	0	0
2769:	0	0	0	0	0	0	0	3
2777:	0	0	0	0	1	0	0	1
2785:	0	0	0	0	0	0	0	0
2793:	0	0	1	0	1	1	0	0
2801:	0	0	0	1	0	1	2	2
2809:	0	1	0	0	0	0	0	0
2817:	0	0	0	0	0	0	1	0
2825:	1	0	0	0	1	0	1	0

2833:	1	0	0	0	0	1	0	1
2841:	0	0	0	0	1	0	0	0
2849:	0	0	0	1	1	0	0	1
2857:	2	0	0	0	2	0	0	0
2865:	0	0	0	0	0	0	0	0
2873:	0	0	1	1	0	0	0	0
2881:	0	0	0	0	0	0	1	1
2889:	0	0	0	1	0	0	0	0
2897:	0	0	1	0	1	0	0	0
2905:	1	0	1	0	0	0	0	0
2913:	0	0	0	1	2	0	0	0
2921:	0	0	1	0	0	0	0	1
2929:	0	0	0	0	1	0	0	0
2937:	1	0	1	0	0	0	0	2
2945:	0	0	0	1	1	0	1	1
2953:	0	0	0	1	0	0	0	0
2961:	0	0	0	1	0	0	0	1
2969:	0	1	0	0	0	0	0	0
2977:	0	0	0	0	0	0	0	0
2985:	0	1	0	2	0	0	0	0
2993:	0	0	0	0	0	0	0	1
3001:	0	0	0	0	0	1	1	0
3009:	0	1	0	0	0	1	0	0
3017:	0	0	0	1	0	0	0	0
3025:	0	0	0	0	0	0	0	0
3033:	0	0	0	0	0	0	0	0
3041:	0	0	1	1	0	0	0	0
3049:	0	0	0	1	0	0	0	1
3057:	0	0	1	0	0	1	1	1
3065:	0	0	0	2	0	1	0	0
3073:	0	0	0	0	0	0	0	0
3081:	2	0	0	1	0	3	0	0
3089:	0	0	0	0	0	0	0	0
3097:	0	0	0	0	0	0	0	0
3105:	0	0	1	0	0	0	0	0
3113:	0	0	0	0	0	0	0	1
3121:	0	0	1	0	0	0	1	0
3129:	0	0	1	0	0	0	1	0
3137:	0	0	0	0	0	0	0	0
3145:	1	0	0	1	0	0	0	0
3153:	0	1	0	0	0	0	0	0
3161:	0	0	0	0	0	0	0	0
3169:	0	0	0	0	0	0	0	0
3177:	0	0	0	1	0	0	0	0
3185:	0	1	1	0	0	0	0	0
3193:	0	0	0	1	1	2	0	0
3201:	1	0	2	0	1	0	0	1
3209:	0	0	0	0	0	0	0	0
3217:	1	1	0	1	0	1	0	0
3225:	0	0	0	0	0	1	0	0
3233:	0	0	0	0	0	0	1	0
3241:	0	0	0	0	0	0	0	0
3249:	0	0	0	0	0	0	0	0
3257:	0	0	0	0	1	0	0	0
3265:	0	0	0	1	0	0	0	0
3273:	0	0	0	0	0	0	0	0
3281:	0	1	0	0	0	0	0	0
3289:	0	0	0	1	0	0	0	0
3297:	0	0	0	0	0	0	1	1
3305:	0	1	0	0	0	1	0	1

3313:	0	0	0	0	0	0	0	0
3321:	0	0	0	0	0	0	0	0
3329:	0	0	0	0	0	0	0	0
3337:	0	0	0	0	0	0	0	0
3345:	0	0	0	1	0	0	0	0
3353:	0	0	0	0	0	0	0	0
3361:	0	0	0	0	1	0	1	0
3369:	0	0	0	0	0	0	0	0
3377:	1	1	0	0	0	0	0	1
3385:	0	1	0	0	0	0	0	0
3393:	0	0	0	1	0	0	0	0
3401:	0	1	0	0	0	0	0	0
3409:	1	0	0	0	0	0	0	0
3417:	0	0	0	0	0	0	0	0
3425:	0	0	0	0	0	0	0	0
3433:	1	0	0	0	1	0	0	0
3441:	0	0	1	0	1	1	0	0
3449:	0	0	0	0	0	1	0	1
3457:	0	1	0	0	0	0	0	0
3465:	0	0	0	0	0	0	1	0
3473:	0	0	0	1	0	0	0	1
3481:	0	0	0	0	0	1	0	1
3489:	0	0	0	0	0	0	0	0
3497:	2	0	1	0	0	0	0	0
3505:	1	0	0	0	0	0	0	0
3513:	0	0	0	0	1	0	0	0
3521:	0	0	0	0	1	0	0	0
3529:	0	0	0	0	1	1	0	1
3537:	1	0	0	0	0	0	0	0
3545:	0	1	0	0	1	0	1	1
3553:	0	0	0	0	0	0	0	0
3561:	0	0	0	0	0	0	0	0
3569:	1	0	1	0	0	0	0	0
3577:	1	0	0	0	0	0	0	0
3585:	0	0	1	1	0	0	1	0
3593:	0	0	0	0	0	0	0	1
3601:	0	0	0	0	1	1	0	0
3609:	0	0	0	1	0	1	0	0
3617:	0	0	0	0	0	0	0	1
3625:	0	1	0	0	0	0	0	0
3633:	0	0	0	0	0	0	0	0
3641:	0	1	0	0	0	0	0	1
3649:	0	1	0	0	0	0	0	0
3657:	0	0	0	0	0	0	1	0
3665:	1	1	0	0	0	0	0	0
3673:	0	0	0	1	0	0	0	1
3681:	1	0	0	0	0	0	0	0
3689:	0	0	0	0	0	0	0	0
3697:	0	0	0	0	0	0	0	1
3705:	0	0	0	0	1	0	0	0
3713:	0	0	0	0	0	0	1	0
3721:	0	0	0	0	0	0	0	0
3729:	0	0	0	0	0	0	0	0
3737:	0	2	1	0	0	0	0	0
3745:	1	0	2	0	0	0	0	0
3753:	0	0	0	1	0	0	0	0
3761:	0	0	0	0	0	1	0	0
3769:	0	0	0	0	0	0	0	0
3777:	0	0	0	0	0	0	0	0
3785:	0	0	0	0	0	0	0	0

3793:	0	0	0	0	0	0	0	0
3801:	0	0	0	0	0	0	0	0
3809:	1	0	0	0	0	0	0	0
3817:	0	0	0	0	0	0	0	0
3825:	0	0	0	1	1	0	0	0
3833:	0	0	0	1	0	0	0	0
3841:	0	0	1	0	0	0	0	0
3849:	0	0	0	1	0	0	0	0
3857:	0	0	0	0	1	0	0	0
3865:	0	0	0	0	0	0	0	1
3873:	0	0	0	0	0	0	1	0
3881:	0	0	0	0	1	0	0	0
3889:	1	0	0	0	0	0	0	0
3897:	0	0	0	0	0	0	0	0
3905:	1	0	1	0	0	0	0	0
3913:	0	0	0	0	0	1	0	0
3921:	0	1	0	1	0	0	0	0
3929:	1	0	0	0	1	0	0	0
3937:	0	0	1	0	0	0	1	0
3945:	0	0	0	0	0	0	0	0
3953:	1	0	0	1	0	0	0	0
3961:	0	0	0	0	0	1	0	0
3969:	0	0	0	0	0	0	0	1
3977:	0	0	0	0	0	0	0	0
3985:	0	0	0	0	1	0	0	1
3993:	0	0	0	0	0	0	1	1
4001:	0	1	0	0	0	0	0	0
4009:	0	0	0	0	0	0	0	0
4017:	0	1	0	0	0	1	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	0	0	0	0	0
4041:	0	0	0	0	0	0	0	0
4049:	0	0	0	0	0	0	0	0
4057:	0	0	1	0	0	0	0	0
4065:	0	1	0	0	0	0	0	0
4073:	1	0	1	0	0	0	0	0
4081:	0	0	0	0	0	0	0	0
4089:	0	1	0	0	0	1	0	0

Sample ID : 1111065-12 Acquisition date : 10-DEC-2011 15:24:31

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VAX/VMS Peak Search Report Generated 10-DEC-2011 16:24:48.50

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106512_GE2_GAS1102_172258.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-65-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 10-DEC-2011 15:24:31
Sample ID : 1111065-12 Sample Quantity : 3.35870E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE2 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:01.92 0.1%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	26.41	111	1179	5.04	26.35	23	6	99.6		TH-231
0	46.54*	419	1126	1.27	46.49	43	7	28.5		PB-210
0	53.78*	99	875	1.66	53.73	52	5	92.6		
0	63.26*	275	1409	1.84	63.22	60	6	45.2		TH-234
0	76.54*	2744	2698	3.43	76.50	71	11	8.3		
4	84.04	168	968	1.41	84.00	82	8	54.2	2.45E+01	TH-231
4	87.35*	400	1042	1.43	87.32	82	8	24.7		NP-237
										SN-126
										CD-109
0	93.45*	324	1187	1.23	93.41	91	6	37.0		
0	127.71	107	877	1.95	127.69	125	7	93.6		
0	153.73	92	758	2.08	153.72	151	6	97.1		
6	182.91	85	304	1.77	182.91	181	10	57.8	6.95E+00	LU-172
6	186.23*	823	543	1.72	186.23	181	10	11.2		RA-226
0	209.31	64	440	1.65	209.32	208	5	101.0		
1	236.13	66	254	1.70	236.15	235	12	66.5	2.76E+01	
1	238.95*	629	402	1.70	238.97	235	12	12.6		PB-212
1	242.00*	697	355	1.63	242.03	235	12	11.3		RA-224
0	270.99	143	660	2.85	271.02	266	10	69.1		LU-173
0	295.24*	1459	597	1.81	295.28	291	9	8.0		PB-214
0	338.31*	116	261	1.85	338.36	335	6	48.3		AC-228
0	351.98*	2412	352	1.37	352.04	348	8	4.9		PB-214
0	387.94	67	276	3.95	388.02	384	8	88.8		
0	411.11	55	233	3.39	411.20	408	7	96.1		
0	462.23*	62	150	2.99	462.33	459	7	71.2		
0	510.41*	83	242	2.85	510.53	506	11	80.4		
0	582.94*	253	154	1.91	583.09	577	10	22.5		TL-208
0	609.31*	1811	229	2.02	609.47	603	12	5.8		BI-214
0	665.52	35	100	1.93	665.70	663	6	96.4		
0	719.58	35	91	2.21	719.78	715	9	105.7		
0	726.97	62	113	1.60	727.17	724	8	63.8		BI-212
0	767.81	190	122	2.13	768.03	762	10	26.2		
0	785.94*	78	116	2.19	786.17	780	11	58.5		
0	794.83	67	84	1.64	795.06	791	9	55.0		
0	826.02	36	102	3.30	826.26	821	10	110.0		
0	837.94	46	105	2.58	838.18	835	9	86.4		

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Sample ID : 1111065-12 Acquisition date : 10-DEC-2011 15:24:31

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	860.30	27	88	2.18	860.56	857	8	126.4		TL-208
0	911.36*	135	77	2.13	911.63	908	9	29.6		AC-228
										LU-172
0	934.45	105	121	2.52	934.73	930	12	46.0		
0	950.99	25	54	1.70	951.27	947	7	104.3		
2	964.14	35	75	2.50	964.43	959	14	88.0	1.80E+00	
2	968.99	87	62	2.14	969.29	959	14	35.7		AC-228
0	999.77*	64	98	4.76	1000.08	994	13	69.7		PA-234M
0	1093.68	26	71	2.36	1094.02	1091	9	121.6		LU-172
0	1103.18	25	66	2.63	1103.52	1099	8	118.5		
0	1120.35*	395	95	2.17	1120.70	1116	11	14.0		BI-214
6	1155.30	49	58	3.80	1155.66	1152	17	58.0	3.25E+00	
6	1164.70	32	56	3.84	1165.07	1152	17	91.6		
0	1171.95*	37	59	4.07	1172.32	1169	8	81.4		
0	1238.16*	165	82	2.33	1238.55	1235	10	26.0		
3	1277.24	12	14	2.16	1277.65	1276	10	71.0	1.50E+00	
3	1280.99	49	55	2.91	1281.40	1276	10	62.9		
0	1378.37	64	71	1.96	1378.82	1374	10	54.8		
0	1400.39	40	26	2.62	1400.84	1397	8	54.6		
0	1408.11	37	58	2.34	1408.57	1405	10	82.7		
0	1460.65*	623	57	2.48	1461.13	1456	11	9.4		K-40
0	1509.32	61	37	2.55	1509.82	1505	11	46.7		
0	1582.23	19	19	2.43	1582.76	1579	7	89.7		
1	1725.66	9	3	2.65	1726.24	1725	13	60.4	1.50E+00	
1	1729.18	71	10	2.65	1729.76	1725	13	28.1		
0	1750.50	11	2	3.39	1751.09	1748	8	78.0		
0	1764.02*	330	20	2.75	1764.62	1757	14	12.6		BI-214
0	1838.65	11	4	2.75	1839.27	1835	8	84.6		
0	1847.05	51	3	3.53	1847.67	1843	10	30.2		
0	1871.94	12	12	1.31	1872.58	1868	10	125.6		
0	1919.57	6	1	2.38	1920.23	1918	5	97.5		
0	1962.53	11	6	1.66	1963.20	1959	9	106.3		
0	2102.92	11	9	2.00	2103.64	2099	9	115.4		
0	2117.54	37	0	2.79	2118.27	2113	10	32.9		
0	2136.91	7	4	1.91	2137.64	2133	8	124.5		
0	2203.59	70	14	3.33	2204.35	2199	12	32.2		BI-214
0	2285.21	8	5	6.17	2286.00	2281	9	125.4		
0	2446.61	39	3	2.84	2447.46	2442	12	36.8		
0	2614.21*	66	0	2.60	2615.12	2610	12	26.2		TL-208

Sample ID : 1111065-12 Acquisition date : 10-DEC-2011 15:24:31

Total number of lines in spectrum	72	
Number of unidentified lines	33	
Number of lines tentatively identified by NID	39	54.17%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.849E+01	2.849E+01	0.412E+01	14.46	
TL-208	1.41E+10Y	1.00	1.480E+00	1.480E+00	0.281E+00	19.01	
PB-210	22.26Y	1.00	1.050E+01	1.053E+01	0.316E+01	29.99	
BI-212	1.41E+10Y	1.00	1.530E+00	1.530E+00	0.987E+00	64.51	
PB-212	1.41E+10Y	1.00	1.734E+00	1.734E+00	0.270E+00	15.55	
BI-214	1602.00Y	1.00	1.020E+01	1.020E+01	0.081E+01	7.99	
PB-214	1602.00Y	1.00	1.062E+01	1.062E+01	0.086E+01	8.10	
RA-224	1.41E+10Y	1.00	2.186E+01	2.186E+01	0.318E+01	14.57	
RA-226	1602.00Y	1.00	2.671E+01	2.671E+01	4.902E+01	183.49	
AC-228	1.41E+10Y	1.00	1.769E+00	1.769E+00	0.526E+00	29.71	
PA-234M	4.47E+09Y	1.00	2.590E+01	2.590E+01	1.825E+01	70.45	
TH-234	4.47E+09Y	1.00	6.431E+00	6.431E+00	2.970E+00	46.18	
			---	---			
	Total Activity :		1.472E+02	1.473E+02			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	9.185E+00	9.630E+00	2.832E+00	29.41	
SN-126	1.00E+05Y	1.00	9.233E-01	9.233E-01	2.654E-01	28.75	
TH-231	7.04E+08Y	1.00	1.828E+00	1.828E+00	0.920E+00	50.34	
NP-237	2.14E+06Y	1.00	2.711E+00	2.711E+00	0.776E+00	28.61	
			---	---			
	Total Activity :		1.465E+01	1.509E+01			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
LU-172	6.70D	26.5	2.715E-01	7.185E+00	4.198E+00	58.42	
LU-173	1.37Y	1.04	9.077E-01	9.484E-01	6.608E-01	69.67	
			---	---			
	Total Activity :		1.179E+00	8.134E+00			

Grand Total Activity :	1.631E+02	1.705E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-12
Acquisition date : 10-DEC-2011 15:24:31

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	4.582E-01	2.849E+01	2.849E+01	14.46	OK
	Final Mean for 1 Valid Peaks = 2.849E+01+/- 4.120E+00 (14.46%)						
TL-208	583.14	30.22*	9.242E-01	2.024E+00	2.024E+00	24.57	OK
	860.37	4.48	6.742E-01	1.998E+00	1.998E+00	126.74	OK
	2614.66	35.85	3.402E-01	1.209E+00	1.209E+00	28.46	OK
	Final Mean for 3 Valid Peaks = 1.480E+00+/- 2.813E-01 (19.01%)						
PB-210	46.50	4.05*	2.204E+00	1.050E+01	1.053E+01	29.99	OK
	Final Mean for 1 Valid Peaks = 1.053E+01+/- 3.158E+00 (29.99%)						
BI-212	727.17	11.80*	7.716E-01	1.530E+00	1.530E+00	64.51	OK
	1620.62	2.75	4.293E-01	----- Line Not Found		-----	Absent
	Final Mean for 1 Valid Peaks = 1.530E+00+/- 9.870E-01 (64.51%)						
PB-212	238.63	44.60*	1.817E+00	1.734E+00	1.734E+00	15.55	OK
	300.09	3.41	1.555E+00	----- Line Not Found		-----	Absent
	Final Mean for 1 Valid Peaks = 1.734E+00+/- 2.696E-01 (15.55%)						
BI-214	609.31	46.30*	8.915E-01	9.809E+00	9.810E+00	11.41	OK
	1120.29	15.10	5.508E-01	1.061E+01	1.061E+01	17.26	OK
	1764.49	15.80	4.084E-01	1.144E+01	1.144E+01	16.11	OK
	2204.22	4.98	3.644E-01	8.684E+00	8.684E+00	33.91	OK
	Final Mean for 4 Valid Peaks = 1.020E+01+/- 8.150E-01 (7.99%)						
PB-214	295.21	19.19	1.574E+00	1.080E+01	1.080E+01	12.24	OK
	351.92	37.19*	1.383E+00	1.048E+01	1.049E+01	10.81	OK
	Final Mean for 2 Valid Peaks = 1.062E+01+/- 8.603E-01 (8.10%)						
RA-224	240.98	3.95*	1.806E+00	2.186E+01	2.186E+01	14.57	OK
	Final Mean for 1 Valid Peaks = 2.186E+01+/- 3.185E+00 (14.57%)						
RA-226	186.21	3.28*	2.099E+00	2.671E+01	2.671E+01	183.49	OK
	Final Mean for 1 Valid Peaks = 2.671E+01+/- 4.902E+01 (183.49%)						
AC-228	338.32	11.40	1.425E+00	1.593E+00	1.593E+00	49.22	OK
	911.07	27.70*	6.445E-01	1.688E+00	1.688E+00	31.19	<<WM Interf
	969.11	16.60	6.144E-01	1.914E+00	1.914E+00	37.04	OK
	Final Mean for 2 Valid Peaks = 1.769E+00+/- 5.257E-01 (29.71%)						

Sample ID : 1111065-12 Acquisition date : 10-DEC-2011 15:24:31

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
PA-234M	1001.03	0.92*	5.993E-01	2.590E+01	2.590E+01	70.45	OK
Final Mean for 1 Valid Peaks = 2.590E+01+/- 1.825E+01 (70.45%)							
TH-234	63.29	3.80*	2.516E+00	6.431E+00	6.431E+00	46.18	OK
Final Mean for 1 Valid Peaks = 6.431E+00+/- 2.970E+00 (46.18%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CD-109	88.03	3.72*	2.618E+00	9.185E+00	9.630E+00	29.41	OK
Final Mean for 1 Valid Peaks = 9.630E+00+/- 2.832E+00 (29.41%)							
SN-126	87.57	37.00*	2.618E+00	9.233E-01	9.233E-01	28.75	OK
Final Mean for 1 Valid Peaks = 9.233E-01+/- 2.654E-01 (28.75%)							
TH-231	25.64	14.70*	1.255E+00	1.345E+00	1.345E+00	100.81	OK
	84.21	6.40	2.618E+00	2.240E+00	2.240E+00	55.93	OK
Final Mean for 2 Valid Peaks = 1.828E+00+/- 9.202E-01 (50.34%)							
NP-237	86.50	12.60*	2.619E+00	2.711E+00	2.711E+00	28.61	OK
Final Mean for 1 Valid Peaks = 2.711E+00+/- 7.757E-01 (28.61%)							

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
LU-172	181.53	20.60	2.127E+00	4.313E-01	1.141E+01	58.51	OK
	810.06	16.63	7.073E-01	----- Line Not Found		-----	Absent
	912.12	15.25	6.439E-01	3.069E+00	8.121E+01	31.19	<<WM Interf
	1093.66	62.50*	5.607E-01	1.672E-01	4.423E+00	122.03	OK
Final Mean for 2 Valid Peaks = 7.185E+00+/- 4.198E+00 (58.42%)							
LU-173	100.72	5.24	2.590E+00	----- Line Not Found		-----	Absent
	272.11	21.20*	1.666E+00	9.077E-01	9.484E-01	69.67	OK
Final Mean for 1 Valid Peaks = 9.484E-01+/- 6.608E-01 (69.67%)							

Flag: "*" = Keyline

Sample ID : 1111065-12 Acquisition date : 10-DEC-2011 15:24:31

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.849E+01	4.120E+00	1.454E+00	1.491E-01	19.595
CD-109	9.630E+00	2.832E+00	3.886E+00	5.996E-01	2.478
SN-126	9.233E-01	2.654E-01	3.725E-01	5.265E-02	2.479
LU-172	7.185E+00	4.198E+00	6.574E+00	6.096E-01	1.093
LU-173	9.484E-01	6.608E-01	5.442E-01	4.470E-02	1.743
TL-208	1.480E+00	2.813E-01	4.218E-01	3.838E-02	3.507
PB-210	1.053E+01	3.158E+00	2.983E+00	2.501E-01	3.530
BI-212	1.530E+00	9.870E-01	1.075E+00	9.492E-02	1.423
PB-212	1.734E+00	2.696E-01	2.467E-01	2.029E-02	7.029
BI-214	1.020E+01	8.150E-01	2.642E-01	2.371E-02	38.606
PB-214	1.062E+01	8.603E-01	3.081E-01	2.698E-02	34.467
RA-224	2.186E+01	3.185E+00	2.805E+00	2.308E-01	7.792
RA-226	2.671E+01	4.902E+01	3.416E+00	6.255E+00	7.820
AC-228	1.769E+00	5.257E-01	5.392E-01	4.849E-02	3.281
TH-231	1.828E+00	9.202E-01	1.517E+00	2.234E-01	1.205
PA-234M	2.590E+01	1.825E+01	1.697E+01	1.558E+00	1.527
TH-234	6.431E+00	2.970E+00	3.362E+00	2.800E-01	1.913
NP-237	2.711E+00	7.757E-01	1.082E+00	1.499E-01	2.506

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	4.774E-01		9.707E-01	1.768E+00	1.635E-01	0.270
NA-22	3.698E-02		1.083E-01	1.738E-01	1.713E-02	0.213
AL-26	-4.312E-02		5.651E-02	9.553E-02	8.636E-03	-0.451
TI-44	5.993E-02		1.000E-01	1.403E-01	1.316E-02	0.427
SC-46	-2.312E-02		1.132E-01	1.944E-01	1.743E-02	-0.119
V-48	-1.116E-02		3.504E-01	6.086E-01	5.570E-02	-0.018
CR-51	1.419E+00		1.527E+00	2.582E+00	2.325E-01	0.550
MN-54	8.514E-02		1.204E-01	1.654E-01	1.485E-02	0.515
CO-56	6.661E-03		1.148E-01	1.819E-01	1.633E-02	0.037
CO-57	-1.431E-02		8.202E-02	1.253E-01	1.063E-02	-0.114
CO-58	-5.959E-02		1.124E-01	1.891E-01	1.699E-02	-0.315
FE-59	5.805E-02		3.641E-01	4.576E-01	4.543E-02	0.127
CO-60	1.569E-01	+	1.287E-01	1.968E-01	1.825E-02	0.798
ZN-65	1.533E-01		2.351E-01	3.868E-01	3.593E-02	0.396
SE-75	-1.575E-01		1.554E-01	2.188E-01	1.813E-02	-0.720
RB-82	-1.618E+00		1.932E+00	2.493E+00	2.225E-01	-0.649
RB-83	-1.543E-01		2.062E-01	3.078E-01	4.924E-02	-0.501
KR-85	3.471E+01		1.832E+01	3.242E+01	3.002E+00	1.071
SR-85	2.117E-01		1.117E-01	1.977E-01	1.831E-02	1.071
Y-88	3.003E-02		7.090E-02	1.356E-01	1.210E-02	0.222
NB-93M	1.138E+01		5.578E+00	7.830E+00	2.357E+00	1.454
NB-94	-5.705E-02		7.957E-02	1.311E-01	1.177E-02	-0.435
NB-95	6.018E-01		2.026E-01	3.885E-01	3.462E-02	1.549
ZR-95	-4.125E-02		2.302E-01	3.559E-01	3.467E-02	-0.116
RU-103	8.120E-02		1.233E-01	2.272E-01	3.308E-02	0.357

Sample ID : 1111065-12 Acquisition date : 10-DEC-2011 15:24:31

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
RU-106	-2.012E-02		7.855E-01	1.387E+00	1.878E-01	-0.015
AG-108M	7.389E-02		9.832E-02	1.396E-01	1.231E-02	0.529
AG-110M	-3.722E-02		9.713E-02	1.486E-01	1.285E-02	-0.251
SN-113	-1.078E-02		1.421E-01	2.272E-01	2.092E-02	-0.047
TE123M	6.575E-02		1.040E-01	1.618E-01	1.301E-02	0.406
SB-124	-2.408E-02		1.129E-01	1.765E-01	1.590E-02	-0.136
I-125	-1.487E-01		1.997E+00	3.321E+00	3.407E-01	-0.045
SB-125	-2.083E-01		2.425E-01	4.127E-01	3.829E-02	-0.505
SB-126	1.084E+00	+	1.151E+00	1.414E+00	1.246E-01	0.767
I-129	1.552E-01		2.046E-01	3.326E-01	4.077E-02	0.467
I-131	5.807E-02		1.183E+00	2.121E+00	1.873E-01	0.027
BA-133	5.696E-02		1.270E-01	1.938E-01	2.579E-02	0.294
CS-134	8.169E-02		8.123E-02	1.394E-01	1.257E-02	0.586
CS-135	7.294E-01		4.523E-01	7.753E-01	6.373E-02	0.941
CS-136	4.004E-01		5.737E-01	1.058E+00	1.003E-01	0.379
CS-137	-5.280E-02		1.048E-01	1.598E-01	1.380E-02	-0.330
LA-138	2.650E-02		1.111E-01	2.023E-01	2.039E-02	0.131
CE-139	-3.557E-02		9.602E-02	1.562E-01	1.243E-02	-0.228
BA-140	-1.350E+00		1.509E+00	2.416E+00	8.047E-01	-0.559
LA-140	1.185E-01		4.486E-01	8.642E-01	8.432E-02	0.137
CE-141	2.810E-01		2.897E-01	4.752E-01	1.180E-01	0.591
CE-144	-7.173E-02		6.877E-01	1.049E+00	8.748E-02	-0.068
PM-144	-4.207E-02		8.229E-02	1.398E-01	1.224E-02	-0.301
PM-145	-1.481E-01		3.883E-01	6.381E-01	4.165E-01	-0.232
PM-146	1.171E-01		1.860E-01	3.104E-01	2.856E-02	0.377
ND-147	1.243E+00		3.774E+00	6.831E+00	6.314E-01	0.182
EU-152	1.181E+00	+	9.880E-01	1.412E+00	1.712E-01	0.836
GD-153	-1.510E-01		2.982E-01	4.901E-01	5.713E-02	-0.308
EU-154	9.446E-02		2.994E-01	4.789E-01	4.720E-02	0.197
EU-155	1.119E+00	+	3.202E-01	4.975E-01	6.896E-02	2.249
EU-156	-1.734E+00		3.329E+00	5.570E+00	1.280E+00	-0.311
HO-166M	7.424E-02		1.517E-01	2.506E-01	2.201E-02	0.296
HF-172	7.915E-02		5.867E-01	9.065E-01	7.638E-02	0.087
HF-175	1.157E-01		1.344E-01	1.874E-01	1.631E-02	0.617
LU-176	-3.485E-02		7.575E-02	1.198E-01	1.011E-02	-0.291
TA-182	5.564E+00	+	9.604E-01	1.426E+00	1.323E-01	3.903
IR-192	1.209E-01		1.946E-01	3.260E-01	3.010E-02	0.371
HG-203	2.290E-01		1.595E-01	2.542E-01	2.149E-02	0.901
BI-207	-7.698E-03		7.241E-02	1.262E-01	1.155E-02	-0.061
BI-210M	-4.212E-02		1.727E-01	2.549E-01	2.098E-02	-0.165
PB-211	1.412E+00		2.604E+00	4.306E+00	3.883E-01	0.328
RN-219	4.047E-01		1.078E+00	1.946E+00	1.752E-01	0.208
RA-223	-1.506E+00		1.840E+00	2.841E+00	2.435E-01	-0.530
RA-225	-7.713E-01		1.118E+00	1.731E+00	1.607E-01	-0.446
TH-227	7.025E-01	+	4.716E-01	1.222E+00	1.005E-01	0.575
TH-230	1.563E+01		2.551E+01	3.581E+01	3.340E+00	0.436
PA-231	2.348E+00		3.308E+00	5.123E+00	4.306E-01	0.458
PA-233	8.034E-02		4.003E-01	6.547E-01	1.467E-01	0.123

Sample ID : 1111065-12 Acquisition date : 10-DEC-2011 15:24:31

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PA-234	-1.270E-02		3.412E-01	5.220E-01	4.366E-02	-0.024
U-235	2.349E-01		6.563E-01	1.089E+00	1.885E-01	0.216
AM-241	2.404E-01		2.461E-01	3.524E-01	2.636E-02	0.682
AM-243	1.604E+00		2.410E-01	2.856E-01	3.130E-02	5.616
CM-243	4.224E-01		5.656E-01	8.749E-01	7.175E-02	0.483

Sample ID : 1111065-12 Acquisition date : 10-DEC-2011 15:24:31

Total number of lines in spectrum	72	
Number of unidentified lines	33	
Number of lines tentatively identified by NID	39	54.17%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.849E+01	2.849E+01	0.412E+01	14.46	
TL-208	1.41E+10Y	1.00	1.480E+00	1.480E+00	0.281E+00	19.01	
PB-210	22.26Y	1.00	1.050E+01	1.053E+01	0.316E+01	29.99	
BI-212	1.41E+10Y	1.00	1.530E+00	1.530E+00	0.987E+00	64.51	
PB-212	1.41E+10Y	1.00	1.734E+00	1.734E+00	0.270E+00	15.55	
BI-214	1602.00Y	1.00	1.020E+01	1.020E+01	0.081E+01	7.99	
PB-214	1602.00Y	1.00	1.062E+01	1.062E+01	0.086E+01	8.10	
RA-224	1.41E+10Y	1.00	2.186E+01	2.186E+01	0.318E+01	14.57	
RA-226	1602.00Y	1.00	2.671E+01	2.671E+01	4.902E+01	183.49	
AC-228	1.41E+10Y	1.00	1.769E+00	1.769E+00	0.526E+00	29.71	
PA-234M	4.47E+09Y	1.00	2.590E+01	2.590E+01	1.825E+01	70.45	
TH-234	4.47E+09Y	1.00	6.431E+00	6.431E+00	2.970E+00	46.18	
			---	---			
	Total Activity :		1.472E+02	1.473E+02			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	9.185E+00	9.630E+00	2.832E+00	29.41	
SN-126	1.00E+05Y	1.00	9.233E-01	9.233E-01	2.654E-01	28.75	
TH-231	7.04E+08Y	1.00	1.828E+00	1.828E+00	0.920E+00	50.34	
NP-237	2.14E+06Y	1.00	2.711E+00	2.711E+00	0.776E+00	28.61	
			---	---			
	Total Activity :		1.465E+01	1.509E+01			

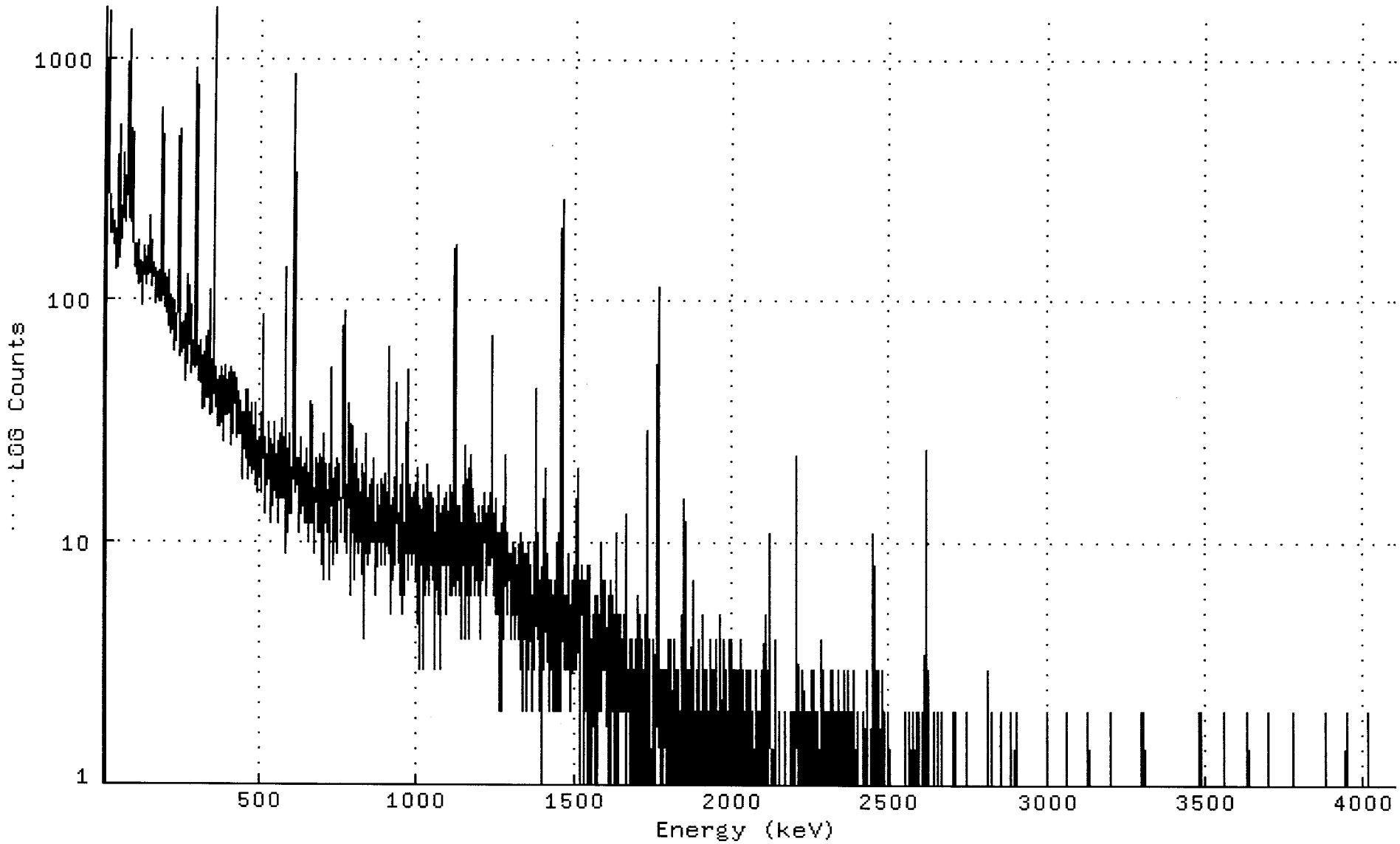
Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
LU-172	6.70D	26.5	2.715E-01	7.185E+00	4.198E+00	58.42	
LU-173	1.37Y	1.04	9.077E-01	9.484E-01	6.608E-01	69.67	
			---	---			
	Total Activity :		1.179E+00	8.134E+00			

Grand Total Activity :	1.631E+02	1.705E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106512_GE2_GAS1102_172258.CNF;1
Title :
Sample Title: DY2-65-31-111109
Start Time: 10-DEC-2011 15:24 Sample Time: 9-NOV-2011 00:00: Energy Offset: 6.87229E-02
Real Time : 0 01:00:01.92 Sample ID : 1111065-12 Energy Slope : 9.99625E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106512_GE2_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	22
9:	286	704	1309	1023	542	804	1521	356
17:	204	186	202	211	187	207	186	215
25:	231	215	218	225	168	207	206	184
33:	185	194	194	154	151	150	132	144
41:	135	140	150	169	144	291	524	164
49:	148	201	184	154	240	222	187	177
57:	181	208	219	241	230	246	400	386
65:	217	260	259	319	208	253	272	272
73:	276	386	940	465	1269	831	271	257
81:	243	217	210	379	249	222	505	435
89:	231	323	255	256	487	262	196	145
97:	145	155	164	156	140	125	136	144
105:	168	148	131	132	174	116	146	123
113:	141	135	138	117	142	124	138	138
121:	121	140	135	94	128	134	134	139
129:	166	157	126	147	115	140	136	131
137:	127	134	134	135	153	125	127	218
145:	132	139	143	130	129	134	113	146
153:	150	173	144	124	133	141	134	131
161:	125	117	127	134	110	121	96	106
169:	124	108	129	106	116	97	114	114
177:	110	131	112	102	97	133	126	128
185:	170	617	377	131	117	112	118	104
193:	107	93	125	98	114	100	101	105
201:	88	122	100	92	117	107	85	77
209:	130	119	91	87	98	93	96	72
217:	99	78	90	84	97	75	78	61
225:	82	76	64	97	67	80	73	87
233:	70	83	90	118	104	246	471	129
241:	161	501	213	67	66	58	74	73
249:	62	62	60	78	80	63	68	78
257:	72	80	81	78	87	66	76	46
265:	61	72	54	59	85	125	104	100
273:	66	72	66	65	75	95	65	68
281:	67	62	49	56	66	63	67	60
289:	53	67	52	68	57	153	887	651
297:	85	53	58	87	66	52	64	49
305:	61	51	46	53	54	67	47	45
313:	50	47	47	42	35	58	47	53
321:	41	60	36	57	37	40	46	70
329:	66	62	54	46	58	50	39	47
337:	50	109	101	33	52	48	55	43
345:	34	43	40	56	52	54	386	1616
353:	540	41	42	38	52	43	39	41
361:	38	33	46	37	38	39	37	30
369:	48	36	36	36	30	30	47	37
377:	34	31	33	52	26	33	38	32
385:	38	43	53	48	52	44	33	35
393:	43	46	43	45	42	33	44	35
401:	39	49	45	41	27	42	45	25
409:	49	52	47	43	36	36	28	40
417:	43	42	47	37	45	49	44	42
425:	43	37	27	32	35	30	41	28

433:	39	30	38	37	31	32	35	28
441:	29	34	30	30	18	33	34	24
449:	26	29	24	33	25	35	42	23
457:	25	22	23	27	30	40	42	35
465:	18	23	23	34	24	27	32	25
473:	19	28	37	29	25	26	30	27
481:	29	28	22	17	28	23	37	31
489:	21	22	26	23	23	16	22	27
497:	19	22	26	25	19	17	20	34
505:	16	22	21	23	46	72	86	58
513:	34	20	27	22	27	13	17	22
521:	23	17	21	23	19	26	25	20
529:	18	19	31	23	23	21	24	19
537:	12	16	18	18	25	22	21	22
545:	31	26	18	24	18	17	15	23
553:	21	20	19	17	24	22	12	25
561:	20	24	28	21	20	17	15	15
569:	19	15	23	32	27	21	22	19
577:	15	20	22	26	28	26	135	106
585:	31	9	18	24	22	11	24	18
593:	15	23	18	24	13	28	13	16
601:	13	20	13	18	23	18	20	127
609:	843	800	138	21	20	21	23	16
617:	18	19	18	18	20	22	16	20
625:	11	22	20	18	23	13	20	15
633:	27	15	20	14	14	19	15	17
641:	17	13	12	17	21	14	14	14
649:	24	21	12	14	21	14	19	19
657:	17	19	10	14	24	25	13	19
665:	38	36	17	12	18	13	16	11
673:	13	10	9	15	16	17	17	15
681:	18	22	19	11	16	20	21	14
689:	15	15	11	23	19	19	14	16
697:	15	17	14	22	8	20	28	19
705:	20	17	7	20	17	15	21	21
713:	14	11	11	14	15	13	14	19
721:	21	12	7	12	14	14	33	52
729:	19	16	15	21	16	10	16	8
737:	9	14	11	10	12	15	16	20
745:	15	11	16	12	9	22	19	17
753:	18	21	16	18	12	14	15	12
761:	11	13	17	15	17	18	37	68
769:	89	28	10	15	28	16	13	17
777:	16	9	14	13	14	15	16	17
785:	22	37	25	18	14	6	10	15
793:	15	20	30	11	18	18	14	7
801:	14	21	20	15	13	24	17	10
809:	16	10	14	18	9	12	11	14
817:	13	12	16	10	15	15	10	16
825:	18	15	21	11	13	4	13	19
833:	17	10	14	16	16	22	26	28
841:	9	9	11	12	8	13	15	12
849:	9	17	13	12	9	18	13	10
857:	12	13	12	17	22	17	11	11
865:	11	9	12	12	9	7	6	10
873:	17	12	14	17	15	10	11	10
881:	11	10	14	10	18	12	15	8
889:	15	14	13	13	10	17	16	8
897:	15	19	16	12	12	15	10	11
905:	16	14	10	9	18	22	58	64

913:	20	16	6	5	11	13	10	14
921:	11	8	14	7	11	15	14	13
929:	8	11	9	18	19	45	35	27
937:	12	13	13	13	11	10	9	11
945:	6	9	8	6	13	14	21	12
953:	5	9	14	10	8	11	11	12
961:	8	6	13	27	24	18	12	19
969:	51	36	12	7	13	10	13	17
977:	12	10	15	9	10	15	9	15
985:	8	12	9	9	13	13	16	12
993:	7	11	11	14	12	17	18	15
1001:	19	20	6	13	7	3	10	9
1009:	14	12	8	9	13	10	12	8
1017:	11	17	8	3	7	15	11	6
1025:	9	7	7	15	8	7	21	7
1033:	12	7	16	9	11	6	10	10
1041:	16	9	8	10	13	11	16	11
1049:	11	8	7	14	15	4	4	11
1057:	7	11	3	13	10	14	8	7
1065:	11	9	13	5	14	17	11	11
1073:	3	11	12	6	13	10	13	9
1081:	12	14	8	15	14	8	14	12
1089:	13	5	9	8	16	15	12	12
1097:	8	8	9	8	12	12	15	17
1105:	12	6	10	11	11	10	9	13
1113:	16	6	7	12	9	10	39	158
1121:	168	51	16	10	15	6	10	10
1129:	7	7	14	8	13	14	8	6
1137:	10	10	5	4	10	12	10	12
1145:	11	8	10	11	17	10	7	11
1153:	4	21	25	22	15	9	10	9
1161:	6	10	6	19	13	11	20	4
1169:	9	14	15	16	9	23	12	8
1177:	8	14	10	14	7	6	13	12
1185:	10	6	6	8	12	7	8	10
1193:	9	11	14	6	10	12	8	11
1201:	7	11	4	11	12	9	13	11
1209:	7	14	10	14	10	11	16	10
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1225:	12	14	10	12	8	16	11	9
1233:	14	9	8	12	33	71	63	22
1241:	9	8	13	10	6	7	10	15
1249:	5	10	12	13	8	11	11	5
1257:	10	10	10	11	11	9	8	2
1265:	9	8	12	2	7	6	7	7
1273:	11	8	10	4	8	14	9	14
1281:	23	21	13	7	6	5	8	8
1289:	11	9	7	9	8	7	7	7
1297:	7	7	4	8	9	8	8	6
1305:	8	5	9	10	9	5	6	6
1313:	4	6	7	5	6	7	8	5
1321:	8	4	7	6	8	9	11	4
1329:	3	9	8	6	8	8	2	10
1337:	6	4	6	7	4	9	6	9
1345:	5	3	6	2	4	9	5	3
1353:	9	4	10	4	8	4	5	4
1361:	6	5	3	5	6	2	6	5
1369:	3	7	6	8	3	10	4	5
1377:	19	43	31	5	9	5	4	11
1385:	10	6	5	4	4	5	7	2

1393:	7	6	6	1	4	5	7	9
1401:	14	15	7	5	3	6	20	20
1409:	13	12	5	5	6	5	9	7
1417:	5	2	7	3	3	5	5	6
1425:	3	5	7	3	3	4	3	5
1433:	6	4	2	6	2	3	7	4
1441:	3	5	2	10	4	8	2	2
1449:	11	5	4	6	8	4	7	6
1457:	2	9	35	151	257	169	48	7
1465:	4	5	3	6	6	4	4	4
1473:	6	4	4	3	3	5	4	4
1481:	3	9	6	6	5	3	5	4
1489:	4	2	4	3	4	6	6	7
1497:	5	7	6	3	6	8	8	3
1505:	6	4	7	12	19	20	8	9
1513:	6	4	3	2	1	7	6	6
1521:	7	5	8	6	8	6	5	2
1529:	1	7	6	7	2	7	7	6
1537:	7	2	8	8	7	0	6	6
1545:	5	6	8	2	3	3	0	3
1553:	4	1	1	2	3	2	5	3
1561:	2	5	3	1	2	6	3	0
1569:	6	1	3	3	6	2	4	3
1577:	5	2	4	4	3	7	10	8
1585:	2	3	4	6	5	4	5	3
1593:	7	4	7	4	3	4	5	4
1601:	4	3	4	4	3	0	6	6
1609:	3	4	5	3	1	3	4	7
1617:	3	6	2	3	5	2	2	4
1625:	5	3	1	2	2	2	11	1
1633:	4	2	0	5	3	3	3	4
1641:	4	0	5	2	2	2	2	2
1649:	2	4	4	3	3	2	5	2
1657:	3	3	4	2	10	13	3	2
1665:	1	2	2	2	2	2	3	3
1673:	2	2	2	1	4	3	2	1
1681:	0	1	4	4	0	2	2	3
1689:	1	3	2	1	4	4	2	3
1697:	3	3	0	2	6	2	1	3
1705:	5	1	4	4	1	1	4	0
1713:	4	0	1	2	0	1	0	3
1721:	0	1	3	2	1	5	0	7
1729:	20	29	14	4	1	3	1	4
1737:	0	2	2	1	1	0	0	1
1745:	1	2	0	0	2	2	4	3
1753:	1	1	0	1	1	3	5	5
1761:	3	9	31	94	114	68	18	4
1769:	2	1	3	0	2	1	1	3
1777:	2	3	1	0	3	2	3	2
1785:	2	2	2	1	3	2	1	2
1793:	1	2	2	4	1	2	3	2
1801:	3	1	1	4	3	2	2	1
1809:	0	1	2	1	2	3	2	4
1817:	1	0	1	3	3	0	1	2
1825:	1	3	1	0	1	2	0	2
1833:	1	1	1	2	1	1	5	2
1841:	3	0	0	3	2	8	9	15
1849:	10	5	2	0	1	2	1	1
1857:	3	0	2	2	0	2	1	3
1865:	1	1	1	2	2	2	2	2

1873:	7	3	2	1	1	1	0	0
1881:	1	2	0	1	0	1	2	3
1889:	3	1	3	4	4	2	1	2
1897:	1	1	2	2	0	1	1	1
1905:	1	0	2	5	1	2	0	2
1913:	2	3	2	1	1	0	2	3
1921:	2	0	0	1	1	2	1	4
1929:	0	4	0	3	3	0	1	1
1937:	2	0	3	3	1	0	2	2
1945:	1	0	3	1	4	1	1	2
1953:	0	1	1	2	1	2	0	2
1961:	3	3	5	1	1	2	0	1
1969:	0	2	1	4	2	0	3	2
1977:	0	3	2	3	3	1	2	0
1985:	1	1	0	2	0	4	0	1
1993:	2	1	4	1	2	1	1	2
2001:	2	0	0	3	1	2	0	3
2009:	0	2	3	2	3	3	2	1
2017:	2	2	3	2	1	0	0	0
2025:	1	2	0	4	0	1	3	2
2033:	2	1	1	2	2	1	2	1
2041:	0	1	3	1	0	0	1	0
2049:	1	1	1	3	1	1	2	1
2057:	1	0	1	3	1	1	1	2
2065:	0	2	0	1	1	0	1	1
2073:	1	1	1	3	0	0	2	1
2081:	2	1	1	0	1	0	0	2
2089:	1	2	0	3	1	1	0	0
2097:	1	2	0	2	3	3	3	5
2105:	3	1	0	2	1	0	3	0
2113:	0	1	2	3	5	6	11	7
2121:	2	0	0	1	0	1	0	0
2129:	0	0	1	1	0	2	0	1
2137:	4	3	1	0	1	0	1	0
2145:	0	1	2	0	1	0	1	1
2153:	1	0	0	0	0	1	0	1
2161:	0	0	1	0	0	1	0	2
2169:	1	1	0	1	0	0	0	0
2177:	0	1	0	0	1	1	0	1
2185:	1	1	0	2	0	0	2	1
2193:	2	1	1	0	1	2	2	0
2201:	2	9	18	23	16	10	1	2
2209:	1	0	1	2	1	0	2	1
2217:	1	1	0	1	2	1	0	3
2225:	2	1	0	2	0	0	1	0
2233:	0	0	0	2	2	0	0	0
2241:	0	0	0	1	2	0	1	1
2249:	0	1	3	1	1	0	1	0
2257:	3	1	0	2	0	1	1	2
2265:	1	1	0	0	0	0	1	2
2273:	1	0	1	0	1	1	1	1
2281:	0	4	1	0	0	2	3	2
2289:	0	1	1	2	2	2	2	0
2297:	0	0	0	0	2	2	1	1
2305:	1	2	0	2	2	0	0	1
2313:	3	1	0	1	1	0	3	2
2321:	1	1	2	2	1	0	1	0
2329:	1	2	0	1	0	1	3	0
2337:	0	2	2	1	1	0	2	2
2345:	0	0	2	0	2	0	0	1

2353:	0	2	3	1	0	2	0	1
2361:	1	0	0	1	2	1	3	1
2369:	1	1	2	2	1	2	2	0
2377:	1	1	0	1	2	1	1	0
2385:	3	1	1	0	0	0	0	0
2393:	0	0	2	1	0	2	0	1
2401:	0	0	1	1	1	1	0	1
2409:	0	1	0	0	0	0	1	1
2417:	1	2	1	0	1	0	0	1
2425:	3	0	1	1	0	1	1	0
2433:	0	1	0	0	1	0	0	1
2441:	0	0	3	2	1	5	7	11
2449:	6	3	1	2	1	0	1	3
2457:	0	0	0	0	1	0	0	1
2465:	3	1	1	1	0	0	0	0
2473:	0	3	1	0	1	0	0	0
2481:	1	0	0	2	0	1	0	0
2489:	1	0	1	0	1	0	0	2
2497:	2	1	1	0	0	0	1	0
2505:	0	1	0	0	0	1	0	0
2513:	0	0	0	0	0	0	1	1
2521:	0	1	0	0	0	0	0	0
2529:	1	0	0	1	0	1	1	0
2537:	0	1	1	0	0	1	0	1
2545:	1	0	0	0	1	0	2	1
2553:	0	0	0	0	0	1	0	0
2561:	0	0	0	2	0	0	1	0
2569:	0	0	2	1	0	1	2	0
2577:	0	0	0	0	0	1	2	0
2585:	0	0	0	0	0	0	2	1
2593:	0	0	0	1	0	0	0	0
2601:	0	2	1	0	2	1	0	0
2609:	0	0	0	2	6	18	24	13
2617:	5	1	1	3	0	0	0	1
2625:	0	0	1	0	0	0	0	0
2633:	0	0	0	1	0	2	0	2
2641:	0	0	1	0	0	0	0	0
2649:	0	1	0	0	0	2	0	0
2657:	1	0	1	1	0	1	2	0
2665:	1	0	1	0	0	0	0	0
2673:	1	0	0	1	0	0	0	0
2681:	0	1	0	0	0	0	1	0
2689:	0	0	0	0	0	0	0	0
2697:	0	0	2	1	0	0	0	1
2705:	0	0	0	2	0	1	0	0
2713:	0	0	1	0	0	1	1	0
2721:	0	0	0	0	0	0	0	1
2729:	0	0	0	1	1	0	0	1
2737:	0	1	0	0	0	0	0	0
2745:	2	1	0	1	0	0	1	0
2753:	0	0	0	0	0	0	0	1
2761:	0	0	0	0	0	0	0	0
2769:	0	0	0	0	0	1	0	0
2777:	0	0	0	0	1	0	0	1
2785:	0	0	0	1	0	1	0	0
2793:	0	1	1	0	0	0	0	0
2801:	0	0	1	1	0	0	0	0
2809:	3	0	0	0	1	1	0	0
2817:	0	0	1	0	1	0	0	2
2825:	0	0	1	1	0	1	0	1

2833:	0	0	0	0	0	0	0	0
2841:	0	1	0	0	0	0	0	0
2849:	0	0	0	1	2	1	0	0
2857:	0	0	1	0	0	0	0	0
2865:	0	1	0	1	0	0	0	1
2873:	1	0	0	1	1	0	0	0
2881:	2	0	0	1	0	0	0	1
2889:	1	0	0	0	1	1	0	0
2897:	1	2	0	0	0	0	0	0
2905:	0	0	0	0	0	0	0	0
2913:	0	0	0	0	0	0	0	0
2921:	0	0	1	0	1	1	0	0
2929:	0	1	1	1	0	0	0	0
2937:	0	0	0	0	0	0	0	0
2945:	0	0	1	0	0	1	0	0
2953:	0	0	0	0	0	0	0	0
2961:	0	0	0	0	0	0	0	0
2969:	1	0	0	0	0	0	0	0
2977:	0	0	0	1	0	0	0	1
2985:	0	1	0	0	0	0	0	0
2993:	0	0	0	0	0	2	0	0
3001:	1	0	0	1	0	0	1	0
3009:	0	0	0	0	1	0	0	0
3017:	0	0	0	0	0	0	0	0
3025:	1	0	0	0	0	0	0	0
3033:	0	0	1	0	1	0	0	0
3041:	0	0	0	0	0	0	1	0
3049:	0	0	0	0	0	1	0	1
3057:	2	1	1	0	0	0	1	1
3065:	0	0	0	0	1	0	0	0
3073:	1	1	0	0	0	0	0	0
3081:	0	0	0	0	0	0	1	0
3089:	0	0	0	1	0	0	0	0
3097:	0	0	0	0	0	0	0	0
3105:	0	0	0	0	0	0	0	0
3113:	0	0	0	0	0	0	0	0
3121:	0	1	0	1	0	0	0	2
3129:	1	0	0	1	1	0	0	0
3137:	0	0	1	1	1	0	0	0
3145:	0	0	0	0	0	0	0	0
3153:	0	0	0	0	1	0	0	0
3161:	1	0	0	0	0	0	0	0
3169:	0	0	1	0	1	0	0	0
3177:	0	0	0	0	0	1	0	0
3185:	0	0	0	0	0	0	1	0
3193:	0	0	1	1	2	1	0	1
3201:	1	0	0	0	0	1	0	0
3209:	0	0	0	0	0	0	0	0
3217:	0	0	0	0	0	0	0	0
3225:	0	1	1	0	0	1	0	0
3233:	1	0	0	0	1	0	1	0
3241:	0	0	0	0	0	0	1	0
3249:	0	0	0	0	0	0	0	1
3257:	1	0	0	0	0	0	0	1
3265:	1	1	0	0	0	0	1	0
3273:	0	0	0	0	0	0	0	0
3281:	0	0	0	1	1	0	0	0
3289:	0	0	0	0	0	0	1	2
3297:	0	0	0	1	1	1	0	2
3305:	0	0	0	0	1	1	0	0

3313:	1	0	0	0	0	0	0	0
3321:	0	0	0	0	0	0	0	0
3329:	0	0	0	0	0	0	0	0
3337:	0	0	0	0	0	0	0	0
3345:	0	0	0	0	0	0	1	0
3353:	0	0	0	0	0	0	0	1
3361:	0	1	0	0	0	0	0	1
3369:	1	0	0	0	0	0	0	1
3377:	0	0	0	0	0	1	1	1
3385:	0	0	0	0	0	0	0	0
3393:	0	1	0	0	0	0	0	1
3401:	0	0	0	0	0	0	0	0
3409:	0	0	0	0	0	0	1	0
3417:	0	0	0	0	0	0	0	1
3425:	0	1	0	0	0	0	0	0
3433:	0	0	0	0	0	0	0	0
3441:	0	0	0	0	0	0	0	0
3449:	0	0	0	0	0	0	0	0
3457:	0	1	0	0	0	0	0	1
3465:	0	0	0	0	0	1	0	0
3473:	0	0	0	1	0	0	0	2
3481:	1	0	2	0	0	0	0	0
3489:	0	0	0	0	1	0	0	0
3497:	0	0	0	0	0	0	0	0
3505:	0	0	0	0	0	0	0	1
3513:	0	0	0	0	0	0	0	0
3521:	0	0	1	0	1	0	0	0
3529:	0	0	0	0	0	0	0	0
3537:	0	1	0	0	0	0	0	0
3545:	0	0	0	1	0	0	0	0
3553:	0	0	0	0	2	0	0	0
3561:	0	0	0	0	0	0	1	0
3569:	0	0	0	0	0	0	1	0
3577:	0	0	0	0	0	0	0	0
3585:	0	0	0	0	0	0	0	0
3593:	0	0	0	0	0	0	0	0
3601:	0	0	0	0	0	0	0	0
3609:	0	0	0	1	0	1	0	1
3617:	0	0	0	0	0	1	0	0
3625:	0	0	0	0	0	1	2	0
3633:	0	0	0	0	1	0	0	0
3641:	0	0	0	1	0	1	0	0
3649:	0	0	0	0	0	1	0	0
3657:	0	0	0	0	0	0	0	0
3665:	1	0	0	0	1	0	0	0
3673:	0	1	0	1	0	0	0	0
3681:	0	0	0	0	1	1	0	0
3689:	0	0	0	0	0	0	0	0
3697:	2	0	0	0	1	0	0	0
3705:	0	0	0	0	0	0	0	0
3713:	0	0	0	0	0	0	1	0
3721:	0	0	0	0	0	0	0	0
3729:	0	0	0	1	0	0	1	1
3737:	0	0	0	1	0	0	0	0
3745:	0	0	0	0	0	0	0	1
3753:	0	0	1	0	0	0	0	0
3761:	0	1	0	0	0	0	0	0
3769:	0	0	0	0	2	1	0	0
3777:	0	1	0	0	1	0	0	0
3785:	1	0	0	0	0	0	1	0

3793:	0	0	0	0	1	0	0	0
3801:	0	0	0	0	0	0	0	0
3809:	0	1	0	0	0	1	0	0
3817:	0	1	0	0	0	1	0	0
3825:	0	1	1	0	1	0	0	0
3833:	0	0	0	0	0	0	0	0
3841:	0	0	0	0	0	0	1	0
3849:	0	0	0	0	0	1	0	0
3857:	0	0	0	0	1	0	0	0
3865:	0	0	1	0	0	0	0	0
3873:	0	0	0	0	0	2	0	0
3881:	0	0	0	0	0	0	0	0
3889:	0	0	1	0	0	0	1	0
3897:	1	0	0	1	0	0	0	0
3905:	0	0	0	0	0	0	0	0
3913:	1	1	0	0	0	0	1	0
3921:	0	0	0	0	0	0	0	0
3929:	1	0	1	0	0	0	0	1
3937:	0	0	0	0	1	2	1	0
3945:	0	0	0	0	0	1	0	0
3953:	0	1	0	0	0	0	0	0
3961:	0	0	0	0	0	0	0	0
3969:	0	0	0	0	0	0	0	0
3977:	0	0	0	0	0	0	1	1
3985:	0	0	1	0	0	1	0	0
3993:	0	0	0	0	0	0	0	1
4001:	0	0	0	0	0	0	1	0
4009:	1	2	1	0	0	0	0	0
4017:	0	0	0	0	0	0	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	1	0	0	0	0	0	0
4041:	0	0	0	0	0	0	0	0
4049:	0	0	0	0	0	0	0	0
4057:	0	0	0	0	0	0	0	0
4065:	0	0	0	0	0	0	0	0
4073:	0	0	0	1	0	0	1	1
4081:	0	0	0	0	0	0	1	0
4089:	0	0	0	0	0	0	0	0

Sample ID : 1111065-13 Acquisition date : 11-DEC-2011 11:13:38

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VAX/VMS Peak Search Report Generated 11-DEC-2011 12:13:58.49

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106513_GE1_GAS1102_172265.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-77-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 11-DEC-2011 11:13:38
Sample ID : 1111065-13 Sample Quantity : 3.53420E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE1 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:03.50 0.1%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.57*	764	1591	1.74	46.20	43	6	18.1		PB-210
0	54.45	105	1502	1.11	54.07	51	5	113.2		
0	63.49*	329	2476	1.35	63.12	60	6	49.5		TH-234
0	76.77*	4995	4988	2.83	76.40	71	12	6.3		
2	84.34*	371	1612	1.38	83.97	82	15	30.7	7.10E+01	
2	87.65	833	1450	1.42	87.29	82	15	14.5		NP-237
										SN-126
										CD-109
2	90.37	369	1287	1.44	90.00	82	15	31.1		
0	143.97*	130	1584	1.35	143.62	141	7	103.1		U-235
										CE-141
0	186.42*	1337	1501	1.46	186.08	182	8	11.5		RA-226
0	205.08	70	730	2.68	204.74	203	5	118.8		U-235
0	210.19	104	831	3.25	209.85	208	6	89.5		
3	239.14*	327	716	1.40	238.81	237	9	25.1	6.03E+00	PB-212
3	242.39	1259	721	1.57	242.05	237	9	8.6		RA-224
0	259.71	64	546	1.72	259.38	258	5	113.8		
0	270.39	232	901	3.15	270.06	267	8	46.4		
0	285.01	96	628	2.58	284.69	282	7	88.8		
2	295.59*	2955	452	1.51	295.27	289	14	4.3	2.08E+00	PB-214
2	299.98	134	532	1.99	299.65	289	14	57.6		PB-212
0	338.52*	93	461	1.99	338.20	336	6	75.9		AC-228
7	352.29*	4947	311	1.62	351.98	347	13	3.1	6.07E+00	PB-214
7	355.76	161	511	2.94	355.45	347	13	102.7		
0	389.09	70	439	1.22	388.79	386	7	102.7		
0	427.66	53	283	1.82	427.37	426	6	104.5		
0	461.78	65	330	2.02	461.49	459	8	99.9		
0	486.59	39	204	1.30	486.31	484	6	120.2		
2	508.62	43	90	1.74	508.34	507	10	63.8	2.25E+00	
2	511.50*	72	177	2.17	511.23	507	10	72.5		
0	583.40*	71	302	1.72	583.14	580	8	89.7		TL-208
0	609.68*	3514	396	2.05	609.42	603	12	4.1		BI-214
0	633.99	42	152	1.32	633.74	630	7	103.2		
4	665.82	124	154	2.19	665.57	658	13	38.9	7.78E+00	
0	701.47	42	181	1.18	701.23	697	8	114.0		
0	719.23	43	165	1.53	718.99	716	8	106.7		

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Sample ID : 1111065-13 Acquisition date : 11-DEC-2011 11:13:38

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	768.68	368	240	2.12	768.45	762	12	19.8		
0	786.47	79	205	1.94	786.25	781	10	71.2		
0	839.96	64	130	2.23	839.75	837	7	64.0		
0	910.72	109	263	1.83	910.53	908	15	67.9		AC-228
0	934.45	167	124	2.20	934.26	930	8	27.8		
3	965.01	53	134	2.63	964.83	961	14	78.2	1.46E+00	
3	969.83*	73	100	2.69	969.65	961	14	57.6		AC-228
0	1000.96*	51	122	4.72	1000.79	996	9	83.2		PA-234M
0	1052.10	29	103	2.48	1051.93	1050	7	119.9		
0	1070.21	52	105	2.94	1070.04	1067	9	74.8		
2	1120.74	799	61	1.95	1120.59	1117	11	7.8	1.60E+00	BI-214
2	1124.45	48	61	2.30	1124.30	1117	11	107.8		
0	1133.28	44	113	3.62	1133.13	1129	9	92.6		
0	1155.70	91	132	2.19	1155.55	1151	10	51.6		
0	1176.99	33	100	3.78	1176.85	1172	8	111.8		
0	1183.45	33	67	2.81	1183.31	1180	7	88.7		
0	1238.58	308	135	2.18	1238.46	1233	11	18.5		
0	1281.62	71	100	2.34	1281.50	1277	10	58.2		
0	1300.53	40	74	6.65	1300.41	1296	10	87.7		
0	1321.91	19	43	2.89	1321.80	1319	6	117.3		
0	1378.09	191	77	2.04	1377.99	1374	9	22.0		
0	1386.19	23	50	1.91	1386.09	1383	6	105.0		
1	1402.31	52	68	2.41	1402.22	1397	24	57.8	2.05E+00	
1	1408.31	97	54	2.41	1408.22	1397	24	32.6		
0	1461.22*	735	85	2.30	1461.14	1455	13	9.0		K-40
0	1509.93	142	57	2.32	1509.86	1505	11	26.9		
0	1584.02	26	64	1.57	1583.97	1582	8	114.6		
0	1624.15	19	25	1.55	1624.11	1621	7	100.2		
1	1661.46	40	23	2.76	1661.43	1655	33	52.4	8.26E-01	
1	1682.06	12	21	2.77	1682.02	1655	33	151.5		
0	1692.33	24	17	4.88	1692.30	1689	8	70.1		
0	1730.13	130	23	1.86	1730.10	1725	9	21.9		
0	1764.92*	559	43	2.22	1764.90	1761	11	9.8		BI-214
0	1837.56	21	12	2.25	1837.56	1833	10	77.1		
0	1847.70	109	5	3.50	1847.70	1843	9	20.4		
0	1873.31	29	7	3.46	1873.32	1867	13	52.6		
0	1936.00	24	17	8.11	1936.02	1930	11	78.6		
0	1978.14	14	8	4.36	1978.17	1971	11	97.2		
0	2119.06	35	15	2.85	2119.11	2114	10	53.5		
0	2150.58	25	4	14.49	2150.65	2143	17	54.1		
0	2204.28*	154	3	2.49	2204.35	2199	12	16.9		BI-214
0	2294.45	21	6	2.83	2294.54	2287	15	72.2		
0	2448.03	53	0	2.95	2448.15	2443	12	27.5		
0	2614.59*	56	0	2.30	2614.75	2610	10	28.1		TL-208
0	2629.09	8	0	2.22	2629.25	2625	8	70.7		

Sample ID : 1111065-13 Acquisition date : 11-DEC-2011 11:13:38

Total number of lines in spectrum	78	
Number of unidentified lines	42	
Number of lines tentatively identified by NID	36	46.15%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.912E+01	2.912E+01	0.379E+01	13.02	
TL-208	1.41E+10Y	1.00	8.043E-01	8.043E-01	2.359E-01	29.33	
PB-210	22.26Y	1.00	1.534E+01	1.539E+01	0.310E+01	20.12	
PB-212	1.41E+10Y	1.00	7.999E-01	7.999E-01	2.070E-01	25.88	
BI-214	1602.00Y	1.00	1.703E+01	1.703E+01	0.111E+01	6.51	
PB-214	1602.00Y	1.00	1.865E+01	1.865E+01	0.130E+01	6.97	
RA-224	1.41E+10Y	1.00	3.408E+01	3.408E+01	0.428E+01	12.55	
RA-226	1602.00Y	1.00	3.751E+01	3.751E+01	6.884E+01	183.51	
AC-228	1.41E+10Y	1.00	1.216E+00	1.216E+00	0.469E+00	38.54	
PA-234M	4.47E+09Y	1.00	1.782E+01	1.782E+01	1.491E+01	83.67	
TH-234	4.47E+09Y	1.00	6.383E+00	6.383E+00	3.203E+00	50.18	
U-235	7.04E+08Y	1.00	1.447E+00	1.447E+00	1.742E+00	120.36	
			---	---			
	Total Activity :		1.802E+02	1.802E+02			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	1.622E+01	1.703E+01	0.324E+01	19.03	
SN-126	1.00E+05Y	1.00	1.631E+00	1.631E+00	0.294E+00	18.05	
CE-141	32.50D	2.00	2.210E-01	4.419E-01	4.693E-01	106.21	
NP-237	2.14E+06Y	1.00	4.784E+00	4.784E+00	0.860E+00	17.99	
			---	---			
	Total Activity :		2.286E+01	2.389E+01			

Grand Total Activity : 2.031E+02 2.041E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-13
Acquisition date : 11-DEC-2011 11:13:38

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	5.027E-01	2.912E+01	2.912E+01	13.02	OK
Final Mean for 1 Valid Peaks = 2.912E+01+/- 3.793E+00 (13.02%)							
TL-208	583.14	30.22*	1.029E+00	4.852E-01	4.852E-01	90.30	OK
	860.37	4.48	7.505E-01	----- Line Not Found		-----	Absent
	2614.66	35.85	3.563E-01	9.347E-01	9.347E-01	29.95	OK
Final Mean for 2 Valid Peaks = 8.043E-01+/- 2.359E-01 (29.33%)							
PB-210	46.50	4.05*	2.613E+00	1.534E+01	1.539E+01	20.12	OK
Final Mean for 1 Valid Peaks = 1.539E+01+/- 3.096E+00 (20.12%)							
PB-212	238.63	44.60*	2.000E+00	7.782E-01	7.782E-01	26.67	OK
	300.09	3.41	1.716E+00	4.881E+00	4.881E+00	58.28	OK
Final Mean for 2 Valid Peaks = 7.999E-01+/- 2.070E-01 (25.88%)							
BI-214	609.31	46.30*	9.927E-01	1.624E+01	1.624E+01	10.92	OK
	1120.29	15.10	6.104E-01	1.842E+01	1.842E+01	11.99	OK
	1764.49	15.80	4.432E-01	1.695E+01	1.695E+01	13.27	OK
	2204.22	4.98	3.885E-01	1.686E+01	1.686E+01	19.45	OK
Final Mean for 4 Valid Peaks = 1.703E+01+/- 1.108E+00 (6.51%)							
PB-214	295.21	19.19	1.736E+00	1.884E+01	1.884E+01	10.05	OK
	351.92	37.19*	1.529E+00	1.847E+01	1.847E+01	9.68	OK
Final Mean for 2 Valid Peaks = 1.865E+01+/- 1.300E+00 (6.97%)							
RA-224	240.98	3.95*	1.987E+00	3.408E+01	3.408E+01	12.55	OK
Final Mean for 1 Valid Peaks = 3.408E+01+/- 4.276E+00 (12.55%)							
RA-226	186.21	3.28*	2.308E+00	3.751E+01	3.751E+01	183.51	OK
Final Mean for 1 Valid Peaks = 3.751E+01+/- 6.884E+01 (183.51%)							
AC-228	338.32	11.40	1.575E+00	1.106E+00	1.106E+00	76.48	OK
	911.07	27.70*	7.170E-01	1.160E+00	1.160E+00	68.44	OK
	969.11	16.60	6.829E-01	1.369E+00	1.369E+00	58.27	OK
Final Mean for 3 Valid Peaks = 1.216E+00+/- 4.685E-01 (38.54%)							
PA-234M	1001.03	0.92*	6.658E-01	1.782E+01	1.782E+01	83.67	OK
Final Mean for 1 Valid Peaks = 1.782E+01+/- 1.491E+01 (83.67%)							

Sample ID : 1111065-13 Acquisition date : 11-DEC-2011 11:13:38

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
TH-234	63.29	3.80*	2.884E+00	6.383E+00	6.383E+00	50.18	OK
Final Mean for 1 Valid Peaks = 6.383E+00+/- 3.203E+00 (50.18%)							
U-235	143.76	10.50*	2.601E+00	1.014E+00	1.014E+00	104.64	<<WM Interf
	163.35	4.70	2.462E+00	----- Line Not Found		-----	Absent
	205.31	4.70	2.188E+00	1.447E+00	1.447E+00	120.36	OK
Final Mean for 1 Valid Peaks = 1.447E+00+/- 1.742E+00 (120.36%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CD-109	88.03	3.72*	2.931E+00	1.622E+01	1.703E+01	19.03	OK
Final Mean for 1 Valid Peaks = 1.703E+01+/- 3.240E+00 (19.03%)							
SN-126	87.57	37.00*	2.932E+00	1.631E+00	1.631E+00	18.05	OK
Final Mean for 1 Valid Peaks = 1.631E+00+/- 2.944E-01 (18.05%)							
CE-141	145.44	48.40*	2.589E+00	2.210E-01	4.419E-01	106.21	OK
Final Mean for 1 Valid Peaks = 4.419E-01+/- 4.693E-01 (106.21%)							
NP-237	86.50	12.60*	2.935E+00	4.784E+00	4.784E+00	17.99	OK
Final Mean for 1 Valid Peaks = 4.784E+00+/- 8.604E-01 (17.99%)							

Flag: "*" = Keyline

Sample ID : 1111065-13 Acquisition date : 11-DEC-2011 11:13:38

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.912E+01	3.793E+00	1.557E+00	1.320E-01	18.711
CD-109	1.703E+01	3.240E+00	3.789E+00	4.400E-01	4.496
SN-126	1.631E+00	2.944E-01	3.626E-01	3.604E-02	4.497
CE-141	4.419E-01	4.693E-01	5.170E-01	1.310E-01	0.855
TL-208	8.043E-01	2.359E-01	4.634E-01	4.285E-02	1.736
PB-210	1.539E+01	3.096E+00	3.301E+00	2.548E-01	4.661
PB-212	7.999E-01	2.070E-01	3.172E-01	2.598E-02	2.522
BI-214	1.703E+01	1.108E+00	2.810E-01	2.613E-02	60.612
PB-214	1.865E+01	1.300E+00	3.311E-01	2.738E-02	56.326
RA-224	3.408E+01	4.276E+00	3.471E+00	2.842E-01	9.817
RA-226	3.751E+01	6.884E+01	3.906E+00	7.153E+00	9.603
AC-228	1.216E+00	4.685E-01	5.616E-01	4.463E-02	2.165
PA-234M	1.782E+01	1.491E+01	1.637E+01	1.327E+00	1.088
TH-234	6.383E+00	3.203E+00	3.821E+00	2.831E-01	1.670
U-235	1.447E+00	1.742E+00	1.186E+00	2.090E-01	1.221
NP-237	4.784E+00	8.604E-01	1.063E+00	1.044E-01	4.499

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	6.424E-01		1.063E+00	1.912E+00	1.686E-01	0.336
NA-22	-7.786E-02		1.096E-01	1.546E-01	1.265E-02	-0.504
AL-26	4.493E-02		5.525E-02	1.139E-01	9.097E-03	0.394
TI-44	6.569E-02		1.180E-01	1.599E-01	1.253E-02	0.411
SC-46	5.057E-02		1.251E-01	2.212E-01	1.770E-02	0.229
V-48	-1.208E-01		3.542E-01	6.003E-01	4.851E-02	-0.201
CR-51	-1.610E+00		1.808E+00	2.769E+00	2.414E-01	-0.581
MN-54	-4.580E-02		1.061E-01	1.592E-01	1.351E-02	-0.288
CO-56	1.535E-02		1.247E-01	1.968E-01	1.650E-02	0.078
CO-57	6.477E-03		9.081E-02	1.483E-01	1.431E-02	0.044
CO-58	-2.307E-01		1.294E-01	1.981E-01	1.721E-02	-1.164
FE-59	-1.052E-01		3.027E-01	5.080E-01	4.530E-02	-0.207
CO-60	3.286E-02		1.205E-01	1.886E-01	1.542E-02	0.174
ZN-65	6.585E-02		2.346E-01	3.704E-01	3.035E-02	0.178
SE-75	-4.846E-03		1.902E-01	2.447E-01	2.009E-02	-0.020
RB-82	6.786E-02		2.009E+00	2.508E+00	2.229E-01	0.027
RB-83	1.875E-01		2.170E-01	3.589E-01	5.695E-02	0.522
KR-85	4.603E+01		1.840E+01	3.449E+01	3.106E+00	1.334
SR-85	2.831E-01		1.132E-01	2.122E-01	1.911E-02	1.334
Y-88	9.898E-02		7.754E-02	1.614E-01	1.282E-02	0.613
NB-93M	-1.041E+01		2.559E+00	6.764E-02	1.505E-02	-153.900
NB-94	-4.638E-04		8.957E-02	1.554E-01	1.270E-02	-0.003
NB-95	8.524E-01		2.111E-01	3.977E-01	3.563E-02	2.143
ZR-95	7.574E-02		2.137E-01	3.645E-01	3.587E-02	0.208
RU-103	3.802E-02		1.378E-01	2.456E-01	3.524E-02	0.155
RU-106	-4.130E-01		7.596E-01	1.292E+00	1.785E-01	-0.320
AG-108M	-8.258E-02		1.072E-01	1.576E-01	1.443E-02	-0.524

Sample ID : 1111065-13 Acquisition date : 11-DEC-2011 11:13:38

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
AG-110M	-5.405E-02		9.550E-02	1.437E-01	1.342E-02	-0.376
SN-113	1.248E-01		1.606E-01	2.625E-01	2.227E-02	0.476
TE123M	-1.387E-01		1.181E-01	1.845E-01	1.528E-02	-0.752
SB-124	1.053E-02		1.226E-01	1.944E-01	1.806E-02	0.054
I-125	-9.439E-02		1.679E+00	2.810E+00	2.549E-01	-0.034
SB-125	2.959E-01	+	3.106E-01	4.673E-01	4.047E-02	0.633
SB-126	1.212E+00	+	1.298E+00	1.734E+00	1.589E-01	0.699
I-129	-1.094E-01		1.505E-01	2.474E-01	2.597E-02	-0.442
I-131	-2.991E-01		1.371E+00	2.301E+00	1.901E-01	-0.130
BA-133	3.778E-01	+	3.913E-01	3.110E-01	4.035E-02	1.215
CS-134	4.390E-02		9.049E-02	1.467E-01	1.366E-02	0.299
CS-135	1.060E+00		5.507E-01	8.606E-01	7.005E-02	1.232
CS-136	4.141E-02		7.015E-01	1.092E+00	9.208E-02	0.038
CS-137	1.653E-01		9.376E-02	1.751E-01	1.638E-02	0.944
LA-138	7.576E-02		1.431E-01	2.580E-01	2.120E-02	0.294
CE-139	-5.367E-02		1.135E-01	1.812E-01	1.448E-02	-0.296
BA-140	-4.628E-01		1.649E+00	2.851E+00	9.484E-01	-0.162
LA-140	2.048E-01		5.886E-01	1.045E+00	8.575E-02	0.196
CE-144	-7.079E-02		7.509E-01	1.218E+00	1.126E-01	-0.058
PM-144	2.307E-02		9.299E-02	1.485E-01	1.376E-02	0.155
PM-145	-1.804E-01		3.643E-01	5.698E-01	3.710E-01	-0.317
PM-146	2.625E-01		1.984E-01	3.491E-01	3.027E-02	0.752
ND-147	2.237E+00		4.300E+00	7.727E+00	7.016E-01	0.290
EU-152	2.699E+00	+	9.307E-01	1.632E+00	1.729E-01	1.653
GD-153	-3.244E-01		3.310E-01	5.264E-01	5.151E-02	-0.616
EU-154	-2.165E-01		3.034E-01	4.278E-01	3.501E-02	-0.506
EU-155	1.975E+00	+	3.552E-01	5.573E-01	5.470E-02	3.544
EU-156	-7.490E+00		4.257E+00	5.985E+00	1.368E+00	-1.251
HO-166M	-2.650E-02		1.612E-01	2.497E-01	2.297E-02	-0.106
HF-172	-8.211E-01		6.688E-01	1.049E+00	9.977E-02	-0.783
LU-172	4.581E-01		4.494E+00	7.803E+00	6.383E-01	0.059
LU-173	1.067E+00		4.438E-01	7.431E-01	6.039E-02	1.436
HF-175	-1.344E-03		1.650E-01	2.104E-01	1.740E-02	-0.006
LU-176	-2.230E-02		9.037E-02	1.310E-01	1.075E-02	-0.170
TA-182	9.707E+00	+	1.164E+00	1.718E+00	1.406E-01	5.650
IR-192	9.766E-02		2.182E-01	3.545E-01	3.105E-02	0.276
HG-203	-9.619E-02		2.150E-01	2.689E-01	2.248E-02	-0.358
BI-207	2.425E-02		7.815E-02	1.389E-01	1.280E-02	0.175
BI-210M	3.892E-02		1.873E-01	2.784E-01	2.271E-02	0.140
PB-211	3.343E+00		2.866E+00	5.180E+00	4.307E-01	0.645
BI-212	6.690E-01		7.695E-01	1.275E+00	1.166E-01	0.525
RN-219	6.998E-01		1.257E+00	2.241E+00	1.858E-01	0.312
RA-223	-2.903E-01		2.085E+00	3.305E+00	2.726E-01	-0.088
RA-225	1.642E-01		1.186E+00	1.841E+00	1.541E-01	0.089
TH-227	8.221E-01		8.376E-01	1.270E+00	1.040E-01	0.647
TH-230	1.931E+01		2.996E+01	4.072E+01	3.182E+00	0.474
PA-231	3.675E+00		3.773E+00	5.758E+00	4.717E-01	0.638
TH-231	6.420E-01		7.959E-01	1.352E+00	1.653E-01	0.475

Sample ID : 1111065-13 Acquisition date : 11-DEC-2011 11:13:38

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PA-233	2.280E-02		4.534E-01	7.258E-01	1.619E-01	0.031
PA-234	2.156E-01		3.637E-01	5.987E-01	5.583E-02	0.360
AM-241	4.274E-01		2.832E-01	3.948E-01	2.796E-02	1.082
AM-243	2.235E+00		2.753E-01	3.219E-01	2.739E-02	6.944
CM-243	7.444E-01		6.984E-01	9.470E-01	7.675E-02	0.786

Sample ID : 1111065-13 Acquisition date : 11-DEC-2011 11:13:38

Total number of lines in spectrum	78	
Number of unidentified lines	42	
Number of lines tentatively identified by NID	36	46.15%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.912E+01	2.912E+01	0.379E+01	13.02	
TL-208	1.41E+10Y	1.00	8.043E-01	8.043E-01	2.359E-01	29.33	
PB-210	22.26Y	1.00	1.534E+01	1.539E+01	0.310E+01	20.12	
PB-212	1.41E+10Y	1.00	7.999E-01	7.999E-01	2.070E-01	25.88	
BI-214	1602.00Y	1.00	1.703E+01	1.703E+01	0.111E+01	6.51	
PB-214	1602.00Y	1.00	1.865E+01	1.865E+01	0.130E+01	6.97	
RA-224	1.41E+10Y	1.00	3.408E+01	3.408E+01	0.428E+01	12.55	
RA-226	1602.00Y	1.00	3.751E+01	3.751E+01	6.884E+01	183.51	
AC-228	1.41E+10Y	1.00	1.216E+00	1.216E+00	0.469E+00	38.54	
PA-234M	4.47E+09Y	1.00	1.782E+01	1.782E+01	1.491E+01	83.67	
TH-234	4.47E+09Y	1.00	6.383E+00	6.383E+00	3.203E+00	50.18	
U-235	7.04E+08Y	1.00	1.447E+00	1.447E+00	1.742E+00	120.36	
			---	---			
	Total Activity :		1.802E+02	1.802E+02			

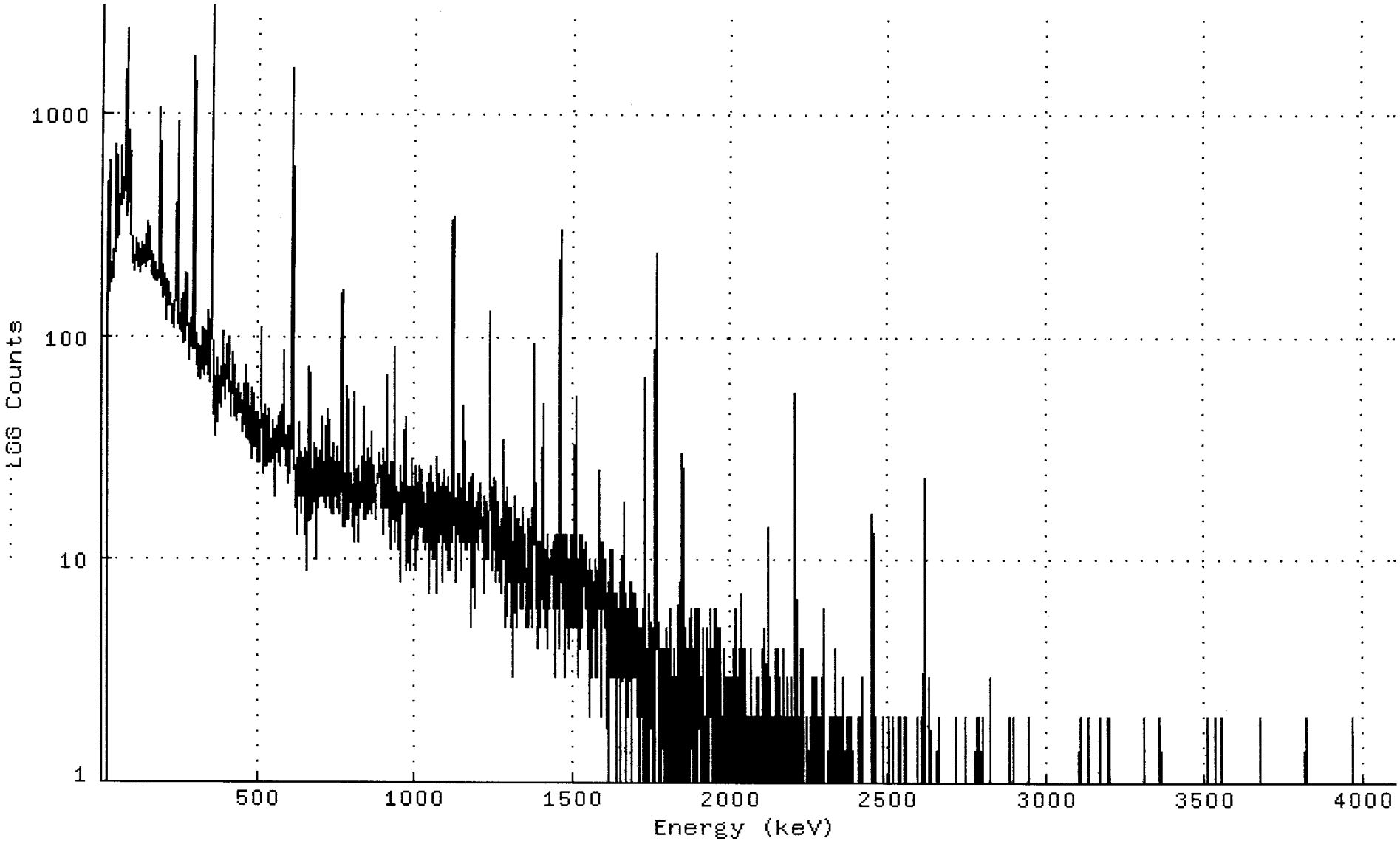
Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	1.622E+01	1.703E+01	0.324E+01	19.03	
SN-126	1.00E+05Y	1.00	1.631E+00	1.631E+00	0.294E+00	18.05	
CE-141	32.50D	2.00	2.210E-01	4.419E-01	4.693E-01	106.21	
NP-237	2.14E+06Y	1.00	4.784E+00	4.784E+00	0.860E+00	17.99	
			---	---			
	Total Activity :		2.286E+01	2.389E+01			

Grand Total Activity : 2.031E+02 2.041E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106513_GE1_GAS1102_172265.CNF;1
Title :
Sample Title: DY2-77-31-111109
Start Time: 11-DEC-2011 11:13 Sample Time: 9-NOV-2011 00:00: Energy Offset: 3.84457E-01
Real Time : 0 01:00:03.50 Sample ID : 1111065-13 Energy Slope : 9.99792E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



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Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106513_GE1_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	0	0	0
17:	0	0	193	238	232	403	607	417
25:	221	158	187	189	179	181	173	213
33:	188	176	191	189	213	180	198	215
41:	278	239	247	290	301	718	570	279
49:	290	369	270	303	430	321	283	292
57:	321	392	388	416	390	446	710	526
65:	410	432	459	510	441	436	445	452
73:	493	899	1466	998	2356	980	486	555
81:	518	343	448	662	398	427	834	636
89:	384	557	358	538	668	378	345	227
97:	278	279	244	261	209	213	194	226
105:	214	209	211	216	246	241	220	215
113:	274	248	215	203	244	219	228	242
121:	233	233	228	192	218	233	221	225
129:	262	244	208	238	250	215	245	211
137:	224	202	220	224	220	233	253	325
145:	251	230	215	244	231	220	235	244
153:	227	308	240	230	233	235	233	188
161:	224	216	226	211	196	182	185	209
169:	187	196	191	196	178	195	192	176
177:	193	196	196	194	180	200	181	202
185:	363	1051	533	199	169	202	166	185
193:	188	161	148	206	171	196	181	189
201:	185	175	151	181	178	172	118	153
209:	161	172	161	144	144	137	143	172
217:	139	144	149	139	144	147	127	123
225:	137	130	134	114	120	142	134	134
233:	108	135	148	210	179	279	397	168
241:	367	919	361	145	112	133	117	108
249:	123	113	121	106	117	105	124	145
257:	132	118	153	132	115	92	108	95
265:	119	99	95	111	170	190	183	147
273:	122	115	135	110	115	110	110	114
281:	78	94	93	119	117	107	105	89
289:	96	88	110	91	90	365	1771	1060
297:	127	121	114	146	101	75	102	98
305:	91	85	73	82	86	71	91	66
313:	86	89	87	77	80	64	85	82
321:	70	78	75	108	92	67	91	86
329:	98	106	84	77	93	86	82	74
337:	92	119	129	77	67	85	82	85
345:	62	79	68	72	91	151	986	3065
353:	973	128	97	95	91	50	44	64
361:	55	60	52	49	55	51	66	36
369:	45	79	55	60	70	45	66	51
377:	62	50	58	52	60	48	56	72
385:	58	63	73	61	104	77	72	59
393:	70	61	73	64	52	62	64	72
401:	73	91	80	68	99	70	75	61
409:	67	70	43	54	58	62	59	61
417:	57	59	55	84	58	63	62	70
425:	43	46	74	69	48	57	42	56

433:	42	49	51	51	53	45	59	61
441:	50	50	46	45	52	45	47	49
449:	37	47	48	51	50	59	60	58
457:	40	40	46	46	51	69	73	41
465:	35	34	46	36	41	61	37	39
473:	34	47	36	33	47	49	58	43
481:	56	36	28	40	39	36	55	41
489:	32	36	32	39	35	45	34	32
497:	32	44	39	34	27	42	27	31
505:	36	30	30	49	41	67	109	78
513:	53	38	28	29	29	38	24	49
521:	29	41	35	37	26	26	39	37
529:	43	34	43	28	34	47	27	32
537:	37	31	27	34	27	34	34	34
545:	28	42	29	31	31	40	32	38
553:	19	33	30	27	32	32	31	32
561:	38	39	28	43	27	28	31	31
569:	31	41	45	26	35	28	35	35
577:	39	36	42	49	41	36	86	73
585:	33	33	29	36	29	32	26	31
593:	28	27	39	22	29	31	30	39
601:	24	24	28	31	31	32	56	328
609:	1576	1456	226	57	48	49	33	26
617:	23	26	23	26	24	22	13	28
625:	26	27	26	22	24	19	27	23
633:	41	29	27	28	16	30	28	17
641:	21	28	19	23	20	25	24	31
649:	24	26	13	20	26	24	27	12
657:	30	28	9	24	51	51	26	27
665:	72	65	29	23	22	21	15	19
673:	21	25	16	18	19	23	18	32
681:	20	21	33	24	20	16	31	10
689:	20	28	25	22	17	27	28	19
697:	24	30	22	25	22	43	29	28
705:	19	25	27	26	27	18	27	20
713:	25	19	17	17	23	23	33	47
721:	24	19	22	25	19	26	42	31
729:	22	20	17	17	28	19	20	20
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865:	23	25	26	18	21	25	26	15
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897:	31	13	23	20	24	17	27	21
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993:	15	13	19	13	16	18	25	25
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1409:	44	8	12	6	11	10	9	5
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1425:	7	10	6	7	7	10	9	10
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1473:	8	3	13	10	6	6	7	9
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1585:	10	7	6	9	9	9	2	12
1593:	6	11	12	9	7	8	6	8
1601:	8	5	9	10	5	5	4	4
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1705:	4	3	6	3	2	3	5	1
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1721:	2	5	3	6	0	3	3	9
1729:	37	65	24	11	1	3	4	2
1737:	3	4	1	3	2	0	3	1
1745:	7	4	5	4	4	2	3	1
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1769:	7	4	3	2	5	2	0	1
1777:	3	3	2	4	3	4	2	3
1785:	3	2	2	0	2	4	0	4
1793:	0	3	5	1	3	3	3	4
1801:	3	1	3	0	3	2	1	6
1809:	4	2	3	1	2	2	1	1
1817:	3	2	2	4	0	1	2	3
1825:	3	3	1	2	0	1	4	1
1833:	2	2	2	5	8	5	2	2
1841:	4	1	1	3	4	15	30	28
1849:	23	10	0	0	2	1	1	4
1857:	1	5	2	2	1	3	4	1
1865:	3	1	0	1	3	3	2	5

1873:	6	5	3	3	2	2	0	1
1881:	1	1	3	4	0	4	2	2
1889:	2	6	2	1	6	1	3	6
1897:	6	3	5	3	4	3	1	3
1905:	1	3	0	3	1	2	1	5
1913:	4	1	2	2	0	0	0	2
1921:	1	1	4	4	2	5	3	1
1929:	2	1	4	3	4	2	5	6
1937:	6	5	4	0	3	3	4	3
1945:	2	3	2	6	2	1	0	1
1953:	2	3	4	6	2	4	1	0
1961:	5	1	2	4	1	1	5	0
1969:	2	2	1	2	1	1	1	4
1977:	2	4	4	2	0	0	2	1
1985:	2	2	3	2	2	1	1	3
1993:	3	3	1	1	1	1	2	1
2001:	2	1	2	3	0	0	2	0
2009:	3	2	3	4	3	1	1	1
2017:	6	1	1	3	1	3	2	3
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2033:	1	3	7	0	2	1	1	4
2041:	4	3	2	1	0	3	4	2
2049:	2	1	2	2	0	1	2	1
2057:	1	0	2	1	1	3	0	2
2065:	0	4	1	1	2	1	0	0
2073:	0	1	1	2	1	2	1	1
2081:	2	0	1	3	2	0	2	0
2089:	2	3	0	0	1	2	0	0
2097:	2	1	1	1	4	3	1	5
2105:	1	3	1	0	4	3	2	2
2113:	1	2	2	1	5	10	14	11
2121:	3	2	0	3	2	1	1	2
2129:	2	1	1	2	1	1	2	0
2137:	2	0	1	2	2	1	0	4
2145:	1	1	2	4	2	3	1	2
2153:	1	1	3	1	1	2	0	0
2161:	2	2	1	1	1	1	0	1
2169:	4	0	1	2	1	0	2	2
2177:	0	3	1	2	2	1	1	1
2185:	2	2	0	1	1	1	1	3
2193:	1	0	2	2	0	1	0	2
2201:	1	6	27	56	45	15	3	1
2209:	2	0	0	2	2	0	1	1
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2225:	0	3	1	0	4	0	1	0
2233:	0	1	0	1	1	0	0	0
2241:	1	2	0	0	1	0	0	0
2249:	1	2	0	0	0	1	1	3
2257:	0	0	2	1	3	1	1	1
2265:	2	0	0	0	3	1	0	2
2273:	2	0	1	0	0	0	0	1
2281:	0	0	0	2	0	2	0	3
2289:	1	1	0	4	4	6	2	2
2297:	1	1	1	1	0	0	0	1
2305:	1	1	0	1	1	2	1	1
2313:	0	1	1	1	2	0	0	1
2321:	1	0	0	1	0	2	2	1
2329:	4	1	1	2	1	2	2	0
2337:	0	0	1	1	0	0	0	2
2345:	2	2	1	0	0	0	1	2

2353:	0	3	0	2	2	1	0	1
2361:	0	1	1	1	1	0	1	1
2369:	0	2	1	2	0	0	2	1
2377:	0	0	0	1	2	2	1	1
2385:	0	0	0	0	0	1	1	0
2393:	0	0	1	0	1	0	1	0
2401:	1	1	0	2	2	0	1	1
2409:	0	2	2	1	2	0	1	3
2417:	0	1	1	0	1	0	1	1
2425:	0	0	1	0	0	1	0	0
2433:	0	0	0	1	1	1	0	0
2441:	1	0	0	1	0	5	13	16
2449:	11	2	2	1	2	0	0	0
2457:	0	2	0	1	0	1	0	0
2465:	0	0	0	1	0	0	1	0
2473:	1	0	0	0	0	0	0	1
2481:	1	1	2	0	0	0	1	1
2489:	0	0	1	0	1	1	1	0
2497:	0	0	2	0	0	1	0	0
2505:	0	0	0	1	0	0	2	0
2513:	1	0	0	1	1	0	0	1
2521:	1	0	1	0	0	1	0	0
2529:	0	2	0	1	0	1	0	0
2537:	2	0	0	0	1	0	0	0
2545:	0	1	2	1	0	0	0	0
2553:	0	0	0	0	2	0	0	0
2561:	1	0	0	0	0	0	0	0
2569:	1	0	0	0	0	0	0	0
2577:	0	1	0	0	0	0	0	1
2585:	0	0	0	1	0	0	2	0
2593:	0	0	0	0	0	0	0	0
2601:	0	2	1	0	0	1	1	0
2609:	0	0	1	2	5	15	23	11
2617:	3	1	0	0	0	1	0	0
2625:	0	0	1	1	2	3	1	0
2633:	0	1	1	0	0	1	1	1
2641:	0	0	0	0	0	0	0	0
2649:	1	0	0	1	0	0	0	2
2657:	1	0	0	1	0	0	1	0
2665:	0	0	1	0	1	0	0	0
2673:	0	0	0	0	0	0	0	0
2681:	1	0	0	0	0	1	0	1
2689:	1	0	0	0	0	0	0	1
2697:	0	0	1	0	0	0	0	1
2705:	0	0	1	0	0	0	2	0
2713:	0	0	0	0	0	0	0	0
2721:	0	0	0	0	1	0	0	0
2729:	1	0	0	0	0	0	1	1
2737:	0	0	0	0	0	2	0	0
2745:	0	1	0	1	0	0	0	1
2753:	0	1	0	0	0	0	0	0
2761:	0	0	0	0	0	1	0	0
2769:	0	0	1	0	0	0	0	0
2777:	2	1	1	0	1	0	0	2
2785:	0	0	0	0	0	1	0	0
2793:	0	0	2	0	0	0	0	0
2801:	0	1	0	1	0	0	0	0
2809:	0	0	0	0	0	0	0	0
2817:	1	0	0	0	0	3	0	0
2825:	0	0	1	1	0	0	0	0

2833:	0	0	0	1	0	0	0	1
2841:	0	1	0	0	0	0	0	0
2849:	0	0	1	0	0	0	0	0
2857:	0	0	0	0	1	0	0	0
2865:	1	1	0	0	0	0	0	0
2873:	0	1	0	0	0	0	0	0
2881:	0	0	2	0	0	0	0	0
2889:	0	0	1	0	2	0	0	0
2897:	0	0	0	1	0	0	0	0
2905:	0	0	1	0	0	0	0	0
2913:	0	0	0	0	0	0	0	0
2921:	0	0	0	0	0	0	0	0
2929:	0	0	0	0	1	0	0	0
2937:	1	0	1	1	0	0	0	0
2945:	2	0	0	0	0	0	0	0
2953:	0	0	0	1	0	1	0	1
2961:	0	0	0	0	0	0	0	0
2969:	0	1	1	0	0	0	0	1
2977:	0	0	0	0	0	0	0	1
2985:	0	0	1	0	1	0	0	1
2993:	0	0	0	0	0	0	1	1
3001:	0	0	0	0	0	0	0	1
3009:	0	0	0	1	0	0	1	1
3017:	0	0	0	0	0	0	0	1
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3033:	0	0	0	1	0	0	0	0
3041:	0	0	0	0	0	0	0	0
3049:	0	0	0	0	1	0	0	0
3057:	0	0	0	0	0	0	0	0
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3073:	0	0	0	0	1	0	0	0
3081:	0	0	0	1	0	0	0	0
3089:	1	0	1	0	0	0	1	0
3097:	0	0	0	0	1	1	0	0
3105:	2	0	0	0	0	0	0	1
3113:	1	0	0	1	0	1	0	0
3121:	0	0	1	0	0	0	0	0
3129:	0	0	1	0	2	0	0	0
3137:	0	0	0	0	0	0	0	1
3145:	0	0	0	1	1	0	0	1
3153:	0	0	0	0	0	0	0	0
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3169:	2	0	0	0	0	0	0	0
3177:	1	0	0	1	0	0	0	0
3185:	1	0	1	0	0	0	2	0
3193:	0	0	0	1	0	0	1	2
3201:	0	0	1	0	0	0	1	0
3209:	1	0	0	0	0	0	1	1
3217:	0	0	0	0	0	1	0	0
3225:	0	0	0	1	0	0	0	0
3233:	0	0	0	0	0	0	0	0
3241:	1	0	0	1	0	0	0	0
3249:	0	0	0	0	0	0	0	0
3257:	0	0	0	0	0	0	0	1
3265:	0	0	0	0	0	0	0	1
3273:	1	1	0	1	0	1	1	0
3281:	0	1	0	0	0	0	0	0
3289:	0	0	0	0	0	0	0	0
3297:	0	0	1	0	1	1	0	0
3305:	1	0	2	0	0	0	0	0

3313:	1	0	0	0	0	0	1	0
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3329:	1	0	0	0	0	0	0	0
3337:	0	0	0	0	0	1	0	0
3345:	0	0	1	0	0	0	0	1
3353:	0	0	1	0	0	2	0	0
3361:	0	0	0	0	0	0	0	0
3369:	0	1	0	0	0	1	0	0
3377:	0	0	0	0	0	1	0	0
3385:	1	0	0	1	0	0	0	0
3393:	0	0	0	0	0	0	0	0
3401:	1	0	1	0	0	0	0	0
3409:	0	0	0	0	0	0	0	0
3417:	1	0	0	0	0	0	0	0
3425:	0	0	0	0	0	0	0	0
3433:	0	0	0	0	0	0	0	0
3441:	0	0	1	0	1	0	0	0
3449:	0	0	1	0	0	0	0	0
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3465:	0	0	0	0	0	0	0	0
3473:	0	0	1	0	0	0	0	0
3481:	0	0	0	0	0	1	0	0
3489:	0	0	0	0	0	0	0	0
3497:	0	0	0	0	0	0	1	0
3505:	0	0	0	2	0	0	0	0
3513:	0	0	0	0	1	0	0	0
3521:	1	0	0	0	0	0	0	0
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3537:	0	0	0	0	0	0	1	0
3545:	0	0	0	2	0	0	0	0
3553:	0	1	1	0	0	0	0	0
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3569:	1	0	0	0	1	0	1	0
3577:	0	0	0	0	0	0	0	0
3585:	1	0	0	0	1	0	0	0
3593:	0	0	0	1	0	0	0	0
3601:	0	0	0	0	0	0	0	0
3609:	0	0	0	0	0	0	0	0
3617:	0	0	0	0	0	0	0	0
3625:	0	0	0	0	0	0	0	1
3633:	0	0	0	0	0	0	0	1
3641:	0	0	0	0	0	0	0	0
3649:	0	0	1	1	0	1	0	0
3657:	0	0	0	1	0	0	0	0
3665:	0	0	1	1	0	2	0	0
3673:	0	0	0	0	0	0	0	0
3681:	0	0	0	1	0	0	0	0
3689:	0	0	0	0	0	1	0	0
3697:	0	0	1	0	0	0	0	0
3705:	0	0	0	0	0	0	0	1
3713:	0	0	0	0	0	1	0	0
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3729:	0	0	1	0	1	1	0	0
3737:	0	0	0	0	0	0	1	0
3745:	1	0	0	0	1	0	0	0
3753:	0	0	0	1	0	0	0	0
3761:	0	0	0	0	1	0	0	0
3769:	0	0	1	0	1	0	0	1
3777:	0	0	0	0	0	0	0	0
3785:	0	0	1	0	0	0	0	0

3793:	0	1	0	0	0	0	0	0
3801:	0	0	1	0	0	0	0	1
3809:	0	0	0	0	1	2	0	0
3817:	0	0	0	1	0	0	0	0
3825:	0	1	1	0	0	0	0	0
3833:	1	0	0	0	0	0	1	1
3841:	0	0	0	0	0	0	0	0
3849:	0	1	0	0	0	0	0	0
3857:	0	1	1	0	0	0	0	0
3865:	0	0	0	0	0	0	0	0
3873:	0	0	0	0	0	0	0	0
3881:	0	0	0	0	0	0	0	0
3889:	0	0	0	0	0	0	0	0
3897:	0	0	0	0	0	0	0	0
3905:	0	1	1	0	1	0	0	1
3913:	1	0	0	0	0	0	0	0
3921:	1	1	0	0	0	0	0	0
3929:	1	0	0	0	0	0	0	1
3937:	0	0	0	0	0	0	0	0
3945:	0	0	0	0	0	0	0	0
3953:	0	0	0	0	0	0	0	1
3961:	0	0	0	2	0	0	1	0
3969:	0	0	0	0	0	0	0	0
3977:	1	0	0	0	0	0	0	0
3985:	0	0	0	0	0	0	0	0
3993:	0	0	0	0	0	0	0	0
4001:	0	0	1	0	0	0	0	0
4009:	0	0	0	0	0	0	0	0
4017:	0	1	0	0	0	0	0	0
4025:	0	0	0	0	0	1	0	0
4033:	0	0	0	1	0	0	0	0
4041:	0	0	1	0	0	0	0	0
4049:	0	1	0	0	0	0	0	1
4057:	0	0	1	0	0	0	0	0
4065:	1	0	0	0	0	0	0	0
4073:	0	0	0	1	0	0	0	0
4081:	0	0	0	0	0	0	1	1
4089:	0	0	0	0	0	0	1	1

Sample ID : 1111065-14 Acquisition date : 11-DEC-2011 11:14:30

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VAX/VMS Peak Search Report Generated 11-DEC-2011 12:14:46.93

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106514_GE2_GAS1102_172266.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-BKGD-E-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 11-DEC-2011 11:14:30
Sample ID : 1111065-14 Sample Quantity : 4.39030E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE2 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:01.12 0.0%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.20*	115	411	1.83	46.15	43	6	61.4		PB-210
0	76.23*	999	967	3.34	76.19	71	9	13.0		
2	84.29	80	220	1.22	84.26	83	9	48.5	8.87E+00	
2	87.32	183	554	1.62	87.28	83	9	41.4		NP-237
										SN-126
										CD-109
0	129.50	89	415	1.94	129.47	126	7	79.7		
0	154.89	118	455	5.00	154.88	151	9	68.2		
0	186.05*	234	397	1.48	186.06	182	8	33.9		RA-226
0	208.96	89	258	2.18	208.97	206	6	60.6		
1	236.13	37	171	1.70	236.15	233	14	128.0	9.28E+00	
1	238.86*	553	168	1.70	238.88	233	14	11.2		PB-212
1	241.99*	178	163	1.70	242.01	233	14	35.3		RA-224
0	269.05	71	241	1.60	269.08	266	8	78.8		CS-135
0	295.02*	328	276	1.53	295.06	291	9	21.6		PB-214
0	338.03*	121	159	1.93	338.09	334	7	39.8		AC-228
0	351.94*	595	181	1.37	352.00	348	8	11.7		PB-214
0	387.42	58	146	3.15	387.49	383	9	79.7		
0	462.30	72	117	3.50	462.41	457	10	61.2		
0	486.65	46	85	3.11	486.76	483	8	75.8		
0	494.07	46	53	4.78	494.19	491	7	61.0		
2	501.25	29	33	2.15	501.37	499	9	69.9	2.05E+00	
2	504.87	19	66	2.15	504.99	499	9	140.7		
0	510.93*	59	134	2.47	511.06	507	11	87.5		
0	534.07	40	79	3.08	534.21	530	9	87.0		
0	583.11*	159	105	1.85	583.26	579	10	29.6		TL-208
0	609.34*	473	110	1.92	609.50	604	12	13.2		BI-214
2	723.79	19	23	2.33	723.99	722	10	77.2	3.59E+00	
2	727.20	42	50	2.33	727.40	722	10	68.8		BI-212
2	768.19	38	70	2.36	768.41	765	16	77.1	1.15E+00	
2	777.37	15	35	2.37	777.59	765	16	161.2		RB-82
3	806.41	23	36	2.25	806.64	801	9	95.3	2.40E+00	
0	859.93	32	39	3.51	860.19	857	7	74.9		TL-208
0	911.48*	110	72	1.89	911.75	906	9	34.3		AC-228
0	969.08*	44	71	1.22	969.37	966	7	72.0		AC-228
0	1095.21	26	43	2.56	1095.55	1091	10	103.1		

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Sample ID : 1111065-14 Acquisition date : 11-DEC-2011 11:14:30

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	1120.61*	96	56	2.14	1120.96	1116	11	37.0		BI-214
0	1154.29	20	39	1.58	1154.65	1153	6	108.4		
3	1170.17	12	17	2.89	1170.54	1169	11	91.1	1.83E+01	
3	1177.35	19	17	2.89	1177.72	1169	11	83.0		
0	1182.62	20	38	3.71	1183.00	1180	8	114.1		
0	1220.79	41	46	6.29	1221.18	1216	11	70.9		
0	1376.07	47	23	3.11	1376.52	1370	13	50.8		
0	1460.47*	603	25	2.61	1460.95	1455	13	8.9		K-40
0	1619.63	17	5	4.29	1620.17	1615	9	64.9		BI-212
0	1663.32	8	8	1.78	1663.87	1659	8	135.1		
0	1722.68	13	2	2.45	1723.25	1720	7	64.9		
0	1729.32	18	1	2.28	1729.90	1727	6	52.3		
0	1734.42	10	0	2.36	1735.00	1733	6	63.2		
0	1763.94*	72	5	2.78	1764.53	1760	9	27.1		BI-214
0	1826.38	8	0	1.16	1827.00	1823	7	70.7		
1	1844.60	6	1	2.70	1845.22	1844	9	55.6	2.47E+00	
1	1847.62	15	2	2.71	1848.25	1844	9	56.5		
0	2102.52*	10	2	1.37	2103.24	2099	10	94.8		
0	2116.69	9	2	4.82	2117.42	2114	7	79.3		
0	2202.76*	26	0	2.47	2203.52	2199	9	42.8		BI-214
0	2230.95	7	0	1.16	2231.71	2228	7	75.6		
0	2318.00	6	1	1.87	2318.80	2316	6	105.1		
0	2421.16	5	0	2.98	2422.00	2419	6	89.4		
0	2446.29	14	0	2.32	2447.14	2443	8	53.5		
0	2613.43*	49	3	2.54	2614.34	2610	10	33.3		TL-208

Sample ID : 1111065-14 Acquisition date : 11-DEC-2011 11:14:30

Total number of lines in spectrum	59	
Number of unidentified lines	29	
Number of lines tentatively identified by NID	30	50.85%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.109E+01	2.109E+01	0.299E+01	14.18	
TL-208	1.41E+10Y	1.00	8.211E-01	8.211E-01	1.880E-01	22.89	
PB-210	22.26Y	1.00	2.200E+00	2.206E+00	1.369E+00	62.07	
BI-212	1.41E+10Y	1.00	9.568E-01	9.568E-01	5.195E-01	54.29	
PB-212	1.41E+10Y	1.00	1.167E+00	1.167E+00	0.169E+00	14.49	
BI-214	1602.00Y	1.00	1.978E+00	1.978E+00	0.254E+00	12.82	
PB-214	1602.00Y	1.00	1.940E+00	1.940E+00	0.247E+00	12.75	
RA-224	1.41E+10Y	1.00	4.276E+00	4.276E+00	1.560E+00	36.48	
RA-226	1602.00Y	1.00	5.802E+00	5.802E+00	10.81E+00	186.26	
AC-228	1.41E+10Y	1.00	1.031E+00	1.031E+00	0.265E+00	25.67	
			---	---			
	Total Activity :		4.126E+01	4.126E+01			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
RB-82	25.55D	2.41	2.760E-01	6.663E-01	10.76E-01	161.54	
CS-135	2.30E+06Y	1.00	4.529E-01	4.529E-01	3.591E-01	79.29	
			---	---			
	Total Activity :		7.289E-01	1.119E+00			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	3.215E+00	3.375E+00	1.498E+00	44.40	
SN-126	1.00E+05Y	1.00	3.232E-01	3.232E-01	1.421E-01	43.97	
NP-237	2.14E+06Y	1.00	9.489E-01	9.489E-01	4.164E-01	43.88	
			---	---			
	Total Activity :		4.487E+00	4.647E+00			

Grand Total Activity :	4.647E+01	4.703E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-14
Acquisition date : 11-DEC-2011 11:14:30

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	4.582E-01	2.109E+01	2.109E+01	14.18	OK
	Final Mean for 1 Valid Peaks = 2.109E+01+/- 2.990E+00 (14.18%)						
TL-208	583.14	30.22*	9.242E-01	9.726E-01	9.726E-01	31.20	OK
	860.37	4.48	6.742E-01	1.799E+00	1.799E+00	75.50	OK
	2614.66	35.85	3.402E-01	6.924E-01	6.924E-01	35.13	OK
	Final Mean for 3 Valid Peaks = 8.211E-01+/- 1.880E-01 (22.89%)						
PB-210	46.50	4.05*	2.204E+00	2.200E+00	2.206E+00	62.07	OK
	Final Mean for 1 Valid Peaks = 2.206E+00+/- 1.369E+00 (62.07%)						
BI-212	727.17	11.80*	7.716E-01	7.869E-01	7.869E-01	69.49	OK
	1620.62	2.75	4.293E-01	2.528E+00	2.528E+00	65.79	OK
	Final Mean for 2 Valid Peaks = 9.568E-01+/- 5.195E-01 (54.29%)						
PB-212	238.63	44.60*	1.817E+00	1.167E+00	1.167E+00	14.49	OK
	300.09	3.41	1.555E+00	----- Line Not Found		-----	Absent
	Final Mean for 1 Valid Peaks = 1.167E+00+/- 1.691E-01 (14.49%)						
BI-214	609.31	46.30*	8.915E-01	1.959E+00	1.959E+00	16.42	OK
	1120.29	15.10	5.508E-01	1.969E+00	1.969E+00	38.35	OK
	1764.49	15.80	4.084E-01	1.920E+00	1.920E+00	28.88	OK
	2204.22	4.98	3.644E-01	2.408E+00	2.408E+00	44.04	OK
	Final Mean for 4 Valid Peaks = 1.978E+00+/- 2.535E-01 (12.82%)						
PB-214	295.21	19.19	1.574E+00	1.859E+00	1.859E+00	23.54	OK
	351.92	37.19*	1.383E+00	1.978E+00	1.978E+00	15.16	OK
	Final Mean for 2 Valid Peaks = 1.940E+00+/- 2.474E-01 (12.75%)						
RA-224	240.98	3.95*	1.806E+00	4.276E+00	4.276E+00	36.48	OK
	Final Mean for 1 Valid Peaks = 4.276E+00+/- 1.560E+00 (36.48%)						
RA-226	186.21	3.28*	2.099E+00	5.802E+00	5.802E+00	186.26	OK
	Final Mean for 1 Valid Peaks = 5.802E+00+/- 1.081E+01 (186.26%)						
AC-228	338.32	11.40	1.425E+00	1.271E+00	1.271E+00	40.95	OK
	911.07	27.70*	6.445E-01	1.053E+00	1.053E+00	35.70	OK
	969.11	16.60	6.144E-01	7.352E-01	7.352E-01	72.64	OK
	Final Mean for 3 Valid Peaks = 1.031E+00+/- 2.647E-01 (25.67%)						

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Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
RB-82	776.52	13.00*	7.317E-01	2.760E-01	6.663E-01	161.54	OK
Final Mean for 1 Valid Peaks = 6.663E-01+/- 1.076E+00 (161.54%)							
CS-135	268.24	16.00*	1.682E+00	4.529E-01	4.529E-01	79.29	OK
Final Mean for 1 Valid Peaks = 4.529E-01+/- 3.591E-01 (79.29%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CD-109	88.03	3.72*	2.618E+00	3.215E+00	3.375E+00	44.40	OK
Final Mean for 1 Valid Peaks = 3.375E+00+/- 1.498E+00 (44.40%)							
SN-126	87.57	37.00*	2.618E+00	3.232E-01	3.232E-01	43.97	OK
Final Mean for 1 Valid Peaks = 3.232E-01+/- 1.421E-01 (43.97%)							
NP-237	86.50	12.60*	2.619E+00	9.489E-01	9.489E-01	43.88	OK
Final Mean for 1 Valid Peaks = 9.489E-01+/- 4.164E-01 (43.88%)							

Flag: "*" = Keyline

Sample ID : 1111065-14 Acquisition date : 11-DEC-2011 11:14:30

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.109E+01	2.990E+00	6.993E-01	7.170E-02	30.151
RB-82	6.663E-01	1.076E+00	1.544E+00	1.378E-01	0.432
CD-109	3.375E+00	1.498E+00	2.129E+00	3.284E-01	1.586
SN-126	3.232E-01	1.421E-01	2.038E-01	2.880E-02	1.586
CS-135	4.529E-01	3.591E-01	3.633E-01	2.986E-02	1.247
TL-208	8.211E-01	1.880E-01	2.605E-01	2.371E-02	3.152
PB-210	2.206E+00	1.369E+00	1.566E+00	1.312E-01	1.409
BI-212	9.568E-01	5.195E-01	6.869E-01	6.063E-02	1.393
PB-212	1.167E+00	1.691E-01	1.330E-01	1.094E-02	8.775
BI-214	1.978E+00	2.535E-01	1.584E-01	1.422E-02	12.485
PB-214	1.940E+00	2.474E-01	1.679E-01	1.470E-02	11.555
RA-224	4.276E+00	1.560E+00	1.512E+00	1.244E-01	2.828
RA-226	5.802E+00	1.081E+01	1.880E+00	3.442E+00	3.086
AC-228	1.031E+00	2.647E-01	3.437E-01	3.091E-02	3.001
NP-237	9.489E-01	4.164E-01	5.979E-01	8.287E-02	1.587

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	3.577E-01		5.962E-01	1.074E+00	9.927E-02	0.333
NA-22	-1.969E-02		5.711E-02	9.643E-02	9.505E-03	-0.204
AL-26	3.146E-04		3.576E-02	7.171E-02	6.482E-03	0.004
TI-44	-3.118E-02		4.709E-02	7.193E-02	6.744E-03	-0.434
SC-46	1.747E-02		6.487E-02	1.185E-01	1.063E-02	0.147
V-48	3.481E-01		2.104E-01	4.293E-01	3.929E-02	0.811
CR-51	-5.132E-01		8.963E-01	1.409E+00	1.269E-01	-0.364
MN-54	5.358E-02		5.235E-02	1.015E-01	9.109E-03	0.528
CO-56	2.335E-02		6.224E-02	1.153E-01	1.036E-02	0.202
CO-57	5.830E-03		4.669E-02	7.288E-02	6.182E-03	0.080
CO-58	-5.347E-02		7.247E-02	1.042E-01	9.365E-03	-0.513
FE-59	2.037E-02		1.700E-01	2.743E-01	2.724E-02	0.074
CO-60	2.585E-02		6.999E-02	1.187E-01	1.101E-02	0.218
ZN-65	2.704E-02		1.312E-01	2.133E-01	1.981E-02	0.127
SE-75	5.237E-03		7.832E-02	1.196E-01	9.913E-03	0.044
RB-83	1.072E-01		1.123E-01	1.992E-01	3.186E-02	0.538
KR-85	1.537E+01		1.144E+01	2.020E+01	1.870E+00	0.761
SR-85	9.453E-02		7.039E-02	1.242E-01	1.151E-02	0.761
Y-88	-3.119E-03		3.851E-02	7.273E-02	6.492E-03	-0.043
NB-93M	-8.473E+00		3.992E+00	5.009E+00	1.508E+00	-1.691
NB-94	6.040E-03		4.839E-02	8.740E-02	7.845E-03	0.069
NB-95	1.092E-01		1.209E-01	2.068E-01	1.844E-02	0.528
ZR-95	-3.059E-02		1.202E-01	2.099E-01	2.045E-02	-0.146
RU-103	3.943E-02		8.877E-02	1.253E-01	1.825E-02	0.315
RU-106	-1.847E-01		4.585E-01	7.963E-01	1.078E-01	-0.232
AG-108M	4.567E-02	+	3.555E-02	9.566E-02	8.433E-03	0.477
AG-110M	-1.297E-01		6.624E-02	9.881E-02	8.549E-03	-1.313
SN-113	4.140E-02		7.486E-02	1.275E-01	1.174E-02	0.325

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
TE123M	-1.239E-02		5.390E-02	8.187E-02	6.586E-03	-0.151
SB-124	-5.857E-03		6.527E-02	1.048E-01	9.445E-03	-0.056
I-125	-1.298E+00		1.349E+00	2.132E+00	2.186E-01	-0.609
SB-125	3.279E-02		1.392E-01	2.542E-01	2.359E-02	0.129
SB-126	1.123E-03		5.972E-01	9.566E-01	8.427E-02	0.001
I-129	2.480E-02		1.275E-01	2.210E-01	2.709E-02	0.112
I-131	-2.876E-02		6.805E-01	1.235E+00	1.090E-01	-0.023
BA-133	-1.342E-02		6.727E-02	9.954E-02	1.325E-02	-0.135
CS-134	-6.878E-03		5.020E-02	7.983E-02	7.200E-03	-0.086
CS-136	-6.936E-02		3.940E-01	6.822E-01	6.473E-02	-0.102
CS-137	1.361E-01		7.031E-02	1.354E-01	1.170E-02	1.005
LA-138	2.177E-02		7.563E-02	1.409E-01	1.420E-02	0.155
CE-139	6.336E-03		5.310E-02	8.881E-02	7.070E-03	0.071
BA-140	5.772E-01		9.776E-01	1.658E+00	5.522E-01	0.348
LA-140	-6.528E-02		2.590E-01	4.850E-01	4.732E-02	-0.135
CE-141	1.170E-01		1.548E-01	2.580E-01	6.484E-02	0.453
CE-144	-3.482E-01		3.590E-01	5.238E-01	4.367E-02	-0.665
PM-144	1.462E-02		5.136E-02	9.143E-02	8.004E-03	0.160
PM-145	-3.960E-01		3.668E-01	4.029E-01	2.630E-01	-0.983
PM-146	5.602E-02		1.036E-01	1.768E-01	1.627E-02	0.317
ND-147	1.172E+00		2.340E+00	4.024E+00	3.719E-01	0.291
EU-152	1.989E-01		3.373E-01	6.511E-01	7.898E-02	0.305
GD-153	6.535E-02		1.628E-01	2.788E-01	3.250E-02	0.234
EU-154	-5.537E-02		1.580E-01	2.666E-01	2.627E-02	-0.208
EU-155	3.918E-01	+	1.719E-01	2.592E-01	3.592E-02	1.512
EU-156	-7.194E-01		2.167E+00	3.312E+00	7.610E-01	-0.217
HO-166M	-2.201E-02		8.271E-02	1.448E-01	1.272E-02	-0.152
HF-172	-5.695E-02		3.419E-01	5.251E-01	4.424E-02	-0.108
LU-172	1.629E+00		2.653E+00	4.953E+00	4.593E-01	0.329
LU-173	2.268E-01		2.077E-01	3.372E-01	2.770E-02	0.673
HF-175	7.351E-02		7.720E-02	1.124E-01	9.788E-03	0.654
LU-176	-9.213E-03		3.988E-02	6.451E-02	5.444E-03	-0.143
TA-182	1.038E+00	+	3.981E-01	6.085E-01	5.648E-02	1.706
IR-192	3.201E-02		1.182E-01	1.971E-01	1.820E-02	0.162
HG-203	9.220E-02		7.744E-02	1.363E-01	1.152E-02	0.677
BI-207	-2.702E-03		4.179E-02	7.491E-02	6.854E-03	-0.036
BI-210M	1.703E-02		8.752E-02	1.349E-01	1.110E-02	0.126
PB-211	-4.752E-01		1.425E+00	2.516E+00	2.269E-01	-0.189
RN-219	5.530E-01		6.133E-01	1.155E+00	1.040E-01	0.479
RA-223	-1.388E+00		1.072E+00	1.583E+00	1.357E-01	-0.876
RA-225	-1.385E+00		7.014E-01	9.974E-01	9.258E-02	-1.389
TH-227	3.031E-01	+	3.890E-01	7.015E-01	5.768E-02	0.432
TH-230	-6.849E+00		1.203E+01	1.846E+01	1.722E+00	-0.371
PA-231	5.978E-01		1.903E+00	2.936E+00	2.468E-01	0.204
TH-231	3.008E-01		6.307E-01	1.055E+00	1.554E-01	0.285
PA-233	1.035E-01		2.222E-01	3.752E-01	8.406E-02	0.276
PA-234	1.628E-01		1.761E-01	2.851E-01	2.384E-02	0.571
PA-234M	-1.318E-01		5.704E+00	1.020E+01	9.369E-01	-0.013

Sample ID : 1111065-14 Acquisition date : 11-DEC-2011 11:14:30

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
TH-234	2.831E-01		1.129E+00	1.962E+00	1.634E-01	0.144
U-235	3.542E-01		3.544E-01	5.981E-01	1.036E-01	0.592
AM-241	-4.816E-03		1.146E-01	1.956E-01	1.463E-02	-0.025
AM-243	4.659E-01		9.097E-02	1.422E-01	1.559E-02	3.276
CM-243	-2.544E-02		2.960E-01	4.451E-01	3.651E-02	-0.057

Sample ID : 1111065-14 Acquisition date : 11-DEC-2011 11:14:30

Total number of lines in spectrum	59	
Number of unidentified lines	29	
Number of lines tentatively identified by NID	30	50.85%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.109E+01	2.109E+01	0.299E+01	14.18	
TL-208	1.41E+10Y	1.00	8.211E-01	8.211E-01	1.880E-01	22.89	
PB-210	22.26Y	1.00	2.200E+00	2.206E+00	1.369E+00	62.07	
BI-212	1.41E+10Y	1.00	9.568E-01	9.568E-01	5.195E-01	54.29	
PB-212	1.41E+10Y	1.00	1.167E+00	1.167E+00	0.169E+00	14.49	
BI-214	1602.00Y	1.00	1.978E+00	1.978E+00	0.254E+00	12.82	
PB-214	1602.00Y	1.00	1.940E+00	1.940E+00	0.247E+00	12.75	
RA-224	1.41E+10Y	1.00	4.276E+00	4.276E+00	1.560E+00	36.48	
RA-226	1602.00Y	1.00	5.802E+00	5.802E+00	10.81E+00	186.26	
AC-228	1.41E+10Y	1.00	1.031E+00	1.031E+00	0.265E+00	25.67	
			---	---			
	Total Activity :		4.126E+01	4.126E+01			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
RB-82	25.55D	2.41	2.760E-01	6.663E-01	10.76E-01	161.54	
CS-135	2.30E+06Y	1.00	4.529E-01	4.529E-01	3.591E-01	79.29	
			---	---			
	Total Activity :		7.289E-01	1.119E+00			

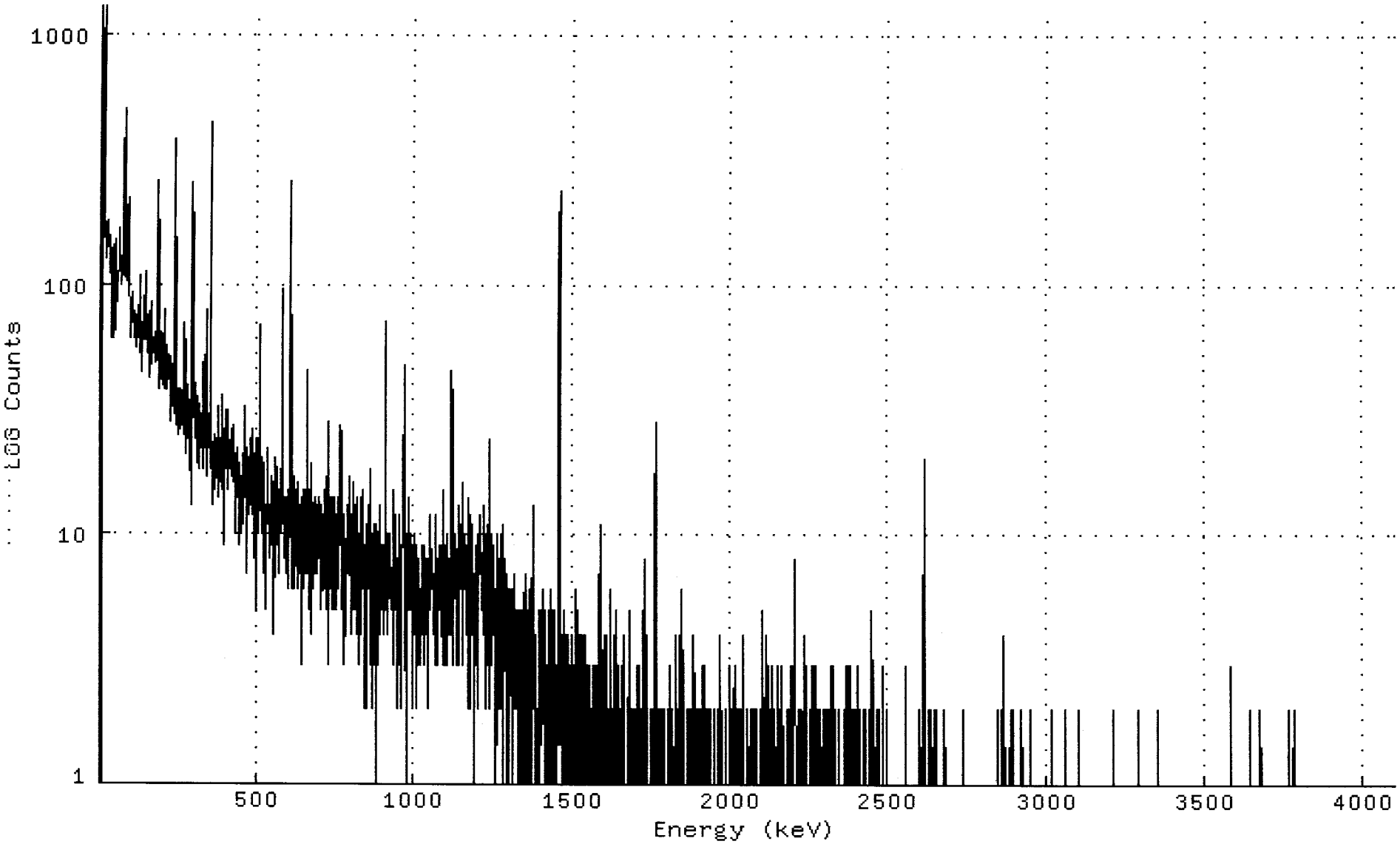
Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	3.215E+00	3.375E+00	1.498E+00	44.40	
SN-126	1.00E+05Y	1.00	3.232E-01	3.232E-01	1.421E-01	43.97	
NP-237	2.14E+06Y	1.00	9.489E-01	9.489E-01	4.164E-01	43.88	
			---	---			
	Total Activity :		4.487E+00	4.647E+00			

Grand Total Activity : 4.647E+01 4.703E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106514_GE2_GAS1102_172266.CNF;1
Title :
Sample Title: DY2-BKGD-E-31-111109
Start Time: 11-DEC-2011 11:14 Sample Time: 9-NOV-2011 00:00: Energy Offset: 6.87229E-02
Real Time : 0 01:00:01.12 Sample ID : 1111065-14 Energy Slope : 9.99625E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106514_GE2_GAS1102_1722

Channel

1:	0	0	0	0	0	0	1	61
9:	304	838	1307	897	437	1030	1168	178
17:	125	135	176	139	165	140	147	141
25:	164	146	180	156	137	154	152	138
33:	146	110	138	117	108	82	60	68
41:	85	61	77	78	76	135	150	65
49:	71	87	79	72	95	88	94	84
57:	89	112	111	120	123	113	156	167
65:	99	127	113	129	101	98	113	117
73:	131	178	378	183	500	301	105	114
81:	123	117	102	161	125	121	205	194
89:	102	168	101	123	220	109	110	71
97:	61	79	60	65	69	69	79	85
105:	75	92	69	74	72	70	60	77
113:	67	74	56	55	63	69	66	60
121:	74	82	60	82	76	63	65	66
129:	108	97	61	44	60	61	56	56
137:	60	81	70	65	63	59	72	111
145:	65	64	59	59	74	55	53	57
153:	75	75	69	77	69	56	42	54
161:	69	52	71	85	53	47	66	55
169:	57	59	60	55	56	48	64	49
177:	54	62	58	55	56	53	49	51
185:	109	259	124	47	38	53	57	61
193:	41	42	55	43	44	64	63	45
201:	52	39	50	48	38	49	46	56
209:	78	76	42	43	54	38	49	48
217:	42	43	41	52	42	50	44	35
225:	51	28	37	50	45	43	40	32
233:	37	36	53	53	30	190	376	95
241:	78	152	71	44	35	27	37	36
249:	38	34	25	36	37	26	36	35
257:	35	38	31	31	35	32	37	29
265:	25	29	37	38	36	69	51	22
273:	30	35	27	21	35	39	36	25
281:	38	24	25	29	34	34	26	34
289:	24	13	33	28	25	40	252	148
297:	40	29	34	41	35	30	29	40
305:	24	24	32	19	27	27	22	35
313:	30	19	18	30	33	18	26	23
321:	30	23	27	24	26	18	36	48
329:	23	25	24	24	22	24	23	32
337:	34	78	79	17	28	27	27	25
345:	30	23	22	28	28	20	129	443
353:	144	23	18	23	17	13	17	23
361:	14	25	18	17	23	15	19	18
369:	20	23	22	24	23	18	15	27
377:	14	32	20	24	17	17	16	22
385:	22	16	36	22	32	23	15	17
393:	22	26	23	9	22	21	31	30
401:	18	25	27	22	27	19	19	15
409:	24	31	18	19	23	21	20	19
417:	19	19	18	17	18	26	16	22
425:	17	27	17	18	21	21	10	17

433:	16	19	16	22	14	15	19	16
441:	18	15	10	19	14	9	11	15
449:	17	10	14	13	19	18	21	14
457:	11	17	18	17	15	24	32	21
465:	27	7	15	19	16	22	16	13
473:	18	12	16	15	17	24	13	16
481:	14	13	14	20	12	19	26	14
489:	18	8	9	21	13	12	21	18
497:	5	9	5	8	24	24	14	14
505:	22	15	10	15	21	56	68	41
513:	18	20	12	15	10	14	11	11
521:	15	19	8	11	7	8	13	12
529:	10	5	13	11	18	15	22	12
537:	12	11	9	12	13	10	8	14
545:	15	17	15	10	9	11	13	12
553:	11	16	10	4	11	8	12	16
561:	10	20	17	9	13	15	9	11
569:	11	12	12	15	7	7	16	13
577:	18	11	10	15	11	28	95	66
585:	14	14	14	8	13	13	12	12
593:	12	9	7	14	8	11	11	15
601:	11	6	11	9	10	12	13	43
609:	257	204	27	18	9	13	6	11
617:	9	15	12	17	9	6	9	9
625:	10	10	15	10	6	8	13	16
633:	7	6	13	11	8	13	7	8
641:	13	6	14	14	6	3	13	11
649:	7	8	6	15	15	14	7	12
657:	10	15	14	7	30	45	26	15
665:	10	15	9	8	7	5	9	4
673:	19	8	7	5	16	11	8	6
681:	13	7	10	10	13	14	8	14
689:	7	9	13	7	7	11	11	11
697:	11	11	12	14	8	12	8	11
705:	13	11	5	7	6	10	12	6
713:	11	6	12	13	8	15	15	5
721:	7	9	10	17	11	12	28	24
729:	9	18	3	10	10	8	14	12
737:	7	6	13	9	14	6	11	5
745:	9	8	6	5	14	8	11	12
753:	5	7	12	10	6	6	9	11
761:	6	14	9	14	13	9	13	27
769:	25	16	5	6	6	8	4	7
777:	7	12	5	3	5	5	4	6
785:	6	7	13	8	11	7	11	8
793:	8	10	10	17	11	9	5	5
801:	4	12	6	5	5	16	12	10
809:	5	6	5	5	8	8	13	7
817:	10	9	13	8	4	14	8	7
825:	3	6	10	6	3	8	4	6
833:	14	6	9	15	7	8	8	6
841:	9	6	2	6	7	7	9	9
849:	11	2	5	10	8	9	8	7
857:	6	13	8	18	16	7	3	7
865:	9	7	7	10	8	10	2	9
873:	8	8	6	3	11	5	7	1
881:	11	8	5	3	8	6	7	8
889:	8	13	7	4	10	11	10	5
897:	9	5	7	7	5	6	9	9
905:	8	9	4	6	9	21	71	49

913:	16	5	10	5	9	9	8	4
921:	8	7	10	6	7	6	5	5
929:	6	7	7	6	9	12	15	9
937:	3	11	6	12	8	8	11	5
945:	7	7	4	6	8	2	12	4
953:	7	7	6	3	7	3	7	2
961:	9	7	11	12	10	12	10	13
969:	47	20	7	11	8	4	2	10
977:	0	2	1	4	6	9	14	6
985:	7	10	10	5	5	7	10	5
993:	9	2	8	4	4	8	5	8
1001:	7	6	10	4	9	4	7	4
1009:	2	4	9	6	4	3	8	3
1017:	3	5	4	5	5	3	6	4
1025:	4	9	6	4	5	9	5	8
1033:	7	4	3	6	6	8	7	6
1041:	4	7	7	5	6	2	8	7
1049:	5	12	7	7	11	7	7	6
1057:	6	8	6	6	4	6	7	4
1065:	4	6	8	5	3	4	12	4
1073:	5	8	3	7	5	7	9	8
1081:	6	5	6	6	5	7	6	9
1089:	5	3	4	7	5	10	7	15
1097:	3	9	5	4	6	5	7	3
1105:	8	4	6	10	5	8	4	6
1113:	6	6	4	5	4	6	16	45
1121:	32	18	14	3	10	5	6	10
1129:	6	8	10	6	7	3	8	5
1137:	5	7	11	6	13	3	9	6
1145:	9	11	6	7	8	9	9	3
1153:	10	16	10	6	10	7	6	6
1161:	7	9	7	4	9	6	6	8
1169:	4	11	6	2	14	11	9	5
1177:	12	6	4	2	11	11	7	10
1185:	8	4	5	7	7	5	1	5
1193:	6	8	4	9	6	3	4	5
1201:	2	7	10	10	10	8	12	10
1209:	7	8	9	8	6	5	5	5
1217:	6	9	13	12	4	13	8	10
1225:	5	2	5	9	6	11	5	5
1233:	8	3	10	2	18	24	16	10
1241:	4	6	10	4	6	3	6	5
1249:	6	6	4	9	6	6	3	2
1257:	4	5	1	2	7	6	7	10
1265:	2	8	4	5	5	3	2	3
1273:	10	3	2	6	2	4	7	6
1281:	8	11	3	1	8	5	8	5
1289:	7	3	4	1	5	6	4	7
1297:	4	5	6	6	0	2	6	5
1305:	5	4	3	5	1	2	5	6
1313:	3	6	5	6	2	6	7	5
1321:	2	3	2	4	5	3	3	2
1329:	5	1	1	4	5	3	5	2
1337:	0	2	2	1	1	3	5	5
1345:	1	4	4	4	3	5	7	5
1353:	1	3	1	3	3	4	4	3
1361:	5	1	4	2	3	6	2	1
1369:	2	1	2	5	4	5	5	9
1377:	12	13	6	3	2	3	1	4
1385:	4	2	2	1	1	2	1	0

1393:	2	2	3	3	4	5	0	2
1401:	5	5	2	2	4	3	4	4
1409:	4	6	3	1	5	1	1	5
1417:	4	2	1	2	3	1	2	2
1425:	3	2	3	1	5	2	5	1
1433:	2	4	6	3	2	5	1	5
1441:	2	2	5	5	4	1	4	2
1449:	2	3	0	3	1	2	3	2
1457:	3	5	41	165	236	150	23	6
1465:	2	2	0	3	1	2	4	2
1473:	1	1	2	3	3	5	1	4
1481:	4	4	0	0	3	3	4	0
1489:	1	2	1	2	3	3	2	1
1497:	1	2	2	1	4	0	1	0
1505:	3	0	3	2	2	5	6	1
1513:	1	1	1	3	2	1	2	5
1521:	1	2	1	4	3	1	3	4
1529:	1	4	0	1	0	3	4	4
1537:	3	2	4	0	3	1	1	0
1545:	3	1	3	1	3	3	3	3
1553:	2	2	0	2	1	1	1	2
1561:	1	1	2	1	0	2	2	3
1569:	3	1	1	3	2	0	1	3
1577:	1	1	3	2	2	2	7	2
1585:	2	3	0	11	6	1	2	2
1593:	2	0	2	1	2	2	3	4
1601:	1	2	2	0	4	1	4	1
1609:	1	0	0	1	0	2	0	2
1617:	1	3	6	2	3	5	0	0
1625:	0	1	1	2	2	1	4	3
1633:	1	3	0	0	3	3	0	5
1641:	0	0	0	3	1	1	0	0
1649:	1	2	0	0	0	0	2	3
1657:	2	1	2	2	1	2	1	4
1665:	4	0	1	1	1	1	0	1
1673:	1	2	0	0	1	1	5	0
1681:	0	2	2	2	0	1	1	0
1689:	0	2	0	2	1	2	2	2
1697:	0	0	0	1	2	0	0	1
1705:	3	0	1	3	3	2	0	1
1713:	0	0	0	2	1	1	0	0
1721:	2	2	4	5	2	0	1	0
1729:	6	8	4	0	0	4	3	2
1737:	1	0	0	1	0	0	1	0
1745:	1	0	0	2	2	0	1	2
1753:	1	1	1	2	1	1	1	0
1761:	1	3	11	28	25	15	1	0
1769:	1	0	2	1	1	1	0	0
1777:	1	1	2	1	0	0	0	0
1785:	2	2	0	2	1	2	2	2
1793:	0	0	1	1	1	1	1	1
1801:	0	1	0	2	1	2	3	0
1809:	2	0	1	1	1	1	2	1
1817:	2	0	0	0	0	0	0	0
1825:	1	2	1	4	0	0	0	0
1833:	1	2	0	1	0	0	2	0
1841:	4	0	1	0	3	1	0	6
1849:	2	1	1	0	0	0	1	1
1857:	1	1	0	0	1	0	0	1
1865:	2	1	0	1	2	1	1	1

1873:	0	0	1	2	0	1	1	0
1881:	1	1	0	4	2	1	0	2
1889:	1	0	1	0	2	0	0	0
1897:	1	0	1	1	2	0	0	0
1905:	0	0	0	2	2	1	1	2
1913:	3	0	3	3	1	2	0	2
1921:	1	0	2	0	0	2	1	2
1929:	0	0	1	0	1	0	0	2
1937:	2	0	0	0	1	0	0	1
1945:	0	0	1	1	0	2	0	1
1953:	0	0	1	0	1	1	1	1
1961:	0	2	0	0	0	2	2	1
1969:	4	1	1	1	1	0	0	0
1977:	1	1	0	0	0	0	2	0
1985:	0	1	0	0	0	0	1	0
1993:	1	0	3	0	1	0	1	0
2001:	0	0	2	0	1	1	1	1
2009:	2	1	1	2	3	2	0	1
2017:	3	2	0	0	2	1	0	1
2025:	0	0	2	1	1	0	1	2
2033:	2	1	1	1	4	0	1	2
2041:	1	1	0	0	0	1	1	0
2049:	1	0	1	1	2	1	0	1
2057:	1	0	0	0	2	1	0	1
2065:	0	0	1	2	0	1	1	1
2073:	0	1	1	1	1	2	2	1
2081:	0	0	1	0	1	1	1	0
2089:	0	0	0	1	0	2	2	1
2097:	2	0	1	1	1	2	5	1
2105:	1	1	1	0	0	1	2	0
2113:	1	0	4	0	1	3	3	0
2121:	0	0	1	1	0	2	1	3
2129:	1	0	0	1	1	0	0	1
2137:	2	1	2	0	1	0	1	1
2145:	0	1	1	1	0	3	1	1
2153:	1	1	0	1	2	0	2	0
2161:	0	1	3	0	1	0	0	0
2169:	1	1	0	1	0	0	0	1
2177:	2	1	0	2	2	0	0	2
2185:	2	1	0	1	0	1	0	0
2193:	0	3	2	0	2	0	0	3
2201:	2	3	3	8	7	3	0	0
2209:	1	0	1	1	2	0	0	0
2217:	0	0	0	1	0	1	0	2
2225:	0	1	0	0	0	0	4	1
2233:	2	0	0	0	2	0	1	3
2241:	0	1	0	1	0	0	1	0
2249:	0	0	1	2	0	0	0	0
2257:	1	3	0	0	1	3	1	1
2265:	1	1	0	0	3	1	2	0
2273:	0	2	0	0	0	0	0	2
2281:	0	0	1	1	2	0	1	0
2289:	1	0	0	1	1	0	1	2
2297:	0	1	0	0	1	2	0	1
2305:	0	0	2	0	0	2	1	1
2313:	1	1	0	1	0	2	3	1
2321:	0	0	0	0	1	0	3	1
2329:	2	1	0	1	1	0	0	1
2337:	0	1	1	1	1	0	2	1
2345:	0	1	0	1	1	1	0	1

2353:	1	0	0	0	0	1	0	0
2361:	0	0	2	2	0	1	0	3
2369:	0	2	0	0	3	1	2	1
2377:	1	2	2	3	0	3	1	0
2385:	0	0	2	1	0	1	2	1
2393:	0	0	0	0	2	0	2	1
2401:	0	1	3	1	0	2	1	2
2409:	2	1	1	0	0	0	0	0
2417:	0	0	0	0	2	1	2	0
2425:	0	0	2	2	1	1	0	1
2433:	1	1	0	0	0	1	0	2
2441:	0	0	0	1	1	2	3	5
2449:	2	0	0	0	2	1	0	0
2457:	0	1	1	0	0	2	0	2
2465:	0	0	0	0	0	0	0	2
2473:	1	0	1	1	1	1	0	0
2481:	0	1	3	0	1	0	0	0
2489:	1	0	1	0	0	0	0	2
2497:	0	0	0	0	0	0	0	1
2505:	0	0	1	0	0	0	0	0
2513:	1	1	0	0	0	0	0	1
2521:	0	1	0	1	1	0	0	1
2529:	0	0	0	0	1	0	1	0
2537:	0	0	1	0	0	0	0	1
2545:	0	0	0	0	1	0	0	1
2553:	0	3	0	1	0	0	0	0
2561:	0	0	1	0	1	0	0	0
2569:	0	0	0	0	1	0	1	1
2577:	0	0	0	0	1	0	0	0
2585:	0	0	0	0	0	1	0	0
2593:	0	0	0	0	0	0	0	2
2601:	0	0	1	0	1	0	1	0
2609:	0	0	0	6	8	20	14	9
2617:	2	1	0	1	0	0	0	0
2625:	0	0	2	0	0	1	2	0
2633:	0	2	0	0	0	0	1	0
2641:	1	0	0	2	0	0	0	1
2649:	1	0	1	1	0	2	0	0
2657:	0	1	1	0	0	0	0	0
2665:	0	1	0	0	1	1	0	0
2673:	0	1	1	0	1	0	2	0
2681:	1	1	0	1	0	0	0	1
2689:	0	0	0	0	0	0	0	1
2697:	0	0	0	0	1	0	0	0
2705:	0	0	0	0	0	0	0	0
2713:	0	0	1	1	0	0	0	1
2721:	0	0	0	0	1	0	1	0
2729:	0	0	1	0	0	0	0	1
2737:	0	0	2	0	1	1	0	0
2745:	0	0	0	0	0	0	0	0
2753:	0	0	0	0	0	0	0	1
2761:	0	0	0	0	1	1	0	0
2769:	0	0	0	1	0	0	0	0
2777:	0	0	1	0	0	0	0	0
2785:	1	1	1	0	0	0	0	0
2793:	0	0	0	0	0	0	0	0
2801:	0	0	1	0	0	0	0	1
2809:	0	0	0	1	0	0	0	1
2817:	0	0	0	0	0	1	0	0
2825:	1	0	0	0	0	0	0	0

2833:	0	1	0	0	0	0	0	0
2841:	0	0	0	0	0	0	2	0
2849:	1	1	0	0	0	0	1	1
2857:	0	0	2	2	0	0	0	0
2865:	4	1	2	0	0	0	0	0
2873:	0	0	0	0	0	0	0	0
2881:	0	0	0	0	0	2	1	1
2889:	0	0	0	2	0	1	0	0
2897:	0	0	1	0	0	1	0	0
2905:	0	0	0	0	0	0	0	0
2913:	0	1	0	0	0	0	0	0
2921:	1	2	0	0	0	0	0	0
2929:	0	1	1	0	0	1	0	0
2937:	0	0	0	0	0	0	0	0
2945:	0	0	1	0	0	2	0	0
2953:	0	0	0	0	0	0	0	0
2961:	0	0	0	0	0	0	0	0
2969:	0	0	1	0	0	0	0	0
2977:	0	0	0	0	0	1	0	0
2985:	0	1	0	0	1	0	0	0
2993:	0	0	1	0	0	0	0	0
3001:	0	1	0	0	0	0	1	1
3009:	0	0	0	0	1	0	0	0
3017:	0	2	1	0	0	0	0	0
3025:	0	0	0	0	0	0	1	0
3033:	0	0	1	0	0	0	0	0
3041:	0	0	0	0	0	0	0	1
3049:	0	0	0	0	0	0	0	1
3057:	2	1	0	0	0	0	0	0
3065:	0	0	0	1	1	0	0	0
3073:	0	0	0	0	0	0	0	0
3081:	0	1	0	0	0	0	0	0
3089:	0	0	0	0	0	0	0	1
3097:	0	0	0	0	2	0	0	0
3105:	1	0	0	0	0	0	1	0
3113:	0	1	0	0	0	0	0	0
3121:	0	0	0	0	0	1	0	0
3129:	0	0	1	0	0	0	0	0
3137:	1	0	0	0	0	0	0	0
3145:	0	0	0	0	0	0	1	0
3153:	0	0	0	0	0	1	0	1
3161:	0	0	0	0	0	0	0	0
3169:	1	1	1	1	1	0	0	0
3177:	0	0	0	1	0	0	0	0
3185:	1	0	0	0	0	0	0	0
3193:	0	0	0	0	0	0	0	0
3201:	0	0	0	1	0	1	0	0
3209:	0	0	0	2	0	0	0	0
3217:	0	0	0	0	1	0	0	0
3225:	0	0	0	0	1	1	0	0
3233:	1	0	1	0	0	0	1	0
3241:	0	0	0	0	0	0	0	0
3249:	1	0	0	1	0	0	0	0
3257:	0	0	0	1	0	0	0	0
3265:	1	0	0	0	0	0	1	1
3273:	0	0	0	0	0	1	0	1
3281:	0	1	0	0	0	1	1	0
3289:	0	0	2	0	0	0	0	1
3297:	0	0	0	0	0	0	1	0
3305:	0	0	0	0	0	0	0	0

3313:	0	0	0	1	0	0	0	1
3321:	0	0	0	0	1	0	0	0
3329:	1	0	0	0	0	0	0	0
3337:	0	0	0	1	1	0	0	0
3345:	0	0	0	0	2	0	0	0
3353:	0	0	0	0	1	0	0	1
3361:	1	1	0	0	1	0	0	0
3369:	1	0	0	1	0	0	0	0
3377:	0	1	0	0	0	0	0	0
3385:	1	0	0	0	0	0	0	0
3393:	0	0	0	0	0	0	0	0
3401:	0	0	0	0	0	0	0	0
3409:	0	0	0	0	0	0	0	0
3417:	0	0	0	1	1	1	0	0
3425:	0	0	0	1	0	0	0	0
3433:	0	0	0	0	0	0	0	0
3441:	0	0	0	0	0	0	0	1
3449:	0	0	0	0	0	0	1	0
3457:	0	0	0	0	0	0	1	0
3465:	0	0	1	0	0	0	0	0
3473:	0	0	0	0	0	0	0	0
3481:	1	0	0	0	0	0	0	0
3489:	0	1	0	0	0	0	0	0
3497:	0	0	0	0	0	0	0	0
3505:	0	0	0	0	1	0	0	0
3513:	1	0	0	0	0	0	0	0
3521:	0	0	0	0	0	0	0	0
3529:	0	0	0	0	0	0	1	0
3537:	0	0	1	0	0	0	0	0
3545:	1	0	0	0	0	1	0	0
3553:	0	0	0	0	1	0	0	0
3561:	0	0	0	0	0	0	0	0
3569:	0	0	0	0	0	0	0	0
3577:	0	1	3	0	2	0	0	0
3585:	0	1	0	0	0	0	0	0
3593:	0	0	1	0	0	0	0	0
3601:	0	0	0	0	0	0	0	0
3609:	1	0	1	0	0	0	0	0
3617:	0	0	0	0	0	0	0	1
3625:	0	0	0	0	0	1	0	0
3633:	0	0	0	0	0	1	0	0
3641:	1	2	0	1	0	0	0	0
3649:	0	1	0	0	0	0	1	0
3657:	0	0	0	0	0	0	0	0
3665:	0	0	0	0	0	0	0	0
3673:	1	2	0	0	1	0	0	0
3681:	0	0	0	0	0	1	0	0
3689:	0	1	0	0	0	0	0	0
3697:	0	0	0	0	0	0	0	0
3705:	0	0	0	0	0	0	0	0
3713:	1	0	0	0	1	0	0	0
3721:	0	0	0	0	0	0	0	0
3729:	0	0	0	0	0	0	0	0
3737:	0	0	0	0	0	0	0	0
3745:	0	0	1	0	1	0	0	0
3753:	0	0	0	0	0	0	0	0
3761:	0	0	2	0	0	0	0	0
3769:	0	1	0	0	0	0	0	0
3777:	0	2	1	0	0	0	0	0
3785:	0	0	0	1	0	0	0	0

3793:	0	1	0	0	0	0	0	0
3801:	0	0	0	0	0	0	0	1
3809:	0	1	0	0	0	0	0	0
3817:	0	0	0	0	0	0	1	0
3825:	0	0	0	0	0	0	0	0
3833:	1	1	0	0	0	0	1	0
3841:	0	0	0	0	0	0	0	0
3849:	0	0	0	1	0	0	1	0
3857:	0	0	1	0	1	1	0	0
3865:	0	0	0	0	0	0	0	0
3873:	0	0	0	0	0	0	1	0
3881:	0	0	0	0	1	0	0	0
3889:	0	0	0	0	0	0	1	0
3897:	0	0	0	0	0	0	0	0
3905:	0	0	0	1	1	0	0	0
3913:	1	0	0	0	0	0	0	0
3921:	0	1	1	0	0	0	0	0
3929:	1	0	0	0	0	0	0	1
3937:	0	0	0	0	1	0	0	0
3945:	0	1	0	0	0	0	0	0
3953:	0	0	0	0	0	0	0	0
3961:	0	0	0	0	1	0	0	0
3969:	0	0	0	0	0	0	0	0
3977:	0	0	0	0	0	0	0	0
3985:	0	1	0	0	0	0	1	0
3993:	0	0	0	0	0	0	0	0
4001:	0	0	0	0	0	0	0	0
4009:	0	0	0	0	0	0	0	0
4017:	0	0	0	0	1	0	0	1
4025:	0	0	0	0	1	0	0	0
4033:	0	0	0	0	0	0	0	0
4041:	0	0	0	0	0	0	0	0
4049:	1	0	0	0	0	0	0	0
4057:	0	0	0	0	0	0	1	0
4065:	0	0	0	0	0	0	0	0
4073:	0	1	0	0	0	0	0	0
4081:	0	0	0	0	1	0	0	0
4089:	0	0	0	1	0	0	0	0

Sample ID : 1111065-15 Acquisition date : 11-DEC-2011 11:15:33

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VAX/VMS Peak Search Report Generated 11-DEC-2011 12:16:06.17

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106515_GE3_GAS1102_172267.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-BKGD-E-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 11-DEC-2011 11:15:33
Sample ID : 1111065-15 Sample Quantity : 4.62780E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE3 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:16.24 0.4%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.24*	240	915	1.12	46.52	43	8	46.1		PB-210
0	63.57*	239	924	1.37	63.85	61	6	42.9		TH-234
1	74.84*	476	761	1.35	75.12	72	10	19.2	3.83E+01	AM-243
1	77.61*	883	743	1.36	77.90	72	10	11.8		
1	83.84	108	318	1.37	84.12	83	9	42.1	2.99E+01	
1	87.84	357	608	1.38	88.13	83	9	21.8		NP-237
										SN-126
										CD-109
0	94.01*	113	883	1.56	94.29	91	6	89.3		
0	154.86	76	615	3.42	155.15	152	8	114.9		
0	186.52*	286	565	1.46	186.81	183	8	31.6		RA-226
1	238.85*	594	245	1.59	239.14	235	13	11.7	1.32E+01	PB-212
1	242.56*	350	233	1.59	242.86	235	13	19.1		
0	258.56	58	258	3.86	258.86	256	7	95.5		
0	270.54*	95	381	2.07	270.84	267	9	76.7		
1	291.85	27	84	1.64	292.15	291	12	96.4	4.40E+00	
1	295.67*	621	120	1.36	295.97	291	12	9.5		PB-214
1	338.69*	112	167	1.86	338.98	335	10	40.8	5.03E+00	AC-228
1	341.68	34	156	1.86	341.98	335	10	132.1		
0	352.37*	1077	215	1.77	352.67	349	9	7.9		PB-214
0	381.88	41	163	4.67	382.18	379	8	111.9		
0	388.93	34	141	2.99	389.24	387	7	119.2		
0	463.08	56	110	2.01	463.39	460	7	68.2		
0	487.72	33	110	2.29	488.03	485	8	114.4		
0	511.35*	58	150	2.30	511.66	507	10	89.9		
0	536.86	33	76	1.58	537.17	532	8	100.1		
0	546.16	40	83	5.21	546.47	543	8	84.0		
0	565.64	26	74	1.40	565.95	563	7	116.2		
0	583.49*	182	100	1.51	583.80	580	8	24.4		TL-208
0	609.76*	780	97	1.42	610.07	605	10	8.6		BI-214
3	657.68	13	10	1.76	658.00	657	13	53.4	2.25E+00	
3	662.25*	76	74	2.35	662.56	657	13	45.4		CS-137
3	665.95	35	78	2.35	666.27	657	13	96.2		
0	727.97	47	55	1.44	728.29	725	6	58.3		BI-212
0	770.24	102	125	1.48	770.56	763	15	52.2		
0	795.32	30	50	1.26	795.65	792	8	90.1		

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Sample ID : 1111065-15 Acquisition date : 11-DEC-2011 11:15:33

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	806.64	38	75	3.94	806.97	801	12	96.2		
0	861.71	42	51	3.16	862.04	857	9	69.0		TL-208
0	911.81	130	50	1.88	912.14	908	9	26.2		AC-228
0	935.21	49	50	1.32	935.54	932	8	57.3		
1	964.51	28	35	2.12	964.85	960	14	77.8	3.77E+00	
1	969.49	76	34	2.13	969.82	960	14	33.8		AC-228
0	1121.62*	104	78	1.77	1121.97	1117	9	36.9		BI-214
0	1156.57	36	91	4.05	1156.92	1151	15	122.0		
0	1215.74	26	49	3.78	1216.09	1213	8	100.3		
2	1235.04	16	17	1.70	1235.39	1234	9	80.2	2.52E+00	
2	1238.58*	79	35	2.49	1238.93	1234	9	35.4		
0	1260.78	23	26	2.22	1261.13	1257	8	86.4		
1	1374.64	9	4	2.12	1375.00	1374	11	68.6	1.49E+00	
1	1378.43	46	12	2.33	1378.79	1374	11	41.5		
0	1409.51	24	16	3.28	1409.88	1406	8	70.7		
0	1461.55*	544	36	1.87	1461.92	1456	12	9.7		K-40
0	1471.59	11	9	1.43	1471.95	1469	6	105.2		
0	1492.20	8	5	2.53	1492.57	1490	6	117.3		
0	1502.54	9	8	3.04	1502.91	1500	6	129.3		
0	1511.39	36	17	6.27	1511.76	1506	13	56.5		
0	1601.07	8	4	2.08	1601.45	1599	5	105.6		
0	1661.57	17	2	2.80	1661.95	1658	8	56.0		
0	1731.41	29	10	3.93	1731.79	1726	11	56.9		
0	1765.43	120	8	2.69	1765.81	1760	12	20.8		BI-214
0	1874.07	8	4	3.56	1874.46	1871	7	103.2		
0	2119.07*	6	2	1.04	2119.47	2116	7	123.5		
4	2205.48	27	0	3.29	2205.90	2201	16	40.8	8.42E-01	BI-214
4	2211.31	10	0	3.56	2211.72	2201	16	105.0		
0	2294.43	6	2	2.84	2294.85	2290	7	109.7		
0	2448.47	17	2	4.32	2448.89	2445	8	56.7		
0	2477.26	6	2	0.97	2477.68	2473	7	108.6		
0	2615.71*	62	8	2.54	2616.15	2612	8	30.4		TL-208

Sample ID : 1111065-15 Acquisition date : 11-DEC-2011 11:15:33

Total number of lines in spectrum	66	
Number of unidentified lines	30	
Number of lines tentatively identified by NID	36	54.55%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.182E+01	2.182E+01	0.301E+01	13.79	
TL-208	1.41E+10Y	1.00	1.086E+00	1.086E+00	0.219E+00	20.16	
PB-210	22.26Y	1.00	5.499E+00	5.514E+00	2.613E+00	47.39	
BI-212	1.41E+10Y	1.00	9.789E-01	9.789E-01	5.796E-01	59.21	
PB-212	1.41E+10Y	1.00	1.240E+00	1.240E+00	0.190E+00	15.33	
BI-214	1602.00Y	1.00	3.324E+00	3.324E+00	0.364E+00	10.94	
PB-214	1602.00Y	1.00	3.615E+00	3.615E+00	0.331E+00	9.16	
RA-226	1602.00Y	1.00	6.904E+00	6.904E+00	12.84E+00	185.94	
AC-228	1.41E+10Y	1.00	1.371E+00	1.371E+00	0.266E+00	19.38	
TH-234	4.47E+09Y	1.00	4.596E+00	4.596E+00	2.025E+00	44.06	
			---	---			
	Total Activity :		5.044E+01	5.045E+01			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	6.299E+00	6.612E+00	1.810E+00	27.38	
SN-126	1.00E+05Y	1.00	6.337E-01	6.337E-01	1.690E-01	26.66	
CS-137	30.17Y	1.00	2.022E-01	2.026E-01	0.942E-01	46.50	
NP-237	2.14E+06Y	1.00	1.864E+00	1.864E+00	0.494E+00	26.51	
			---	---			
	Total Activity :		8.999E+00	9.312E+00			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AM-243	7380.00Y	1.00	4.908E-01	4.908E-01	1.122E-01	22.87	
			---	---			
	Total Activity :		4.908E-01	4.908E-01			

Grand Total Activity : 5.993E+01 6.026E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-15 Acquisition date : 11-DEC-2011 11:15:33

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	3.789E-01	2.182E+01	2.182E+01	13.79	OK
Final Mean for 1 Valid Peaks = 2.182E+01+/- 3.009E+00 (13.79%)							
TL-208	583.14	30.22*	8.029E-01	1.216E+00	1.216E+00	26.67	OK
	860.37	4.48	5.645E-01	2.692E+00	2.692E+00	69.60	OK
	2614.66	35.85	3.019E-01	9.333E-01	9.333E-01	32.22	OK
Final Mean for 3 Valid Peaks = 1.086E+00+/- 2.189E-01 (20.16%)							
PB-210	46.50	4.05*	1.750E+00	5.499E+00	5.514E+00	47.39	OK
Final Mean for 1 Valid Peaks = 5.514E+00+/- 2.613E+00 (47.39%)							
BI-212	727.17	11.80*	6.552E-01	9.789E-01	9.789E-01	59.21	OK
	1620.62	2.75	3.568E-01	----- Line Not Found		-----	Absent
Final Mean for 1 Valid Peaks = 9.789E-01+/- 5.796E-01 (59.21%)							
PB-212	238.63	44.60*	1.744E+00	1.240E+00	1.240E+00	15.33	OK
	300.09	3.41	1.461E+00	----- Line Not Found		-----	Absent
Final Mean for 1 Valid Peaks = 1.240E+00+/- 1.900E-01 (15.33%)							
BI-214	609.31	46.30*	7.707E-01	3.545E+00	3.545E+00	13.65	OK
	1120.29	15.10	4.552E-01	2.446E+00	2.446E+00	38.37	OK
	1764.49	15.80	3.416E-01	3.595E+00	3.596E+00	23.01	OK
	2204.22	4.98	3.132E-01	2.838E+00	2.838E+00	42.12	OK
Final Mean for 4 Valid Peaks = 3.324E+00+/- 3.636E-01 (10.94%)							
PB-214	295.21	19.19	1.480E+00	3.546E+00	3.546E+00	13.27	OK
	351.92	37.19*	1.276E+00	3.683E+00	3.683E+00	12.65	OK
Final Mean for 2 Valid Peaks = 3.615E+00+/- 3.310E-01 (9.16%)							
RA-226	186.21	3.28*	2.048E+00	6.904E+00	6.904E+00	185.94	OK
Final Mean for 1 Valid Peaks = 6.904E+00+/- 1.284E+01 (185.94%)							
AC-228	338.32	11.40	1.320E+00	1.211E+00	1.211E+00	41.97	OK
	911.07	27.70*	5.376E-01	1.418E+00	1.418E+00	27.75	OK
	969.11	16.60	5.106E-01	1.454E+00	1.454E+00	35.11	OK
Final Mean for 3 Valid Peaks = 1.371E+00+/- 2.657E-01 (19.38%)							
TH-234	63.29	3.80*	2.218E+00	4.596E+00	4.596E+00	44.06	OK
Final Mean for 1 Valid Peaks = 4.596E+00+/- 2.025E+00 (44.06%)							

Sample ID : 1111065-15 Acquisition date : 11-DEC-2011 11:15:33

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CD-109	88.03	3.72*	2.473E+00	6.299E+00	6.612E+00	27.38	OK
Final Mean for 1 Valid Peaks = 6.612E+00+/- 1.810E+00 (27.38%)							
SN-126	87.57	37.00*	2.471E+00	6.337E-01	6.337E-01	26.66	OK
Final Mean for 1 Valid Peaks = 6.337E-01+/- 1.690E-01 (26.66%)							
CS-137	661.65	85.12*	7.142E-01	2.022E-01	2.026E-01	46.50	OK
Final Mean for 1 Valid Peaks = 2.026E-01+/- 9.422E-02 (46.50%)							
NP-237	86.50	12.60*	2.467E+00	1.864E+00	1.864E+00	26.51	OK
Final Mean for 1 Valid Peaks = 1.864E+00+/- 4.942E-01 (26.51%)							

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
AM-243	74.67	66.00*	2.383E+00	4.908E-01	4.908E-01	22.87	OK
Final Mean for 1 Valid Peaks = 4.908E-01+/- 1.122E-01 (22.87%)							

Flag: "*" = Keyline

Sample ID : 1111065-15 Acquisition date : 11-DEC-2011 11:15:33

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.182E+01	3.009E+00	8.957E-01	8.033E-02	24.364
CD-109	6.612E+00	1.810E+00	2.046E+00	3.299E-01	3.232
SN-126	6.337E-01	1.690E-01	1.960E-01	2.917E-02	3.233
CS-137	2.026E-01	9.422E-02	1.077E-01	1.014E-02	1.881
TL-208	1.086E+00	2.189E-01	2.740E-01	2.714E-02	3.963
PB-210	5.514E+00	2.613E+00	2.303E+00	2.319E-01	2.394
BI-212	9.789E-01	5.796E-01	8.096E-01	7.485E-02	1.209
PB-212	1.240E+00	1.900E-01	1.458E-01	1.320E-02	8.503
BI-214	3.324E+00	3.636E-01	1.792E-01	1.753E-02	18.547
PB-214	3.615E+00	3.310E-01	1.969E-01	1.780E-02	18.364
RA-226	6.904E+00	1.284E+01	1.985E+00	3.637E+00	3.478
AC-228	1.371E+00	2.657E-01	3.261E-01	2.648E-02	4.205
TH-234	4.596E+00	2.025E+00	2.192E+00	1.995E-01	2.096
NP-237	1.864E+00	4.942E-01	5.761E-01	8.420E-02	3.235
AM-243	4.908E-01	1.122E-01	1.283E-01	1.505E-02	3.826

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	-2.018E-01		7.375E-01	1.187E+00	1.181E-01	-0.170
NA-22	-3.071E-02		6.951E-02	1.178E-01	1.079E-02	-0.261
AL-26	2.874E-02		4.125E-02	8.965E-02	8.020E-03	0.321
TI-44	4.969E-03		6.258E-02	8.888E-02	9.026E-03	0.056
SC-46	1.014E-02		7.077E-02	1.301E-01	1.055E-02	0.078
V-48	9.984E-02		2.126E-01	4.069E-01	3.544E-02	0.245
CR-51	-1.079E-01		9.247E-01	1.531E+00	1.395E-01	-0.070
MN-54	9.726E-03		6.297E-02	1.149E-01	9.892E-03	0.085
CO-56	-5.998E-02		7.288E-02	1.215E-01	1.034E-02	-0.494
CO-57	-2.738E-02		4.618E-02	7.677E-02	8.917E-03	-0.357
CO-58	-2.364E-02		7.909E-02	1.244E-01	1.096E-02	-0.190
FE-59	-8.971E-02		1.857E-01	3.161E-01	3.239E-02	-0.284
CO-60	7.703E-03		7.168E-02	1.288E-01	1.309E-02	0.060
ZN-65	-1.062E-02		1.643E-01	2.628E-01	2.561E-02	-0.040
SE-75	-1.663E-02		9.382E-02	1.253E-01	1.072E-02	-0.133
RB-82	-3.665E-01		1.008E+00	1.577E+00	1.421E-01	-0.232
RB-83	8.233E-02		1.295E-01	2.256E-01	3.711E-02	0.365
KR-85	2.378E+01		1.286E+01	2.349E+01	2.353E+00	1.012
SR-85	1.463E-01		7.910E-02	1.445E-01	1.447E-02	1.012
Y-88	-3.519E-02		4.503E-02	6.748E-02	6.034E-03	-0.522
NB-93M	-2.379E+00		4.062E+00	6.379E+00	4.717E+00	-0.373
NB-94	-5.275E-03		5.442E-02	9.779E-02	8.103E-03	-0.054
NB-95	1.559E-01		1.056E-01	2.104E-01	1.910E-02	0.741
ZR-95	2.465E-02		1.391E-01	2.455E-01	2.443E-02	0.100
RU-103	4.246E-02		9.667E-02	1.649E-01	2.480E-02	0.257
RU-106	2.978E-01		5.120E-01	9.697E-01	1.365E-01	0.307
AG-108M	-3.449E-02		6.733E-02	1.034E-01	9.580E-03	-0.333
AG-110M	3.397E-02	+	1.848E-02	1.079E-01	1.017E-02	0.315

Sample ID : 1111065-15 Acquisition date : 11-DEC-2011 11:15:33

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
SN-113	6.924E-03		8.763E-02	1.349E-01	1.310E-02	0.051
TE123M	7.850E-03		5.596E-02	8.823E-02	9.000E-03	0.089
SB-124	1.625E-03		7.333E-02	1.212E-01	1.190E-02	0.013
I-125	-5.994E-01		1.463E+00	2.533E+00	3.551E-01	-0.237
SB-125	-1.191E-01		1.644E-01	2.560E-01	2.527E-02	-0.465
SB-126	2.566E-01		6.473E-01	1.102E+00	1.021E-01	0.233
I-129	-5.095E-02		1.459E-01	2.541E-01	4.724E-02	-0.201
I-131	1.146E-01		8.406E-01	1.413E+00	1.298E-01	0.081
BA-133	7.588E-02		7.537E-02	1.239E-01	1.675E-02	0.612
CS-134	3.702E-02		5.271E-02	9.258E-02	9.094E-03	0.400
CS-135	3.803E-01		2.724E-01	4.538E-01	3.813E-02	0.838
CS-136	-3.662E-01		4.678E-01	7.702E-01	7.293E-02	-0.476
LA-138	4.013E-02		8.311E-02	1.618E-01	1.406E-02	0.248
CE-139	3.403E-02		5.599E-02	9.635E-02	9.569E-03	0.353
BA-140	1.417E+00	+	1.497E+00	1.821E+00	6.106E-01	0.778
LA-140	-9.912E-02		4.026E-01	6.155E-01	5.467E-02	-0.161
CE-141	1.756E-01		1.652E-01	2.789E-01	7.266E-02	0.630
CE-144	3.654E-02		3.740E-01	6.371E-01	7.109E-02	0.057
PM-144	4.384E-03		5.255E-02	9.634E-02	9.008E-03	0.046
PM-145	-1.101E-01		3.056E-01	5.150E-01	3.392E-01	-0.214
PM-146	6.039E-02		1.190E-01	2.042E-01	2.013E-02	0.296
ND-147	-1.710E+00		2.796E+00	4.341E+00	4.348E-01	-0.394
EU-152	-3.802E-02		5.345E-01	8.375E-01	9.154E-02	-0.045
GD-153	-1.439E-01		1.933E-01	3.172E-01	4.226E-02	-0.454
EU-154	-8.501E-02		1.924E-01	3.261E-01	2.989E-02	-0.261
EU-155	7.696E-01	+	2.040E-01	3.074E-01	4.492E-02	2.504
EU-156	-1.630E+00		2.404E+00	3.536E+00	8.100E-01	-0.461
HO-166M	-8.977E-03		9.857E-02	1.773E-01	1.648E-02	-0.051
HF-172	-1.169E-01		3.429E-01	5.756E-01	6.594E-02	-0.203
LU-172	2.470E-01		2.909E+00	5.267E+00	5.041E-01	0.047
LU-173	3.896E-01		2.267E-01	4.024E-01	3.341E-02	0.968
HF-175	-6.596E-03		7.803E-02	1.186E-01	1.061E-02	-0.056
LU-176	-2.036E-02		4.180E-02	6.763E-02	5.736E-03	-0.301
TA-182	1.289E+00	+	4.948E-01	7.756E-01	7.585E-02	1.662
IR-192	-8.609E-04		1.389E-01	2.114E-01	2.096E-02	-0.004
HG-203	-4.335E-02		9.899E-02	1.476E-01	1.235E-02	-0.294
BI-207	1.984E-02		4.869E-02	8.359E-02	8.317E-03	0.237
BI-210M	-6.176E-03		9.044E-02	1.392E-01	1.192E-02	-0.044
PB-211	2.286E-01		1.728E+00	2.873E+00	2.749E-01	0.080
RN-219	-1.812E-01		7.889E-01	1.283E+00	1.225E-01	-0.141
RA-223	6.943E-02		1.092E+00	1.825E+00	1.588E-01	0.038
RA-224	1.609E+01		2.249E+00	3.363E+00	3.030E-01	4.786
RA-225	-2.864E-01		9.332E-01	1.502E+00	1.791E-01	-0.191
TH-227	5.194E-01		3.915E-01	6.438E-01	5.861E-02	0.807
TH-230	9.448E-01		1.596E+01	2.265E+01	2.289E+00	0.042
PA-231	1.417E+00		1.918E+00	3.098E+00	2.611E-01	0.458
TH-231	-1.263E-02		7.399E-01	1.310E+00	3.243E-01	-0.010
PA-233	4.211E-02		2.320E-01	3.919E-01	8.791E-02	0.107

Sample ID : 1111065-15 Acquisition date : 11-DEC-2011 11:15:33

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PA-234	9.488E-02		1.853E-01	3.195E-01	3.593E-02	0.297
PA-234M	-2.524E+00		6.703E+00	1.162E+01	1.029E+00	-0.217
U-235	3.349E-01		3.719E-01	6.403E-01	1.195E-01	0.523
AM-241	5.197E-02		1.431E-01	2.328E-01	1.917E-02	0.223
CM-243	8.283E-02		3.289E-01	5.138E-01	4.188E-02	0.161

Sample ID : 1111065-15 Acquisition date : 11-DEC-2011 11:15:33

Total number of lines in spectrum	66	
Number of unidentified lines	30	
Number of lines tentatively identified by NID	36	54.55%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.182E+01	2.182E+01	0.301E+01	13.79	
TL-208	1.41E+10Y	1.00	1.086E+00	1.086E+00	0.219E+00	20.16	
PB-210	22.26Y	1.00	5.499E+00	5.514E+00	2.613E+00	47.39	
BI-212	1.41E+10Y	1.00	9.789E-01	9.789E-01	5.796E-01	59.21	
PB-212	1.41E+10Y	1.00	1.240E+00	1.240E+00	0.190E+00	15.33	
BI-214	1602.00Y	1.00	3.324E+00	3.324E+00	0.364E+00	10.94	
PB-214	1602.00Y	1.00	3.615E+00	3.615E+00	0.331E+00	9.16	
RA-226	1602.00Y	1.00	6.904E+00	6.904E+00	12.84E+00	185.94	
AC-228	1.41E+10Y	1.00	1.371E+00	1.371E+00	0.266E+00	19.38	
TH-234	4.47E+09Y	1.00	4.596E+00	4.596E+00	2.025E+00	44.06	
			---	---			
	Total Activity :		5.044E+01	5.045E+01			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	6.299E+00	6.612E+00	1.810E+00	27.38	
SN-126	1.00E+05Y	1.00	6.337E-01	6.337E-01	1.690E-01	26.66	
CS-137	30.17Y	1.00	2.022E-01	2.026E-01	0.942E-01	46.50	
NP-237	2.14E+06Y	1.00	1.864E+00	1.864E+00	0.494E+00	26.51	
			---	---			
	Total Activity :		8.999E+00	9.312E+00			

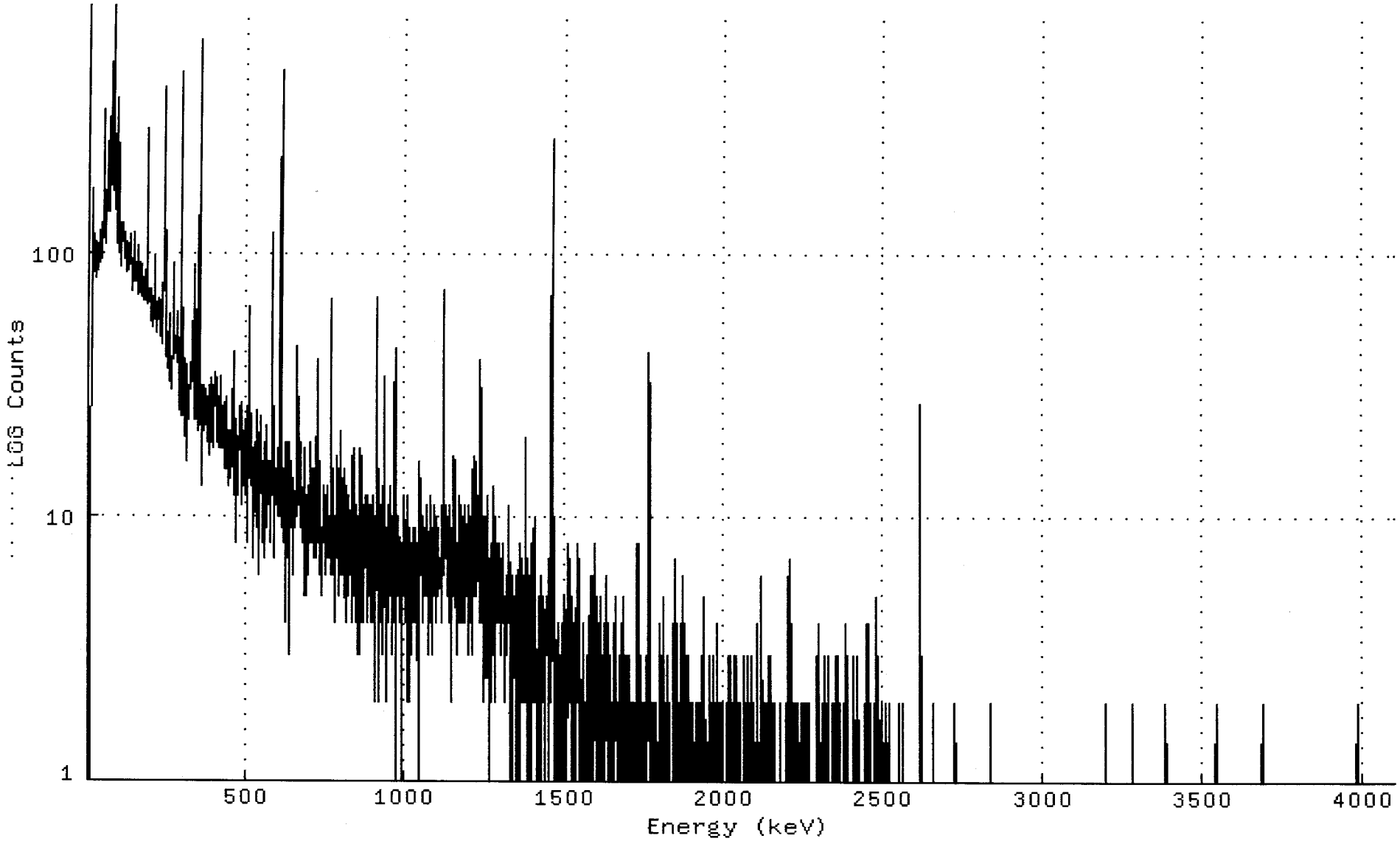
Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AM-243	7380.00Y	1.00	4.908E-01	4.908E-01	1.122E-01	22.87	
			---	---			
	Total Activity :		4.908E-01	4.908E-01			

Grand Total Activity : 5.993E+01 6.026E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106515_GE3_GAS1102_172267.CNF;1
Title :
Sample Title: DY2-BKGD-E-31-111109
Start Time: 11-DEC-2011 11:15 Sample Time: 9-NOV-2011 00:00: Energy Offset: -2.78447E-01
Real Time : 0 01:00:16.24 Sample ID : 1111065-15 Energy Slope : 9.99940E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106515_GE3_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	4	167	173	131	153	124	118	115
17:	106	84	83	93	90	83	109	79
25:	97	80	103	94	85	93	95	96
33:	106	97	90	92	109	119	91	111
41:	127	94	110	128	114	140	345	141
49:	112	120	129	151	111	169	107	114
57:	153	154	142	152	144	184	210	323
65:	187	175	142	195	167	183	195	191
73:	188	184	518	431	449	862	170	174
81:	186	179	143	226	230	162	207	377
89:	150	217	185	107	292	226	151	125
97:	98	109	138	120	114	116	119	88
105:	120	125	114	111	109	119	127	110
113:	93	99	103	114	117	95	102	99
121:	83	109	85	85	100	100	100	90
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609:	109	485	186	24	12	9	10	15
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929:	5	7	10	3	13	9	34	16
937:	6	8	10	2	9	9	4	6
945:	9	5	7	4	6	11	8	6
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1369:	2	5	3	6	2	2	6	2
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1409:	10	7	7	5	2	2	3	3
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1425:	2	1	5	4	6	1	5	3
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1473:	2	1	2	3	3	1	4	2
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1497:	3	2	5	1	5	5	4	2
1505:	0	1	4	0	3	7	8	7
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1601:	5	3	0	1	1	4	2	2
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1625:	1	1	4	2	3	6	2	3
1633:	3	2	1	2	3	3	1	4
1641:	1	2	1	1	3	1	0	2
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1673:	0	3	1	0	0	0	3	1
1681:	0	4	2	3	1	5	2	0
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1697:	3	3	0	1	0	0	3	2
1705:	2	2	2	1	0	1	1	1
1713:	0	1	1	2	0	2	0	0
1721:	0	0	1	0	4	0	2	1
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1745:	2	0	0	0	2	1	1	1
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1761:	2	2	4	8	39	42	25	2
1769:	2	1	0	0	1	1	1	2
1777:	2	0	2	1	1	2	0	0
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1793:	0	1	1	0	0	1	4	2
1801:	1	1	1	2	0	3	0	1
1809:	5	0	3	0	1	0	1	0
1817:	1	0	2	1	3	2	1	1
1825:	3	0	2	1	2	0	1	1
1833:	0	1	0	0	1	0	1	1
1841:	4	1	1	0	1	1	6	7
1849:	4	4	0	4	0	0	1	0
1857:	1	1	1	1	2	2	2	0
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1881:	1	0	1	3	0	0	2	2
1889:	2	3	1	0	0	1	0	1
1897:	0	2	2	2	0	2	0	0
1905:	1	0	1	0	0	0	2	1
1913:	1	2	2	0	2	2	0	0
1921:	0	0	0	1	1	0	2	0
1929:	0	1	0	3	1	1	2	0
1937:	1	5	1	3	1	1	0	1
1945:	1	1	0	0	1	0	0	0
1953:	2	1	2	2	1	3	0	1
1961:	1	2	1	2	0	2	0	3
1969:	0	1	2	1	2	2	2	1
1977:	2	2	0	0	0	4	1	1
1985:	0	1	0	1	1	0	0	1
1993:	0	2	1	0	0	1	2	0
2001:	1	0	0	1	1	1	1	1
2009:	2	1	2	2	1	0	3	0
2017:	0	2	3	1	1	1	1	2
2025:	0	2	0	0	0	2	1	1
2033:	0	0	0	3	0	1	0	2
2041:	0	3	1	2	1	1	2	2
2049:	0	1	2	0	0	1	1	1
2057:	0	0	0	1	0	2	2	0
2065:	3	1	0	2	0	0	0	1
2073:	1	1	0	3	1	0	1	0
2081:	2	0	0	1	1	0	1	0
2089:	1	3	1	0	0	0	0	2
2097:	0	1	0	0	1	1	0	1
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2121:	1	0	1	0	0	0	0	0
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2137:	1	0	3	0	1	2	0	1
2145:	0	1	1	1	3	0	2	0
2153:	0	1	1	2	1	2	0	0
2161:	1	1	1	0	1	0	0	0
2169:	1	0	1	0	0	1	1	0
2177:	0	0	2	0	0	0	1	1
2185:	0	1	0	0	0	1	1	1
2193:	1	1	1	0	2	2	2	0
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2225:	0	1	1	2	1	1	2	0
2233:	1	1	1	1	0	1	0	1
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2249:	0	2	0	0	0	2	0	0
2257:	0	1	1	2	2	1	0	1
2265:	0	2	0	1	1	0	1	1
2273:	1	0	0	1	0	0	1	0
2281:	0	0	0	0	1	0	0	0
2289:	1	0	0	1	3	0	4	0
2297:	0	0	0	1	1	1	1	0
2305:	0	1	2	1	0	1	0	0
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2321:	2	1	1	1	1	0	1	3
2329:	1	1	0	0	1	0	1	0
2337:	0	0	0	1	2	0	0	2
2345:	1	0	2	1	3	0	3	1

2353:	2	0	0	1	3	1	1	0
2361:	1	1	0	2	0	1	1	0
2369:	0	0	1	1	1	1	0	1
2377:	1	2	1	1	0	0	4	0
2385:	0	0	3	0	1	1	0	1
2393:	0	0	0	1	0	0	0	1
2401:	0	1	1	0	0	0	0	3
2409:	0	1	0	1	1	0	0	1
2417:	2	0	1	3	1	1	0	0
2425:	0	0	0	0	1	1	1	0
2433:	0	1	0	0	0	0	1	0
2441:	2	0	0	0	0	2	2	4
2449:	4	3	4	0	1	0	0	0
2457:	0	0	1	0	2	0	1	0
2465:	0	1	0	1	0	1	0	1
2473:	0	2	0	1	0	5	0	0
2481:	0	1	1	1	0	3	0	0
2489:	0	1	0	1	0	0	1	1
2497:	0	2	0	1	0	1	0	1
2505:	2	0	0	0	1	1	0	0
2513:	1	1	0	0	2	1	0	1
2521:	0	0	0	0	0	0	0	0
2529:	1	0	0	0	0	0	0	1
2537:	1	0	0	0	0	0	0	0
2545:	0	1	0	1	1	2	1	1
2553:	0	0	0	1	0	0	0	0
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2569:	0	0	0	1	1	0	1	1
2577:	0	0	0	0	0	1	0	1
2585:	0	1	1	0	0	0	0	0
2593:	1	0	0	0	0	1	1	0
2601:	0	0	0	1	0	0	0	0
2609:	0	0	1	0	0	6	16	27
2617:	18	6	0	3	0	0	0	0
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2633:	1	0	0	0	0	0	0	1
2641:	0	0	0	0	1	0	1	0
2649:	0	0	1	0	0	0	0	1
2657:	1	0	2	0	0	0	0	0
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2673:	0	0	0	0	0	0	0	0
2681:	0	0	0	1	0	0	0	0
2689:	0	0	0	0	1	0	0	1
2697:	0	0	0	0	0	0	1	0
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2729:	0	0	0	0	1	0	0	0
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2745:	0	0	0	0	0	1	0	0
2753:	1	0	0	0	1	1	0	0
2761:	0	0	1	0	0	1	0	0
2769:	0	1	0	0	1	0	0	0
2777:	0	0	0	0	0	0	0	0
2785:	0	0	0	0	0	0	0	0
2793:	0	0	0	0	0	0	1	0
2801:	0	0	1	0	0	0	0	0
2809:	1	0	0	0	0	0	0	0
2817:	0	0	0	1	1	0	0	0
2825:	0	0	0	0	0	0	0	0

2833:	1	0	2	0	0	0	0	0
2841:	1	0	0	0	0	0	0	0
2849:	0	1	0	0	0	0	0	0
2857:	0	0	0	0	0	1	0	0
2865:	1	1	0	0	0	0	0	0
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2881:	0	0	0	1	0	0	1	0
2889:	0	1	0	0	1	0	0	0
2897:	0	1	0	1	1	0	0	0
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2913:	0	0	0	0	0	0	0	0
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2937:	0	0	0	0	0	0	1	1
2945:	0	0	1	0	0	0	0	0
2953:	0	0	0	0	1	1	0	1
2961:	0	0	1	0	1	0	0	0
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2977:	0	0	0	1	1	0	0	0
2985:	0	1	0	0	0	0	0	0
2993:	0	0	0	0	1	0	0	0
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3009:	0	0	0	0	0	0	0	0
3017:	1	0	0	0	0	1	1	0
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3057:	0	0	0	0	0	0	0	0
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3073:	0	0	0	0	0	1	0	0
3081:	0	0	0	1	0	0	0	0
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3121:	0	0	0	0	0	0	0	0
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3177:	0	0	0	0	0	0	0	0
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3201:	1	0	1	0	0	0	0	0
3209:	0	0	0	0	0	0	0	0
3217:	0	0	0	0	0	0	0	0
3225:	0	1	0	0	0	0	0	0
3233:	0	0	0	0	0	0	0	0
3241:	0	0	0	1	0	0	0	0
3249:	1	0	0	0	0	0	0	0
3257:	0	0	0	0	0	0	1	0
3265:	1	0	0	0	0	0	0	1
3273:	0	0	0	0	1	0	0	0
3281:	0	2	0	1	0	0	0	0
3289:	0	1	0	1	0	0	0	0
3297:	0	0	0	1	0	0	0	0
3305:	0	0	0	0	0	0	0	0

3313:	0	0	0	0	0	0	0	0
3321:	0	0	0	0	0	0	0	0
3329:	0	0	0	0	0	0	0	0
3337:	1	0	0	0	0	1	0	0
3345:	1	0	0	0	0	0	0	0
3353:	0	0	0	0	0	0	0	0
3361:	0	0	0	0	0	0	0	0
3369:	0	0	0	0	0	0	0	0
3377:	0	0	0	0	0	0	0	0
3385:	2	0	1	0	0	0	0	0
3393:	0	0	0	0	0	0	0	0
3401:	1	0	0	0	0	0	0	0
3409:	0	0	1	0	0	0	0	0
3417:	0	0	0	0	0	0	0	0
3425:	0	0	0	0	0	0	0	0
3433:	1	0	0	1	0	0	0	0
3441:	0	1	0	0	0	0	0	0
3449:	1	0	0	0	0	0	0	0
3457:	0	0	0	0	0	0	0	0
3465:	0	0	0	0	0	0	0	0
3473:	0	1	0	0	0	0	0	0
3481:	0	1	0	0	0	0	0	0
3489:	0	0	0	0	0	0	0	0
3497:	1	0	0	0	0	0	0	0
3505:	0	0	0	0	0	0	0	0
3513:	0	1	0	0	0	0	0	0
3521:	0	0	0	0	0	0	0	0
3529:	0	1	0	1	0	0	1	0
3537:	0	0	0	1	0	2	0	0
3545:	0	0	0	0	0	0	1	0
3553:	0	0	0	0	0	0	0	0
3561:	0	0	0	0	0	0	0	0
3569:	0	0	0	0	0	0	0	0
3577:	0	0	0	0	0	0	0	0
3585:	0	0	0	0	1	0	0	0
3593:	1	0	0	0	0	0	0	0
3601:	0	0	0	0	0	0	1	0
3609:	0	0	0	0	1	0	1	0
3617:	1	0	0	0	0	0	1	0
3625:	0	0	0	0	1	0	0	0
3633:	0	0	0	0	0	1	0	0
3641:	0	0	0	1	0	0	0	0
3649:	0	0	0	0	0	0	0	1
3657:	1	1	0	0	0	0	0	0
3665:	0	0	0	0	0	0	0	0
3673:	0	0	0	0	0	0	0	0
3681:	0	0	0	0	0	2	0	1
3689:	1	0	0	0	0	0	1	0
3697:	0	0	0	0	0	0	1	0
3705:	1	0	0	0	1	1	0	0
3713:	0	0	1	0	0	0	0	0
3721:	0	0	0	0	1	0	0	1
3729:	0	0	0	0	0	0	1	0
3737:	0	0	0	0	0	0	0	1
3745:	1	0	0	0	0	0	1	0
3753:	0	0	0	0	0	0	0	0
3761:	0	0	0	0	0	0	0	0
3769:	0	0	0	0	1	0	0	0
3777:	0	0	0	1	0	0	0	0
3785:	0	0	0	0	0	0	0	0

3793:	0	0	1	1	0	0	0	0
3801:	0	0	0	0	1	0	0	0
3809:	0	0	0	0	0	0	0	0
3817:	0	0	1	0	0	0	0	0
3825:	0	0	0	0	0	0	0	0
3833:	0	0	0	0	0	0	1	0
3841:	0	0	0	1	0	0	0	0
3849:	0	1	0	0	0	0	0	0
3857:	0	0	1	0	0	0	0	0
3865:	0	0	0	0	0	0	0	0
3873:	0	0	0	0	0	0	0	0
3881:	0	0	0	0	0	0	0	0
3889:	0	0	0	0	0	0	0	0
3897:	0	0	0	0	0	0	0	0
3905:	0	0	0	0	0	0	0	0
3913:	0	0	0	0	0	0	1	0
3921:	0	0	0	0	0	0	0	0
3929:	0	0	0	0	0	0	0	0
3937:	0	0	0	0	0	0	0	0
3945:	0	0	1	0	1	0	0	0
3953:	0	0	0	0	0	0	0	0
3961:	0	0	0	0	0	0	1	0
3969:	0	0	0	0	0	0	0	0
3977:	0	0	0	2	0	0	0	0
3985:	0	0	0	0	0	1	0	0
3993:	0	0	0	0	1	0	0	0
4001:	0	0	1	0	0	0	0	0
4009:	0	0	0	0	0	0	1	1
4017:	0	0	0	0	1	0	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	0	0	1	0	0
4041:	0	1	0	0	0	0	0	0
4049:	0	0	0	0	0	0	0	0
4057:	0	0	0	1	0	0	1	0
4065:	0	0	1	0	0	1	0	0
4073:	1	0	0	0	0	0	0	0
4081:	0	0	1	0	0	0	0	0
4089:	0	0	0	0	1	1	1	0

Sample ID : 1111065-16 Acquisition date : 11-DEC-2011 12:16:17

AG
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VAX/VMS Peak Search Report Generated 11-DEC-2011 13:16:35.42

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106516_GE1_GAS1102_172273.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-BKGD-S-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 11-DEC-2011 12:16:17
Sample ID : 1111065-16 Sample Quantity : 3.89410E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE1 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:01.38 0.0%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.43*	110	795	1.92	46.05	42	9	95.4		PB-210
0	76.58*	1407	1557	3.13	76.21	71	11	12.1		
0	93.09*	229	850	1.44	92.73	90	7	46.5		
0	156.35	141	643	6.22	155.99	151	10	69.3		
0	169.17	55	267	1.94	168.82	167	5	92.2		
0	186.28*	197	561	1.60	185.94	182	9	46.6		RA-226
0	198.37	65	414	3.69	198.03	196	8	111.1		
0	208.35	183	420	1.56	208.01	203	9	42.9		
1	239.17*	940	203	1.76	238.84	233	14	8.1	7.96E+00	PB-212
1	242.49	264	176	1.76	242.16	233	14	21.6		
0	270.13	106	284	2.94	269.80	265	9	60.5		
0	277.42	66	251	3.13	277.09	274	8	86.5		
2	295.65*	441	130	1.61	295.33	290	13	12.4	1.27E+00	PB-214
2	300.32	109	138	1.99	299.99	290	13	41.1		PB-212
0	338.92*	136	222	1.87	338.60	335	8	41.8		AC-228
0	352.23*	674	233	1.44	351.92	347	10	11.5		PB-214
0	464.46	58	148	1.56	464.17	459	10	83.2		
0	510.91*	98	191	2.54	510.63	505	13	65.4		
0	546.63	29	84	2.15	546.36	543	7	111.4		
0	583.17*	311	147	1.86	582.91	577	12	19.5		TL-208
0	609.66*	478	141	1.99	609.40	603	12	13.6		BI-214
1	662.13*	76	66	2.06	661.88	658	11	42.5	2.03E+00	CS-137
1	666.06	26	64	2.06	665.81	658	11	106.8		
2	724.42	17	17	2.10	724.19	723	10	68.2	1.42E+00	ZR-95
2	728.00*	62	54	2.31	727.77	723	10	50.9		BI-212
0	755.95	24	55	2.04	755.73	751	8	114.0		ZR-95
0	769.08	62	85	3.31	768.85	762	10	61.3		
0	796.08	27	64	1.41	795.86	792	8	112.0		
0	861.18	74	46	2.25	860.97	856	10	42.0		TL-208
0	903.31	25	29	3.77	903.12	900	7	79.8		
0	911.69*	213	61	2.22	911.49	907	10	19.6		AC-228
0	923.34	22	36	2.41	923.15	920	7	102.7		
2	965.04	42	40	2.44	964.85	959	14	61.5	8.93E-01	
2	969.47*	130	37	2.02	969.29	959	14	23.7		AC-228
0	1121.20	99	89	1.98	1121.04	1117	10	40.6		BI-214
0	1378.49	23	22	1.33	1378.39	1374	7	75.9		

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Sample ID : 1111065-16 Acquisition date : 11-DEC-2011 12:16:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	1408.33	26	16	1.69	1408.24	1403	10	70.3		
0	1417.66	21	9	5.61	1417.57	1413	9	68.3		
0	1461.33*	726	25	2.34	1461.25	1454	14	8.0		K-40
0	1509.70	21	17	3.56	1509.63	1504	11	88.5		
0	1589.89	25	25	1.45	1589.84	1585	10	84.9		
0	1622.79	10	6	2.49	1622.75	1618	9	116.8		
0	1631.46	15	15	1.15	1631.42	1627	11	113.2		
0	1704.96	9	4	3.61	1704.93	1699	9	112.6		
0	1730.20	21	10	2.69	1730.18	1726	7	68.4		
0	1742.03	11	2	1.93	1742.00	1738	8	73.9		
2	1764.57*	69	13	2.15	1764.55	1760	14	29.7	2.36E+00	BI-214
2	1769.02	8	11	2.31	1769.00	1760	14	168.2		
0	1805.29	6	2	1.19	1805.29	1801	7	115.4		
0	1848.45	18	7	1.65	1848.45	1844	9	70.1		
0	1889.44	9	0	1.10	1889.44	1887	5	66.7		
0	1923.65	8	1	2.52	1923.66	1921	6	86.2		
0	2120.43	15	2	5.20	2120.48	2117	8	62.2		
0	2151.75	6	2	1.58	2151.81	2148	7	105.4		
0	2204.00*	18	5	2.09	2204.08	2199	9	66.4		BI-214
0	2341.44	8	1	2.90	2341.55	2339	6	85.6		
0	2364.64	6	3	1.01	2364.75	2361	6	122.5		
0	2614.61*	112	0	2.26	2614.77	2608	13	19.4		TL-208
0	3197.92	5	0	2.31	3198.20	3193	8	89.4		

Sample ID : 1111065-16 Acquisition date : 11-DEC-2011 12:16:17

Total number of lines in spectrum	59	
Number of unidentified lines	30	
Number of lines tentatively identified by NID	29	49.15%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.608E+01	2.608E+01	0.322E+01	12.33	
TL-208	1.41E+10Y	1.00	1.852E+00	1.852E+00	0.276E+00	14.92	
PB-210	22.26Y	1.00	2.013E+00	2.018E+00	1.934E+00	95.82	
BI-212	1.41E+10Y	1.00	1.169E+00	1.169E+00	0.607E+00	51.90	
PB-212	1.41E+10Y	1.00	2.072E+00	2.072E+00	0.245E+00	11.80	
BI-214	1602.00Y	1.00	1.974E+00	1.974E+00	0.271E+00	13.74	
PB-214	1602.00Y	1.00	2.399E+00	2.399E+00	0.256E+00	10.66	
RA-226	1602.00Y	1.00	5.028E+00	5.029E+00	9.503E+00	188.97	
AC-228	1.41E+10Y	1.00	1.966E+00	1.966E+00	0.304E+00	15.47	
			---	---			
	Total Activity :		4.456E+01	4.456E+01			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
ZR-95	64.02D	1.42	8.904E-02	1.266E-01	0.751E-01	59.29	
			---	---			
	Total Activity :		8.904E-02	1.266E-01			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CS-137	30.17Y	1.00	1.846E-01	1.849E-01	0.809E-01	43.73	
			---	---			
	Total Activity :		1.846E-01	1.849E-01			

Grand Total Activity : 4.483E+01 4.487E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-16 Acquisition date : 11-DEC-2011 12:16:17

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	5.027E-01	2.608E+01	2.608E+01	12.33	OK
Final Mean for 1 Valid Peaks = 2.608E+01+/- 3.217E+00 (12.33%)							
TL-208	583.14	30.22*	1.029E+00	1.928E+00	1.928E+00	21.93	OK
	860.37	4.48	7.505E-01	4.218E+00	4.218E+00	43.00	OK
	2614.66	35.85	3.563E-01	1.693E+00	1.693E+00	22.01	OK
Final Mean for 3 Valid Peaks = 1.852E+00+/- 2.764E-01 (14.92%)							
PB-210	46.50	4.05*	2.613E+00	2.013E+00	2.018E+00	95.82	OK
Final Mean for 1 Valid Peaks = 2.018E+00+/- 1.934E+00 (95.82%)							
BI-212	727.17	11.80*	8.597E-01	1.169E+00	1.169E+00	51.90	OK
	1620.62	2.75	4.684E-01	----- Line Not Found		-----	Absent
Final Mean for 1 Valid Peaks = 1.169E+00+/- 6.068E-01 (51.90%)							
PB-212	238.63	44.60*	2.000E+00	2.031E+00	2.031E+00	12.20	OK
	300.09	3.41	1.716E+00	3.581E+00	3.581E+00	42.12	OK
Final Mean for 2 Valid Peaks = 2.072E+00+/- 2.446E-01 (11.80%)							
BI-214	609.31	46.30*	9.927E-01	2.004E+00	2.004E+00	16.99	OK
	1120.29	15.10	6.104E-01	2.077E+00	2.077E+00	41.63	OK
	1764.49	15.80	4.432E-01	1.890E+00	1.890E+00	30.99	OK
	2204.22	4.98	3.885E-01	1.765E+00	1.765E+00	67.15	OK
Final Mean for 4 Valid Peaks = 1.974E+00+/- 2.713E-01 (13.74%)							
PB-214	295.21	19.19	1.736E+00	2.551E+00	2.551E+00	15.37	OK
	351.92	37.19*	1.529E+00	2.286E+00	2.286E+00	14.75	OK
Final Mean for 2 Valid Peaks = 2.399E+00+/- 2.557E-01 (10.66%)							
RA-226	186.21	3.28*	2.308E+00	5.028E+00	5.029E+00	188.97	OK
Final Mean for 1 Valid Peaks = 5.029E+00+/- 9.503E+00 (188.97%)							
AC-228	338.32	11.40	1.575E+00	1.463E+00	1.463E+00	42.78	OK
	911.07	27.70*	7.170E-01	2.063E+00	2.063E+00	21.49	OK
	969.11	16.60	6.829E-01	2.216E+00	2.216E+00	25.32	OK
Final Mean for 3 Valid Peaks = 1.966E+00+/- 3.041E-01 (15.47%)							

Sample ID : 1111065-16 Acquisition date : 11-DEC-2011 12:16:17

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
ZR-95	724.18	43.70	8.626E-01	8.578E-02	1.220E-01	69.07	OK
	756.72	55.30*	8.323E-01	1.016E-01	1.445E-01	114.46	OK

Final Mean for 2 Valid Peaks = 1.266E-01+/- 7.508E-02 (59.29%)

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CS-137	661.65	85.12*	9.283E-01	1.846E-01	1.849E-01	43.73	OK

Final Mean for 1 Valid Peaks = 1.849E-01+/- 8.087E-02 (43.73%)

Flag: "*" = Keyline

Sample ID : 1111065-16 Acquisition date : 11-DEC-2011 12:16:17

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.608E+01	3.217E+00	7.550E-01	6.402E-02	34.544
ZR-95	1.266E-01	7.508E-02	2.082E-01	2.049E-02	0.608
CS-137	1.849E-01	8.087E-02	1.038E-01	9.712E-03	1.781
TL-208	1.852E+00	2.764E-01	2.510E-01	2.321E-02	7.379
PB-210	2.018E+00	1.934E+00	1.650E+00	1.274E-01	1.223
BI-212	1.169E+00	6.068E-01	7.145E-01	6.530E-02	1.636
PB-212	2.072E+00	2.446E-01	1.514E-01	1.240E-02	13.684
BI-214	1.974E+00	2.713E-01	1.790E-01	1.665E-02	11.031
PB-214	2.399E+00	2.557E-01	1.911E-01	1.581E-02	12.551
RA-226	5.029E+00	9.503E+00	2.170E+00	3.973E+00	2.317
AC-228	1.966E+00	3.041E-01	3.337E-01	2.652E-02	5.893

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	3.113E-01		5.980E-01	1.111E+00	9.791E-02	0.280
NA-22	7.332E-03		6.188E-02	1.111E-01	9.088E-03	0.066
AL-26	-4.347E-03		4.247E-02	6.933E-02	5.537E-03	-0.063
TI-44	-1.800E-01		6.107E-02	8.086E-02	6.334E-03	-2.226
SC-46	3.537E-02		7.087E-02	1.315E-01	1.052E-02	0.269
V-48	4.187E-02		2.031E-01	3.724E-01	3.009E-02	0.112
CR-51	-5.106E-01		9.548E-01	1.495E+00	1.303E-01	-0.342
MN-54	-3.435E-02		5.798E-02	9.763E-02	8.284E-03	-0.352
CO-56	-4.755E-03		6.908E-02	1.223E-01	1.026E-02	-0.039
CO-57	3.409E-03		4.790E-02	7.933E-02	7.657E-03	0.043
CO-58	-6.076E-02		6.515E-02	1.058E-01	9.190E-03	-0.574
FE-59	-1.322E-02		1.727E-01	3.037E-01	2.709E-02	-0.044
CO-60	1.993E-02		6.622E-02	1.192E-01	9.747E-03	0.167
ZN-65	-6.735E-02		1.454E-01	2.147E-01	1.760E-02	-0.314
SE-75	-2.147E-02		8.554E-02	1.260E-01	1.035E-02	-0.170
RB-82	-9.229E-01		1.053E+00	1.501E+00	1.334E-01	-0.615
RB-83	-8.053E-03		1.301E-01	2.093E-01	3.322E-02	-0.038
KR-85	2.358E+01		1.190E+01	2.304E+01	2.075E+00	1.023
SR-85	1.451E-01		7.326E-02	1.418E-01	1.277E-02	1.023
Y-88	-5.555E-03		3.682E-02	7.272E-02	5.777E-03	-0.076
NB-93M	-4.555E+00		1.214E+00	2.475E-01	5.508E-02	-18.403
NB-94	4.156E-02		5.108E-02	9.468E-02	7.740E-03	0.439
NB-95	9.115E-02		1.060E-01	1.991E-01	1.783E-02	0.458
RU-103	6.737E-02		8.333E-02	1.566E-01	2.247E-02	0.430
RU-106	-3.147E-01		4.803E-01	8.139E-01	1.125E-01	-0.387
AG-108M	4.138E-02	+	2.854E-02	9.795E-02	8.969E-03	0.423
CD-109	2.380E+00		1.605E+00	2.519E+00	2.925E-01	0.945
AG-110M	3.070E-02		6.239E-02	1.049E-01	9.798E-03	0.293
SN-113	5.598E-02		7.847E-02	1.458E-01	1.237E-02	0.384
TE123M	4.334E-02		6.255E-02	9.779E-02	8.095E-03	0.443
SB-124	-5.158E-03		7.590E-02	1.213E-01	1.127E-02	-0.043
I-125	-7.650E-01		9.746E-01	1.596E+00	1.448E-01	-0.479

Sample ID : 1111065-16 Acquisition date : 11-DEC-2011 12:16:17

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
SB-125	3.815E-03		1.514E-01	2.716E-01	2.353E-02	0.014
SB-126	1.530E-01		5.518E-01	9.217E-01	8.449E-02	0.166
SN-126	1.049E-01		1.537E-01	2.385E-01	2.371E-02	0.440
I-129	-1.156E-01		9.245E-02	1.479E-01	1.553E-02	-0.782
I-131	8.334E-02		7.687E-01	1.394E+00	1.152E-01	0.060
BA-133	1.490E-01		8.338E-02	1.452E-01	1.884E-02	1.026
CS-134	4.075E-03		5.366E-02	8.698E-02	8.101E-03	0.047
CS-135	3.864E-01		2.896E-01	4.693E-01	3.820E-02	0.823
CS-136	-1.200E-02		3.658E-01	6.517E-01	5.497E-02	-0.018
LA-138	5.037E-02		6.503E-02	1.343E-01	1.104E-02	0.375
CE-139	2.977E-02		5.959E-02	9.273E-02	7.412E-03	0.321
BA-140	7.621E-01		1.097E+00	1.928E+00	6.414E-01	0.395
LA-140	1.026E-01		3.173E-01	5.538E-01	4.544E-02	0.185
CE-141	-2.807E-02		1.661E-01	2.697E-01	6.836E-02	-0.104
CE-144	-1.354E-01		4.144E-01	6.726E-01	6.216E-02	-0.201
PM-144	-4.106E-02		5.400E-02	9.025E-02	8.361E-03	-0.455
PM-145	-2.657E-01		2.612E-01	3.131E-01	2.039E-01	-0.848
PM-146	3.212E-02		1.067E-01	1.864E-01	1.616E-02	0.172
ND-147	-1.383E+00		2.458E+00	4.237E+00	3.847E-01	-0.326
EU-152	6.620E-01	+	4.714E-01	7.433E-01	7.871E-02	0.891
GD-153	-3.677E-02		1.881E-01	3.092E-01	3.025E-02	-0.119
EU-154	1.852E-02		1.711E-01	3.068E-01	2.511E-02	0.060
EU-155	5.511E-01		1.827E-01	2.917E-01	2.863E-02	1.889
EU-156	-3.172E+00		2.191E+00	3.135E+00	7.166E-01	-1.012
HO-166M	5.395E-02		8.898E-02	1.665E-01	1.532E-02	0.324
HF-172	-5.671E-01		3.694E-01	5.641E-01	5.366E-02	-1.005
LU-172	1.951E+00		2.692E+00	5.106E+00	4.177E-01	0.382
LU-173	3.536E-01		2.586E-01	3.768E-01	3.062E-02	0.938
HF-175	2.225E-02		8.843E-02	1.182E-01	9.775E-03	0.188
LU-176	-2.436E-02		4.918E-02	7.052E-02	5.787E-03	-0.345
TA-182	1.095E+00	+	4.559E-01	6.719E-01	5.500E-02	1.630
IR-192	1.512E-02		1.214E-01	1.994E-01	1.746E-02	0.076
HG-203	6.010E-02		9.947E-02	1.546E-01	1.293E-02	0.389
BI-207	2.817E-02		4.615E-02	8.602E-02	7.925E-03	0.327
BI-210M	-5.282E-02		9.853E-02	1.418E-01	1.157E-02	-0.372
PB-211	-1.076E+00		1.595E+00	2.747E+00	2.284E-01	-0.392
RN-219	2.258E-02		6.683E-01	1.199E+00	9.942E-02	0.019
RA-223	-1.275E+00		1.130E+00	1.685E+00	1.389E-01	-0.757
RA-224	2.343E+01		2.824E+00	3.963E+00	3.244E-01	5.913
RA-225	5.395E-01		6.314E-01	1.027E+00	8.596E-02	0.525
TH-227	1.710E+00		4.568E-01	8.110E-01	6.641E-02	2.109
TH-230	-5.150E+01		1.582E+01	2.051E+01	1.603E+00	-2.511
PA-231	2.331E+00		1.970E+00	3.193E+00	2.616E-01	0.730
TH-231	8.861E-01		5.714E-01	9.850E-01	1.204E-01	0.900
PA-233	1.474E-01		2.551E-01	4.265E-01	9.514E-02	0.346
PA-234	8.738E-02		1.996E-01	3.336E-01	3.111E-02	0.262
PA-234M	-6.440E-01		6.463E+00	1.138E+01	9.222E-01	-0.057
TH-234	2.322E+00		1.308E+00	2.301E+00	1.705E-01	1.009

Sample ID : 1111065-16 Acquisition date : 11-DEC-2011 12:16:17

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
U-235	-4.726E-02		3.771E-01	6.140E-01	1.083E-01	-0.077
NP-237	1.335E+00		4.425E-01	7.065E-01	6.935E-02	1.890
AM-241	-2.295E-01		1.317E-01	2.057E-01	1.457E-02	-1.116
AM-243	6.580E-01		1.065E-01	1.665E-01	1.417E-02	3.952
CM-243	5.047E-01	+	4.390E-01	5.467E-01	4.431E-02	0.923

Sample ID : 1111065-16 Acquisition date : 11-DEC-2011 12:16:17

Total number of lines in spectrum	59	
Number of unidentified lines	30	
Number of lines tentatively identified by NID	29	49.15%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.608E+01	2.608E+01	0.322E+01	12.33	
TL-208	1.41E+10Y	1.00	1.852E+00	1.852E+00	0.276E+00	14.92	
PB-210	22.26Y	1.00	2.013E+00	2.018E+00	1.934E+00	95.82	
BI-212	1.41E+10Y	1.00	1.169E+00	1.169E+00	0.607E+00	51.90	
PB-212	1.41E+10Y	1.00	2.072E+00	2.072E+00	0.245E+00	11.80	
BI-214	1602.00Y	1.00	1.974E+00	1.974E+00	0.271E+00	13.74	
PB-214	1602.00Y	1.00	2.399E+00	2.399E+00	0.256E+00	10.66	
RA-226	1602.00Y	1.00	5.028E+00	5.029E+00	9.503E+00	188.97	
AC-228	1.41E+10Y	1.00	1.966E+00	1.966E+00	0.304E+00	15.47	
			---	---			
	Total Activity :		4.456E+01	4.456E+01			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
ZR-95	64.02D	1.42	8.904E-02	1.266E-01	0.751E-01	59.29	
			---	---			
	Total Activity :		8.904E-02	1.266E-01			

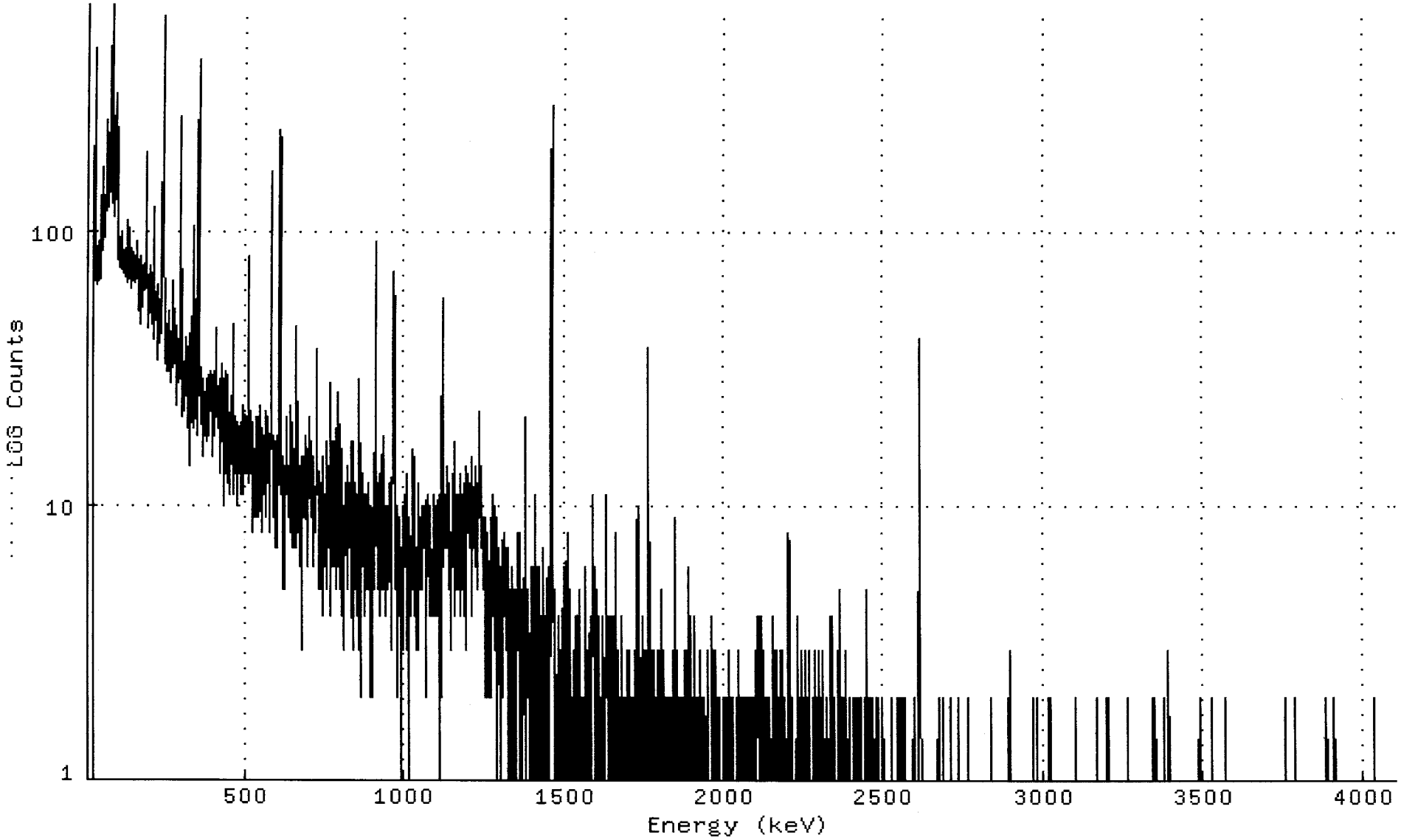
Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CS-137	30.17Y	1.00	1.846E-01	1.849E-01	0.809E-01	43.73	
			---	---			
	Total Activity :		1.846E-01	1.849E-01			

Grand Total Activity :	4.483E+01	4.487E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106516_GE1_GAS1102_172273.CNF;1
Title :
Sample Title: DY2-BKGD-S-31-111109
Start Time: 11-DEC-2011 12:16 Sample Time: 9-NOV-2011 00:00: Energy Offset: 3.84457E-01
Real Time : 0 01:00:01.38 Sample ID : 1111065-16 Energy Slope : 9.99792E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106516_GE1_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	0	0	0
17:	0	5	71	140	144	289	465	318
25:	124	89	66	78	64	81	86	87
33:	73	79	68	73	68	66	90	93
41:	67	113	74	80	108	171	147	89
49:	88	85	89	98	134	103	103	112
57:	110	130	134	118	127	149	255	207
65:	122	134	125	153	145	157	139	163
73:	155	285	473	316	678	347	155	127
81:	134	138	113	183	158	137	262	211
89:	140	221	131	184	318	178	103	79
97:	78	93	103	74	82	89	92	80
105:	91	100	79	83	88	92	73	77
113:	81	85	76	84	70	76	69	77
121:	84	86	70	65	70	92	71	76
129:	109	97	81	67	89	100	83	62
137:	86	79	77	74	79	66	72	84
145:	66	79	66	69	78	69	65	77
153:	72	92	83	92	82	67	81	73
161:	51	66	79	73	58	48	58	61
169:	81	76	46	61	67	75	63	59
177:	53	76	62	69	66	61	73	72
185:	107	195	117	72	66	56	67	69
193:	64	54	44	56	69	57	75	65
201:	59	52	46	60	61	70	57	68
209:	123	78	40	49	59	49	50	60
217:	47	57	55	64	46	40	36	52
225:	34	56	40	55	55	39	48	47
233:	43	42	46	68	73	316	605	126
241:	109	192	96	47	46	33	34	46
249:	46	40	46	40	39	31	39	51
257:	50	38	38	31	38	31	35	33
265:	28	30	40	46	51	66	57	40
273:	32	33	40	40	49	52	45	35
281:	23	38	38	45	30	28	28	40
289:	30	29	38	36	29	63	260	184
297:	39	34	44	72	58	21	23	22
305:	32	30	27	27	33	34	41	26
313:	32	28	25	34	20	38	27	22
321:	26	14	29	30	33	17	37	49
329:	20	30	26	33	33	30	19	23
337:	31	105	89	36	29	30	31	29
345:	23	18	21	20	33	33	152	424
353:	140	46	27	25	29	32	27	20
361:	25	27	25	15	24	23	29	25
369:	16	21	23	25	18	26	18	29
377:	19	23	25	17	28	30	27	20
385:	21	26	18	27	25	31	25	22
393:	27	30	15	24	23	29	30	18
401:	24	26	31	25	28	21	26	28
409:	39	44	23	20	27	20	19	23
417:	24	26	13	20	16	15	29	23
425:	26	20	33	20	17	21	18	21

433:	29	19	10	18	18	31	13	27
441:	16	27	20	21	17	12	30	16
449:	13	13	16	11	16	22	25	17
457:	22	16	18	11	17	17	46	31
465:	13	21	19	13	13	13	20	10
473:	17	11	20	20	16	16	18	13
481:	15	18	19	20	11	16	20	14
489:	11	11	14	13	14	11	23	20
497:	13	15	19	13	15	13	21	15
505:	16	16	18	19	36	69	81	46
513:	12	21	16	13	15	13	22	11
521:	8	15	20	17	16	12	14	16
529:	9	16	15	9	12	10	17	21
537:	17	21	9	18	14	17	14	15
545:	20	23	16	14	11	8	16	19
553:	13	17	15	15	15	11	16	18
561:	15	21	22	9	18	11	9	21
569:	16	13	20	12	16	9	14	11
577:	8	15	16	21	19	50	164	110
585:	16	18	14	14	16	9	13	13
593:	14	12	12	7	17	10	14	7
601:	18	13	10	14	17	13	13	43
609:	234	206	36	16	14	11	13	15
617:	14	12	5	13	12	5	12	14
625:	14	13	10	17	13	11	11	21
633:	11	14	12	9	9	10	11	9
641:	12	23	10	8	15	10	20	12
649:	11	14	7	7	15	7	13	11
657:	16	7	20	14	35	45	27	14
665:	16	24	11	8	13	14	11	8
673:	11	11	6	15	12	3	13	9
681:	10	13	14	9	15	12	9	13
689:	18	9	15	15	13	6	13	7
697:	10	16	13	13	13	18	16	21
705:	12	9	9	17	10	17	9	11
713:	15	8	8	6	8	8	8	11
721:	9	10	8	17	11	16	35	37
729:	18	10	6	5	8	12	9	12
737:	10	5	7	8	7	15	12	8
745:	5	4	7	6	9	9	8	6
753:	11	8	17	16	8	5	6	8
761:	11	7	14	8	9	9	19	26
769:	28	23	4	12	17	7	7	11
777:	6	6	10	11	13	10	17	5
785:	13	14	19	7	12	11	9	10
793:	6	11	26	15	9	6	8	6
801:	5	8	6	7	4	16	7	10
809:	8	3	9	3	6	7	11	12
817:	11	9	10	5	9	14	8	8
825:	9	10	9	7	8	12	8	7
833:	9	5	10	17	5	3	8	17
841:	13	10	8	11	12	7	12	6
849:	5	11	5	4	4	5	9	3
857:	6	10	13	28	29	10	6	10
865:	5	2	7	11	6	13	9	6
873:	10	7	4	11	7	7	6	7
881:	11	7	8	5	9	5	10	12
889:	7	11	11	9	7	10	9	10
897:	2	5	3	2	8	9	7	14
905:	8	6	5	6	7	35	92	88

913:	18	11	10	5	8	12	5	6
921:	6	12	13	9	8	4	6	9
929:	8	10	5	7	13	18	10	6
937:	6	5	6	8	8	5	4	10
945:	6	10	10	9	7	5	7	6
953:	10	6	12	9	9	3	8	9
961:	7	9	10	16	26	16	12	23
969:	71	47	13	5	8	6	5	6
977:	8	10	4	10	2	8	4	7
985:	9	8	5	7	1	6	5	6
993:	6	3	8	10	4	9	6	11
1001:	8	11	7	6	11	8	9	13
1009:	7	5	3	4	3	6	0	7
1017:	9	5	7	5	4	4	6	10
1025:	16	5	7	6	5	7	15	4
1033:	12	7	6	3	4	5	7	6
1041:	7	6	12	3	6	6	4	8
1049:	5	6	9	5	5	6	7	9
1057:	8	10	5	10	7	8	7	8
1065:	8	6	7	5	7	2	10	11
1073:	8	8	10	10	6	5	4	6
1081:	8	4	10	4	6	5	6	6
1089:	6	8	8	7	8	11	4	10
1097:	9	4	6	7	9	4	7	6
1105:	7	6	10	11	9	8	4	10
1113:	1	12	2	10	6	5	11	57
1121:	54	17	6	12	9	11	8	7
1129:	7	9	7	13	14	7	11	8
1137:	11	5	7	5	12	6	8	6
1145:	3	5	8	8	8	6	10	8
1153:	12	7	10	17	4	7	4	5
1161:	11	9	8	6	6	5	11	10
1169:	5	10	11	6	8	6	5	13
1177:	4	4	8	11	5	11	11	7
1185:	9	7	10	7	7	4	12	3
1193:	14	4	8	7	10	11	8	13
1201:	9	8	10	11	12	7	12	9
1209:	9	15	7	4	6	10	11	7
1217:	8	7	7	11	10	14	10	11
1225:	8	8	6	12	5	9	11	11
1233:	10	11	12	9	14	22	15	13
1241:	8	8	9	10	7	9	5	9
1249:	7	5	7	6	9	5	3	6
1257:	2	7	6	7	7	2	8	5
1265:	6	6	6	2	6	2	5	6
1273:	9	5	4	5	6	7	4	8
1281:	11	7	5	3	8	6	10	3
1289:	5	6	9	1	4	6	7	6
1297:	7	4	5	1	6	5	3	5
1305:	2	5	4	6	2	4	7	8
1313:	8	4	7	8	7	4	3	4
1321:	3	7	5	4	4	6	7	0
1329:	5	1	2	5	3	5	2	1
1337:	2	2	4	3	6	3	0	3
1345:	5	5	0	5	1	2	3	4
1353:	5	3	4	8	3	4	4	8
1361:	4	4	6	3	0	5	4	5
1369:	2	1	3	3	4	4	3	3
1377:	10	21	4	0	3	4	4	2
1385:	3	5	2	4	3	3	3	2

1393:	0	1	3	2	1	0	3	6
1401:	5	0	6	1	3	4	4	11
1409:	6	3	4	0	1	1	4	5
1417:	6	4	3	6	0	3	3	0
1425:	4	1	1	2	2	1	6	3
1433:	3	7	1	3	4	1	1	0
1441:	1	0	3	5	1	2	4	5
1449:	6	1	4	1	2	2	4	4
1457:	5	4	23	139	288	205	53	11
1465:	11	7	2	1	1	5	3	3
1473:	2	1	0	1	0	2	2	3
1481:	4	0	0	4	0	1	3	0
1489:	2	2	2	4	2	4	0	3
1497:	6	3	1	2	2	3	2	1
1505:	2	1	4	5	8	5	6	2
1513:	2	1	2	5	1	5	4	2
1521:	1	1	1	2	2	1	1	1
1529:	3	3	2	3	1	1	1	0
1537:	1	4	3	2	1	3	4	3
1545:	1	0	5	0	2	2	1	2
1553:	0	1	1	1	2	1	0	2
1561:	2	2	2	1	1	1	6	1
1569:	2	3	0	2	1	2	0	0
1577:	2	1	0	3	4	2	2	1
1585:	4	2	4	11	6	4	3	5
1593:	6	5	0	4	1	1	3	3
1601:	5	1	2	3	0	4	1	2
1609:	0	0	1	2	1	0	2	1
1617:	1	1	0	2	4	4	2	1
1625:	2	0	1	1	4	2	11	3
1633:	3	2	2	1	0	4	0	3
1641:	1	4	0	0	0	1	3	1
1649:	1	0	2	4	2	4	1	2
1657:	0	3	0	3	2	8	2	1
1665:	1	3	0	2	0	0	2	0
1673:	0	0	1	1	1	1	4	0
1681:	3	2	2	0	2	1	2	0
1689:	1	2	1	0	0	2	0	3
1697:	1	2	0	2	1	0	3	2
1705:	3	2	0	0	1	1	2	1
1713:	2	1	0	0	0	1	0	3
1721:	0	3	1	3	0	2	2	1
1729:	8	8	10	0	4	1	2	0
1737:	0	1	1	2	1	2	4	2
1745:	0	0	1	1	1	1	3	1
1753:	2	1	0	0	0	2	2	3
1761:	2	0	8	27	38	9	6	1
1769:	5	1	3	1	0	3	3	0
1777:	2	2	1	0	3	1	1	0
1785:	1	1	0	2	0	0	1	0
1793:	1	1	2	3	0	3	3	0
1801:	0	0	0	1	5	1	0	1
1809:	1	3	0	0	1	2	1	0
1817:	2	1	1	0	0	2	1	0
1825:	0	0	2	0	1	1	0	1
1833:	2	0	0	0	0	2	1	1
1841:	3	0	0	1	0	2	4	9
1849:	4	3	2	0	2	2	3	0
1857:	1	0	0	2	0	2	0	1
1865:	1	1	2	0	0	2	1	1

1873:	2	1	1	0	3	1	2	1
1881:	1	1	0	1	3	0	0	2
1889:	1	6	0	0	1	0	4	0
1897:	1	1	1	1	2	0	0	2
1905:	0	0	0	4	1	1	1	1
1913:	0	2	2	1	2	1	1	0
1921:	1	1	2	3	2	0	0	2
1929:	1	1	2	1	2	0	1	0
1937:	2	0	0	2	0	1	1	1
1945:	1	0	3	1	1	1	2	0
1953:	0	0	1	0	1	1	1	4
1961:	2	1	2	1	1	0	2	3
1969:	1	2	1	0	0	3	2	2
1977:	1	2	1	1	1	0	1	2
1985:	0	2	2	1	1	0	0	0
1993:	0	0	1	0	2	0	0	2
2001:	2	1	0	2	0	1	2	1
2009:	1	0	2	1	1	2	2	0
2017:	3	0	2	0	2	1	1	2
2025:	0	0	1	1	2	1	0	1
2033:	0	0	0	1	0	1	2	2
2041:	1	1	3	0	1	0	0	0
2049:	2	2	1	0	2	1	1	1
2057:	0	0	0	2	1	1	0	2
2065:	2	1	1	0	2	2	0	1
2073:	0	1	1	2	2	1	2	0
2081:	2	1	1	1	1	0	0	2
2089:	0	2	0	2	1	1	0	1
2097:	2	1	2	2	1	3	3	4
2105:	4	3	2	2	0	2	2	4
2113:	2	2	3	0	0	2	4	3
2121:	3	2	3	0	1	0	1	1
2129:	1	2	2	0	2	0	0	0
2137:	1	0	2	2	2	1	2	0
2145:	1	0	0	0	0	1	2	4
2153:	1	0	1	3	1	1	1	0
2161:	1	3	0	0	3	0	0	1
2169:	2	0	2	0	2	0	0	1
2177:	0	3	1	1	3	0	2	0
2185:	1	1	0	1	0	2	0	2
2193:	0	0	0	0	0	1	0	2
2201:	2	1	2	8	7	2	0	1
2209:	2	0	1	2	0	0	0	1
2217:	1	0	0	0	1	0	1	1
2225:	1	1	0	0	2	2	2	4
2233:	0	1	0	2	1	1	2	1
2241:	2	0	1	3	2	1	0	0
2249:	0	2	0	0	1	2	1	2
2257:	2	3	0	2	0	1	1	0
2265:	0	3	0	0	2	0	0	0
2273:	1	1	0	1	0	2	0	0
2281:	2	0	1	1	1	0	0	3
2289:	1	1	1	2	1	1	1	0
2297:	3	0	1	0	1	0	1	1
2305:	2	1	0	0	1	3	0	2
2313:	1	0	0	1	0	1	1	0
2321:	2	1	0	1	1	0	1	1
2329:	1	1	2	0	0	1	4	2
2337:	2	1	0	2	4	1	2	0
2345:	0	0	0	1	1	0	1	0

2353:	1	0	0	3	0	0	2	0
2361:	1	0	2	1	5	0	1	0
2369:	0	2	1	0	0	1	0	1
2377:	1	2	0	0	3	3	1	0
2385:	1	0	0	0	0	0	2	0
2393:	0	1	2	0	0	0	0	1
2401:	1	1	0	2	1	0	1	1
2409:	0	0	1	2	0	1	1	2
2417:	1	0	0	0	2	0	1	0
2425:	0	1	0	1	2	0	1	1
2433:	1	0	0	0	0	1	0	1
2441:	0	2	1	1	0	0	2	5
2449:	2	0	2	0	1	1	1	0
2457:	0	2	0	1	1	0	1	0
2465:	0	0	2	0	1	0	1	1
2473:	1	0	2	2	0	1	0	1
2481:	0	0	1	0	2	0	1	0
2489:	1	0	1	0	0	1	0	0
2497:	1	2	0	1	0	0	1	0
2505:	0	0	0	0	0	1	0	0
2513:	0	0	0	0	0	0	0	0
2521:	1	1	0	2	0	0	0	0
2529:	0	0	0	0	0	0	1	0
2537:	1	0	0	0	1	2	0	0
2545:	0	2	0	0	2	0	0	0
2553:	0	0	0	0	2	0	2	0
2561:	0	0	0	0	0	0	1	2
2569:	1	0	0	1	0	0	0	1
2577:	0	1	0	0	0	0	0	0
2585:	0	0	0	0	0	1	1	1
2593:	0	0	2	1	1	0	1	0
2601:	1	0	1	0	0	0	0	0
2609:	1	1	3	2	12	24	41	20
2617:	10	2	1	0	0	0	0	1
2625:	1	0	1	1	0	0	0	0
2633:	0	0	1	0	0	0	0	0
2641:	0	0	0	1	1	0	1	1
2649:	0	1	0	0	0	1	0	0
2657:	1	0	0	0	0	1	0	0
2665:	0	0	0	0	0	0	0	0
2673:	2	0	0	1	1	0	0	0
2681:	0	1	0	0	0	0	1	2
2689:	0	1	1	0	0	0	1	0
2697:	0	1	0	0	0	0	0	0
2705:	0	0	0	0	0	0	0	0
2713:	2	0	0	0	0	1	0	0
2721:	0	0	0	0	0	0	1	1
2729:	1	0	0	0	0	1	0	2
2737:	1	1	0	0	0	0	0	0
2745:	0	1	0	0	1	0	1	0
2753:	0	0	0	0	0	0	0	1
2761:	0	0	0	0	2	0	0	0
2769:	0	1	0	1	0	0	0	1
2777:	1	0	0	1	0	0	0	0
2785:	0	0	0	0	1	0	0	1
2793:	0	0	0	0	0	0	0	0
2801:	1	0	0	0	0	0	1	0
2809:	1	0	0	0	0	0	0	0
2817:	0	0	0	0	1	0	0	0
2825:	0	1	0	0	0	0	1	0

2833:	0	0	1	2	0	0	0	0
2841:	1	0	0	0	0	0	0	0
2849:	1	0	0	0	0	0	0	0
2857:	1	0	0	0	0	0	0	0
2865:	0	0	0	0	0	1	0	0
2873:	0	1	1	0	0	0	1	1
2881:	1	1	0	0	0	0	0	0
2889:	0	2	1	0	0	0	0	3
2897:	0	0	0	0	0	0	0	0
2905:	0	0	0	0	0	0	0	0
2913:	0	0	0	0	0	0	0	0
2921:	0	0	0	0	0	0	0	0
2929:	0	1	0	0	0	0	0	1
2937:	1	1	0	0	0	0	0	0
2945:	1	1	1	0	0	0	1	0
2953:	0	1	0	0	0	0	0	0
2961:	0	0	0	0	0	0	0	0
2969:	0	2	0	0	0	0	0	0
2977:	0	1	2	0	1	1	1	1
2985:	0	0	0	0	1	1	0	0
2993:	0	0	0	1	0	0	1	0
3001:	0	0	0	0	1	1	1	0
3009:	0	0	0	0	1	0	2	1
3017:	1	0	0	2	0	0	1	0
3025:	0	1	1	0	0	0	1	1
3033:	1	0	0	0	1	0	0	0
3041:	0	0	0	0	0	0	0	0
3049:	1	0	1	0	0	0	0	1
3057:	0	0	1	1	0	0	0	0
3065:	0	0	0	0	0	1	1	0
3073:	0	0	1	0	0	0	0	1
3081:	0	0	0	0	0	0	0	1
3089:	0	1	0	0	0	0	0	1
3097:	0	0	2	1	0	0	0	0
3105:	1	0	0	0	0	0	1	1
3113:	0	0	0	0	0	0	0	0
3121:	0	0	0	0	0	0	0	1
3129:	0	0	0	0	0	0	0	0
3137:	0	0	0	0	1	0	0	0
3145:	0	0	0	0	0	0	0	0
3153:	0	0	0	1	1	1	0	0
3161:	0	1	0	0	2	0	0	1
3169:	1	0	0	0	0	0	0	0
3177:	0	0	0	0	0	0	0	0
3185:	0	0	0	0	0	0	0	0
3193:	0	0	0	0	1	2	2	0
3201:	0	0	2	0	1	0	0	0
3209:	0	1	0	0	0	1	0	0
3217:	0	0	0	0	0	1	1	0
3225:	0	1	0	0	0	0	0	0
3233:	0	0	0	0	1	0	0	0
3241:	0	0	1	0	0	0	0	0
3249:	0	0	0	1	1	0	0	0
3257:	0	0	0	0	2	0	0	0
3265:	0	0	0	0	0	1	1	0
3273:	1	0	0	1	0	0	1	0
3281:	0	1	0	0	0	0	0	0
3289:	0	0	1	0	0	1	0	0
3297:	0	0	1	0	0	0	0	0
3305:	0	0	0	0	1	1	0	0

3313:	0	0	0	0	0	0	0	0
3321:	0	1	0	0	0	0	0	0
3329:	0	1	0	0	0	0	0	0
3337:	0	0	0	0	0	2	0	0
3345:	0	0	0	0	2	0	0	0
3353:	0	0	0	0	0	0	0	0
3361:	0	0	0	0	0	0	0	1
3369:	0	0	1	0	0	0	0	1
3377:	2	1	0	0	0	0	0	1
3385:	0	0	0	0	0	0	3	0
3393:	0	0	0	0	0	1	0	0
3401:	0	0	0	0	1	0	1	0
3409:	0	0	0	0	0	0	0	0
3417:	0	1	0	0	0	0	1	0
3425:	0	0	0	0	0	0	0	0
3433:	0	0	0	0	0	0	0	0
3441:	0	0	0	0	0	1	0	0
3449:	0	0	0	0	0	0	0	0
3457:	0	0	0	1	0	0	0	0
3465:	0	0	0	0	0	0	0	1
3473:	0	0	0	0	0	0	0	0
3481:	0	0	0	0	1	0	0	2
3489:	0	0	0	0	0	0	0	0
3497:	1	0	0	0	0	1	0	0
3505:	1	1	0	0	0	0	1	0
3513:	0	0	0	0	0	0	0	1
3521:	0	1	0	0	0	0	2	0
3529:	0	1	0	0	0	0	0	0
3537:	0	0	0	1	0	0	0	0
3545:	0	0	0	1	0	0	0	0
3553:	0	0	0	0	0	0	0	0
3561:	0	1	0	0	0	0	2	0
3569:	0	0	0	0	0	0	0	0
3577:	0	0	1	0	1	0	0	0
3585:	0	0	0	0	0	0	0	0
3593:	0	0	0	0	0	0	1	0
3601:	0	0	0	1	1	0	0	0
3609:	0	0	0	0	0	0	1	1
3617:	0	0	0	1	0	0	1	0
3625:	0	0	0	1	0	1	0	0
3633:	0	0	0	1	0	0	0	0
3641:	0	0	0	1	0	0	0	0
3649:	0	0	0	0	1	0	0	0
3657:	0	0	0	0	0	0	0	0
3665:	1	0	0	0	1	0	0	0
3673:	0	0	0	0	0	0	1	0
3681:	0	0	0	0	0	0	0	0
3689:	0	0	0	0	0	0	0	0
3697:	0	1	0	0	1	0	0	0
3705:	0	0	0	0	0	0	0	0
3713:	0	0	0	0	0	0	1	0
3721:	0	0	0	0	0	0	0	1
3729:	0	0	1	0	0	1	0	0
3737:	0	0	0	0	1	0	0	0
3745:	1	0	0	0	0	1	0	0
3753:	0	0	2	0	0	0	0	0
3761:	1	0	0	0	0	0	1	0
3769:	0	0	0	1	0	0	1	1
3777:	1	0	0	0	0	0	0	0
3785:	1	2	0	0	0	0	0	0

3793:	0	0	0	0	0	0	0	0
3801:	0	0	0	0	1	0	0	0
3809:	0	0	0	1	0	0	0	0
3817:	0	0	1	0	0	0	0	1
3825:	0	0	0	0	0	0	0	0
3833:	0	0	0	0	0	0	0	0
3841:	0	0	0	1	1	1	1	1
3849:	0	0	0	0	0	1	0	0
3857:	0	0	1	0	0	0	0	0
3865:	0	0	0	0	0	0	0	0
3873:	0	1	0	0	0	0	0	0
3881:	0	0	2	1	0	0	0	0
3889:	0	0	0	0	0	0	0	0
3897:	0	0	0	0	0	0	1	0
3905:	0	0	2	0	1	0	0	0
3913:	1	0	1	0	0	0	1	0
3921:	0	1	0	0	0	0	0	0
3929:	0	1	0	0	0	0	0	0
3937:	0	1	0	0	0	0	0	0
3945:	0	0	0	0	0	0	0	1
3953:	1	0	0	1	0	1	0	1
3961:	0	0	0	0	0	0	1	0
3969:	0	0	1	0	1	0	1	0
3977:	0	0	0	1	0	0	0	0
3985:	0	0	0	0	0	0	1	0
3993:	0	0	0	0	0	0	0	0
4001:	0	0	0	0	0	0	0	0
4009:	0	0	0	1	0	0	0	0
4017:	0	0	0	0	0	0	0	0
4025:	0	0	0	0	2	0	0	1
4033:	0	0	0	0	1	0	0	0
4041:	0	1	0	0	0	0	0	0
4049:	0	0	0	0	0	0	0	0
4057:	0	0	0	0	1	0	0	0
4065:	0	0	0	0	0	0	0	1
4073:	0	0	0	0	0	0	0	0
4081:	0	0	0	0	0	0	0	0
4089:	0	0	1	1	0	0	0	0

Sample ID : 1111065-17 Acquisition date : 11-DEC-2011 12:18:38

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VAX/VMS Peak Search Report Generated 11-DEC-2011 13:18:54.82

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106517_GE2_GAS1102_172274.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : DY2-BKGD-W-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 11-DEC-2011 12:18:38
Sample ID : 1111065-17 Sample Quantity : 3.23110E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE2 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:01.14 0.0%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.30*	164	481	1.48	46.24	43	7	48.6		PB-210
1	75.17	573	444	1.45	75.13	71	27	12.8	5.11E+01	AM-243
1	84.17	79	366	1.47	84.13	71	27	73.1		
1	87.17	215	348	1.48	87.13	71	27	29.6		NP-237
										SN-126
										CD-109
1	89.90	163	328	1.48	89.87	71	27	38.9		
0	175.66	45	275	1.43	175.66	174	6	119.4		
0	185.81*	201	508	1.47	185.81	181	10	45.7		RA-226
0	209.49	94	293	1.86	209.50	207	7	64.1		
4	238.80*	825	191	1.56	238.83	235	12	8.7	4.07E+00	PB-212
4	241.93*	200	222	1.99	241.95	235	12	37.4		RA-224
0	270.22	58	202	2.18	270.25	268	7	85.7		
0	278.13	40	165	1.30	278.17	276	6	106.9		HG-203
0	294.85*	265	298	1.53	294.89	291	9	26.9		PB-214
0	327.52	97	174	2.65	327.57	323	9	52.8		
0	338.46*	182	157	1.86	338.52	335	7	27.9		AC-228
0	351.90*	484	131	1.37	351.96	348	7	12.5		PB-214
0	403.02	50	161	3.77	403.10	398	9	96.7		RN-219
0	409.78	33	112	1.29	409.86	407	6	107.1		
0	462.60	69	128	1.29	462.71	459	8	61.3		
0	511.07*	74	131	2.01	511.19	507	10	69.2		
0	564.87	34	89	5.53	565.01	561	9	104.1		
0	583.22*	263	114	1.86	583.37	579	10	20.0		TL-208
0	609.22*	382	146	2.03	609.38	604	11	16.4		BI-214
0	661.59*	65	117	1.92	661.77	656	12	72.1		CS-137
5	724.38	12	17	3.10	724.59	723	13	103.4	1.83E+00	
5	727.41	66	53	2.57	727.61	723	13	48.5		BI-212
1	768.58	48	41	2.15	768.80	766	11	50.9	2.83E+00	
1	771.97	27	35	2.15	772.20	766	11	88.1		
0	782.83	39	64	7.54	783.06	778	11	85.3		
0	794.88	74	48	2.16	795.11	789	12	44.9		
0	837.15	27	49	4.66	837.40	834	8	98.4		
0	911.18*	173	49	1.97	911.45	907	10	21.9		AC-228
0	956.46	16	24	3.39	956.75	955	5	107.5		
2	964.27	29	39	2.37	964.57	961	15	83.8	1.79E+00	

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Sample ID : 1111065-17 Acquisition date : 11-DEC-2011 12:18:38

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	968.67*	110	50	2.31	968.97	961	15	28.2		AC-228
0	1112.49	23	30	4.00	1112.84	1109	8	93.9		
0	1120.57*	104	53	2.24	1120.93	1117	11	33.8		BI-214
0	1271.41	24	34	1.55	1271.82	1267	10	101.8		
0	1279.94	16	9	1.27	1280.35	1278	5	74.3		
0	1285.32	21	18	3.87	1285.74	1283	7	79.6		
6	1374.57	13	5	3.31	1375.01	1373	9	68.0	4.39E+00	
6	1377.72	42	4	2.86	1378.16	1373	9	36.4		
0	1406.25	46	18	7.71	1406.71	1398	19	53.6		
0	1441.14	12	13	1.66	1441.61	1437	10	124.2		
0	1460.43*	664	23	2.18	1460.91	1455	12	8.4		K-40
0	1505.54	29	9	7.69	1506.04	1500	12	55.6		
0	1630.16	12	7	3.15	1630.71	1626	9	94.7		
0	1699.21	7	4	1.71	1699.78	1696	6	127.0		
0	1709.43	7	2	3.41	1710.00	1706	7	95.4		
0	1729.65	22	10	2.59	1730.23	1726	10	68.6		
0	1763.90*	78	5	2.42	1764.50	1761	8	25.5		BI-214
0	1935.83	6	3	1.12	1936.49	1933	6	116.0		
0	2100.55	17	4	1.61	2101.27	2097	9	67.1		
0	2117.46	11	0	5.59	2118.18	2114	8	60.3		
0	2183.53	7	0	3.40	2184.29	2181	7	75.6		
0	2298.74	9	2	5.88	2299.53	2295	9	89.1		
0	2323.65	5	1	1.84	2324.45	2321	6	125.3		
0	2613.73*	85	2	2.65	2614.64	2610	11	24.0		TL-208
0	2936.84*	5	0	3.25	2937.88	2934	8	119.3		

Sample ID : 1111065-17 Acquisition date : 11-DEC-2011 12:18:38

Total number of lines in spectrum	59	
Number of unidentified lines	26	
Number of lines tentatively identified by NID	33	55.93%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	3.155E+01	3.155E+01	0.436E+01	13.83	
TL-208	1.41E+10Y	1.00	1.867E+00	1.867E+00	0.322E+00	17.26	
PB-210	22.26Y	1.00	4.264E+00	4.276E+00	2.115E+00	49.46	
BI-212	1.41E+10Y	1.00	1.682E+00	1.682E+00	0.833E+00	49.50	
PB-212	1.41E+10Y	1.00	2.365E+00	2.365E+00	0.298E+00	12.62	
BI-214	1602.00Y	1.00	2.366E+00	2.366E+00	0.342E+00	14.47	
PB-214	1602.00Y	1.00	2.149E+00	2.149E+00	0.297E+00	13.81	
RN-219	3.28E+04Y	1.00	1.421E+00	1.421E+00	1.381E+00	97.19	
RA-224	1.41E+10Y	1.00	6.500E+00	6.500E+00	2.505E+00	38.54	
RA-226	1602.00Y	1.00	6.777E+00	6.777E+00	12.79E+00	188.77	
AC-228	1.41E+10Y	1.00	2.403E+00	2.403E+00	0.380E+00	15.84	
			---	---			
	Total Activity :		6.334E+01	6.335E+01			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	5.135E+00	5.391E+00	1.815E+00	33.66	
SN-126	1.00E+05Y	1.00	5.162E-01	5.162E-01	1.708E-01	33.09	
CS-137	30.17Y	1.00	2.142E-01	2.146E-01	1.561E-01	72.71	
NP-237	2.14E+06Y	1.00	1.516E+00	1.516E+00	0.500E+00	32.97	
			---	---			
	Total Activity :		7.381E+00	7.638E+00			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
HG-203	46.60D	1.62	7.293E-02	1.183E-01	1.269E-01	107.29	
AM-243	7380.00Y	1.00	7.765E-01	7.765E-01	1.347E-01	17.35	
			---	---			
	Total Activity :		8.494E-01	8.948E-01			

Grand Total Activity :	7.157E+01	7.189E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-17
Acquisition date : 11-DEC-2011 12:18:38

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	4.582E-01	3.155E+01	3.155E+01	13.83	OK
	Final Mean for 1 Valid Peaks = 3.155E+01+/- 4.363E+00 (13.83%)						
TL-208	583.14	30.22*	9.242E-01	2.189E+00	2.189E+00	22.30	OK
	860.37	4.48	6.742E-01	----- Line Not Found		-----	Absent
	2614.66	35.85	3.402E-01	1.618E+00	1.618E+00	26.50	OK
	Final Mean for 2 Valid Peaks = 1.867E+00+/- 3.221E-01 (17.26%)						
PB-210	46.50	4.05*	2.204E+00	4.264E+00	4.276E+00	49.46	OK
	Final Mean for 1 Valid Peaks = 4.276E+00+/- 2.115E+00 (49.46%)						
BI-212	727.17	11.80*	7.716E-01	1.682E+00	1.682E+00	49.50	OK
	1620.62	2.75	4.293E-01	----- Line Not Found		-----	Absent
	Final Mean for 1 Valid Peaks = 1.682E+00+/- 8.327E-01 (49.50%)						
PB-212	238.63	44.60*	1.817E+00	2.365E+00	2.365E+00	12.62	OK
	300.09	3.41	1.555E+00	----- Line Not Found		-----	Absent
	Final Mean for 1 Valid Peaks = 2.365E+00+/- 2.985E-01 (12.62%)						
BI-214	609.31	46.30*	8.915E-01	2.149E+00	2.149E+00	19.12	OK
	1120.29	15.10	5.508E-01	2.919E+00	2.919E+00	35.30	OK
	1764.49	15.80	4.084E-01	2.825E+00	2.825E+00	27.41	OK
	2204.22	4.98	3.644E-01	----- Line Not Found		-----	Absent
	Final Mean for 3 Valid Peaks = 2.366E+00+/- 3.424E-01 (14.47%)						
PB-214	295.21	19.19	1.574E+00	2.038E+00	2.038E+00	28.41	OK
	351.92	37.19*	1.383E+00	2.189E+00	2.189E+00	15.79	OK
	Final Mean for 2 Valid Peaks = 2.149E+00+/- 2.967E-01 (13.81%)						
RN-219	401.80	6.50*	1.248E+00	1.421E+00	1.421E+00	97.19	OK
	Final Mean for 1 Valid Peaks = 1.421E+00+/- 1.381E+00 (97.19%)						
RA-224	240.98	3.95*	1.806E+00	6.500E+00	6.500E+00	38.54	OK
	Final Mean for 1 Valid Peaks = 6.500E+00+/- 2.505E+00 (38.54%)						
RA-226	186.21	3.28*	2.099E+00	6.777E+00	6.777E+00	188.77	OK
	Final Mean for 1 Valid Peaks = 6.777E+00+/- 1.279E+01 (188.77%)						
AC-228	338.32	11.40	1.425E+00	2.598E+00	2.598E+00	29.45	OK

Sample ID : 1111065-17 Acquisition date : 11-DEC-2011 12:18:38

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
	911.07	27.70*	6.445E-01	2.250E+00	2.250E+00	24.02	OK
	969.11	16.60	6.144E-01	2.508E+00	2.508E+00	29.91	OK

Final Mean for 3 Valid Peaks = 2.403E+00+/- 3.805E-01 (15.84%)

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
CD-109	88.03	3.72*	2.618E+00	5.135E+00	5.391E+00	33.66	OK

Final Mean for 1 Valid Peaks = 5.391E+00+/- 1.815E+00 (33.66%)

SN-126	87.57	37.00*	2.618E+00	5.162E-01	5.162E-01	33.09	OK

Final Mean for 1 Valid Peaks = 5.162E-01+/- 1.708E-01 (33.09%)

CS-137	661.65	85.12*	8.333E-01	2.142E-01	2.146E-01	72.71	OK

Final Mean for 1 Valid Peaks = 2.146E-01+/- 1.561E-01 (72.71%)

NP-237	86.50	12.60*	2.619E+00	1.516E+00	1.516E+00	32.97	OK

Final Mean for 1 Valid Peaks = 1.516E+00+/- 4.998E-01 (32.97%)

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
HG-203	279.19	77.30*	1.637E+00	7.293E-02	1.183E-01	107.29	OK

Final Mean for 1 Valid Peaks = 1.183E-01+/- 1.269E-01 (107.29%)

AM-243	74.67	66.00*	2.598E+00	7.765E-01	7.765E-01	17.35	OK

Final Mean for 1 Valid Peaks = 7.765E-01+/- 1.347E-01 (17.35%)

Flag: "*" = Keyline

Sample ID : 1111065-17 Acquisition date : 11-DEC-2011 12:18:38

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	3.155E+01	4.363E+00	9.502E-01	9.743E-02	33.201
CD-109	5.391E+00	1.815E+00	2.351E+00	3.628E-01	2.293
SN-126	5.162E-01	1.708E-01	2.251E-01	3.181E-02	2.294
CS-137	2.146E-01	1.561E-01	1.275E-01	1.101E-02	1.683
HG-203	1.183E-01	1.269E-01	1.643E-01	1.389E-02	0.720
TL-208	1.867E+00	3.221E-01	3.304E-01	3.006E-02	5.650
PB-210	4.276E+00	2.115E+00	2.062E+00	1.729E-01	2.073
BI-212	1.682E+00	8.327E-01	9.940E-01	8.774E-02	1.692
PB-212	2.365E+00	2.985E-01	1.865E-01	1.534E-02	12.679
BI-214	2.366E+00	3.424E-01	2.335E-01	2.095E-02	10.136
PB-214	2.149E+00	2.967E-01	2.499E-01	2.188E-02	8.601
RN-219	1.421E+00	1.381E+00	1.388E+00	1.250E-01	1.024
RA-224	6.500E+00	2.505E+00	2.121E+00	1.745E-01	3.065
RA-226	6.777E+00	1.279E+01	2.466E+00	4.514E+00	2.749
AC-228	2.403E+00	3.805E-01	4.448E-01	4.000E-02	5.401
NP-237	1.516E+00	4.998E-01	6.604E-01	9.154E-02	2.295
AM-243	7.765E-01	1.347E-01	1.261E-01	1.382E-02	6.160

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	2.797E-01		7.033E-01	1.313E+00	1.214E-01	0.213
NA-22	8.894E-02		8.339E-02	1.377E-01	1.357E-02	0.646
AL-26	4.802E-04		4.613E-02	9.331E-02	8.436E-03	0.005
TI-44	-3.610E-02		6.611E-02	1.015E-01	9.518E-03	-0.356
SC-46	-2.783E-02		8.968E-02	1.546E-01	1.386E-02	-0.180
V-48	-1.767E-02		2.757E-01	4.882E-01	4.468E-02	-0.036
CR-51	2.230E-02		1.305E+00	1.973E+00	1.777E-01	0.011
MN-54	7.194E-03		8.209E-02	1.320E-01	1.185E-02	0.054
CO-56	-2.270E-02		9.671E-02	1.598E-01	1.435E-02	-0.142
CO-57	3.698E-02		5.786E-02	9.954E-02	8.443E-03	0.372
CO-58	-5.701E-03		8.499E-02	1.514E-01	1.360E-02	-0.038
FE-59	-7.001E-02		2.416E-01	4.112E-01	4.083E-02	-0.170
CO-60	2.534E-02		9.361E-02	1.702E-01	1.578E-02	0.149
ZN-65	1.620E-01		2.154E-01	3.135E-01	2.912E-02	0.517
SE-75	8.394E-02		1.055E-01	1.697E-01	1.406E-02	0.495
RB-82	3.355E-01		1.420E+00	1.917E+00	1.710E-01	0.175
RB-83	8.126E-02		1.545E-01	2.649E-01	4.237E-02	0.307
KR-85	3.200E+01		1.549E+01	2.847E+01	2.636E+00	1.124
SR-85	1.970E-01		9.534E-02	1.752E-01	1.622E-02	1.124
Y-88	-2.379E-02		5.147E-02	9.480E-02	8.462E-03	-0.251
NB-93M	-3.152E+00		4.354E+00	7.229E+00	2.177E+00	-0.436
NB-94	5.982E-02		6.772E-02	1.299E-01	1.166E-02	0.460
NB-95	1.664E-01		1.529E-01	2.682E-01	2.391E-02	0.620
ZR-95	5.167E-02		1.680E-01	3.074E-01	2.994E-02	0.168
RU-103	1.245E-02		9.500E-02	1.744E-01	2.540E-02	0.071
RU-106	-1.168E-01		6.438E-01	1.139E+00	1.542E-01	-0.103

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
AG-108M	4.012E-02	+	4.166E-02	1.258E-01	1.109E-02	0.319
AG-110M	5.948E-02		8.041E-02	1.387E-01	1.200E-02	0.429
SN-113	9.857E-02		9.918E-02	1.878E-01	1.729E-02	0.525
TE123M	-5.115E-02		6.791E-02	1.090E-01	8.769E-03	-0.469
SB-124	4.217E-02		9.513E-02	1.604E-01	1.445E-02	0.263
I-125	-5.021E+00		1.858E+00	2.621E+00	2.688E-01	-1.916
SB-125	1.072E-01		1.819E-01	3.397E-01	3.151E-02	0.316
SB-126	2.341E-01		7.713E-01	1.283E+00	1.131E-01	0.182
I-129	1.817E-01		1.816E-01	3.184E-01	3.903E-02	0.571
I-131	-1.364E-01		9.571E-01	1.724E+00	1.522E-01	-0.079
BA-133	-2.966E-02		1.012E-01	1.478E-01	1.967E-02	-0.201
CS-134	3.650E-02		7.257E-02	1.221E-01	1.101E-02	0.299
CS-135	2.208E-01		3.543E-01	5.598E-01	4.602E-02	0.394
CS-136	4.415E-01		5.049E-01	9.717E-01	9.220E-02	0.454
LA-138	-1.407E-02		1.018E-01	1.589E-01	1.602E-02	-0.089
CE-139	1.067E-02		7.121E-02	1.193E-01	9.499E-03	0.089
BA-140	5.198E-01		1.301E+00	2.388E+00	7.953E-01	0.218
LA-140	9.575E-02		3.464E-01	7.017E-01	6.846E-02	0.136
CE-141	8.902E-02		2.022E-01	3.370E-01	8.473E-02	0.264
CE-144	-3.309E-01		4.521E-01	7.315E-01	6.098E-02	-0.452
PM-144	-8.276E-02		7.241E-02	1.129E-01	9.880E-03	-0.733
PM-145	-8.188E-01		6.339E-01	5.047E-01	3.294E-01	-1.622
PM-146	-3.631E-02		1.460E-01	2.324E-01	2.138E-02	-0.156
ND-147	1.321E+00		3.214E+00	5.964E+00	5.513E-01	0.221
EU-152	2.290E-01		4.273E-01	8.298E-01	1.007E-01	0.276
GD-153	-1.669E-01		2.187E-01	3.560E-01	4.150E-02	-0.469
EU-154	2.616E-01		2.328E-01	3.874E-01	3.818E-02	0.675
EU-155	6.258E-01	+	2.063E-01	3.499E-01	4.849E-02	1.789
EU-156	8.956E-01		2.615E+00	4.829E+00	1.109E+00	0.185
HO-166M	-4.275E-02		1.091E-01	1.890E-01	1.660E-02	-0.226
HF-172	-3.858E-01		4.294E-01	6.903E-01	5.816E-02	-0.559
LU-172	7.144E-01		3.635E+00	6.528E+00	6.053E-01	0.109
LU-173	4.476E-01		3.021E-01	4.551E-01	3.738E-02	0.984
HF-175	3.294E-02		9.850E-02	1.356E-01	1.181E-02	0.243
LU-176	-1.048E-02		5.456E-02	8.849E-02	7.468E-03	-0.118
TA-182	1.539E+00	+	5.433E-01	8.472E-01	7.863E-02	1.817
IR-192	3.958E-02		1.494E-01	2.505E-01	2.313E-02	0.158
BI-207	2.614E-02		5.992E-02	1.017E-01	9.308E-03	0.257
BI-210M	-9.107E-02		1.153E-01	1.803E-01	1.483E-02	-0.505
PB-211	2.341E+00		2.408E+00	3.505E+00	3.161E-01	0.668
RA-223	-3.634E-01		1.420E+00	2.096E+00	1.797E-01	-0.173
RA-225	-9.179E-01		8.933E-01	1.355E+00	1.258E-01	-0.677
TH-227	1.894E+00		5.941E-01	1.010E+00	8.307E-02	1.875
TH-230	-1.044E+01		1.683E+01	2.576E+01	2.403E+00	-0.405
PA-231	1.527E+00		2.425E+00	3.846E+00	3.233E-01	0.397
TH-231	1.967E-01		8.804E-01	1.468E+00	2.162E-01	0.134
PA-233	3.423E-02		2.972E-01	4.929E-01	1.104E-01	0.069
PA-234	2.103E-01		2.212E-01	3.846E-01	3.216E-02	0.547

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---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PA-234M	-3.806E+00		8.228E+00	1.398E+01	1.284E+00	-0.272
TH-234	2.368E+00		1.583E+00	2.816E+00	2.345E-01	0.841
U-235	6.013E-02		4.721E-01	7.812E-01	1.353E-01	0.077
AM-241	-2.090E-01		1.592E-01	2.590E-01	1.938E-02	-0.807
CM-243	4.019E-01	+	4.311E-01	6.307E-01	5.173E-02	0.637

Sample ID : 1111065-17 Acquisition date : 11-DEC-2011 12:18:38

Total number of lines in spectrum	59	
Number of unidentified lines	26	
Number of lines tentatively identified by NID	33	55.93%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	3.155E+01	3.155E+01	0.436E+01	13.83	
TL-208	1.41E+10Y	1.00	1.867E+00	1.867E+00	0.322E+00	17.26	
PB-210	22.26Y	1.00	4.264E+00	4.276E+00	2.115E+00	49.46	
BI-212	1.41E+10Y	1.00	1.682E+00	1.682E+00	0.833E+00	49.50	
PB-212	1.41E+10Y	1.00	2.365E+00	2.365E+00	0.298E+00	12.62	
BI-214	1602.00Y	1.00	2.366E+00	2.366E+00	0.342E+00	14.47	
PB-214	1602.00Y	1.00	2.149E+00	2.149E+00	0.297E+00	13.81	
RN-219	3.28E+04Y	1.00	1.421E+00	1.421E+00	1.381E+00	97.19	
RA-224	1.41E+10Y	1.00	6.500E+00	6.500E+00	2.505E+00	38.54	
RA-226	1602.00Y	1.00	6.777E+00	6.777E+00	12.79E+00	188.77	
AC-228	1.41E+10Y	1.00	2.403E+00	2.403E+00	0.380E+00	15.84	
			---	---			
	Total Activity :		6.334E+01	6.335E+01			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CD-109	464.00D	1.05	5.135E+00	5.391E+00	1.815E+00	33.66	
SN-126	1.00E+05Y	1.00	5.162E-01	5.162E-01	1.708E-01	33.09	
CS-137	30.17Y	1.00	2.142E-01	2.146E-01	1.561E-01	72.71	
NP-237	2.14E+06Y	1.00	1.516E+00	1.516E+00	0.500E+00	32.97	
			---	---			
	Total Activity :		7.381E+00	7.638E+00			

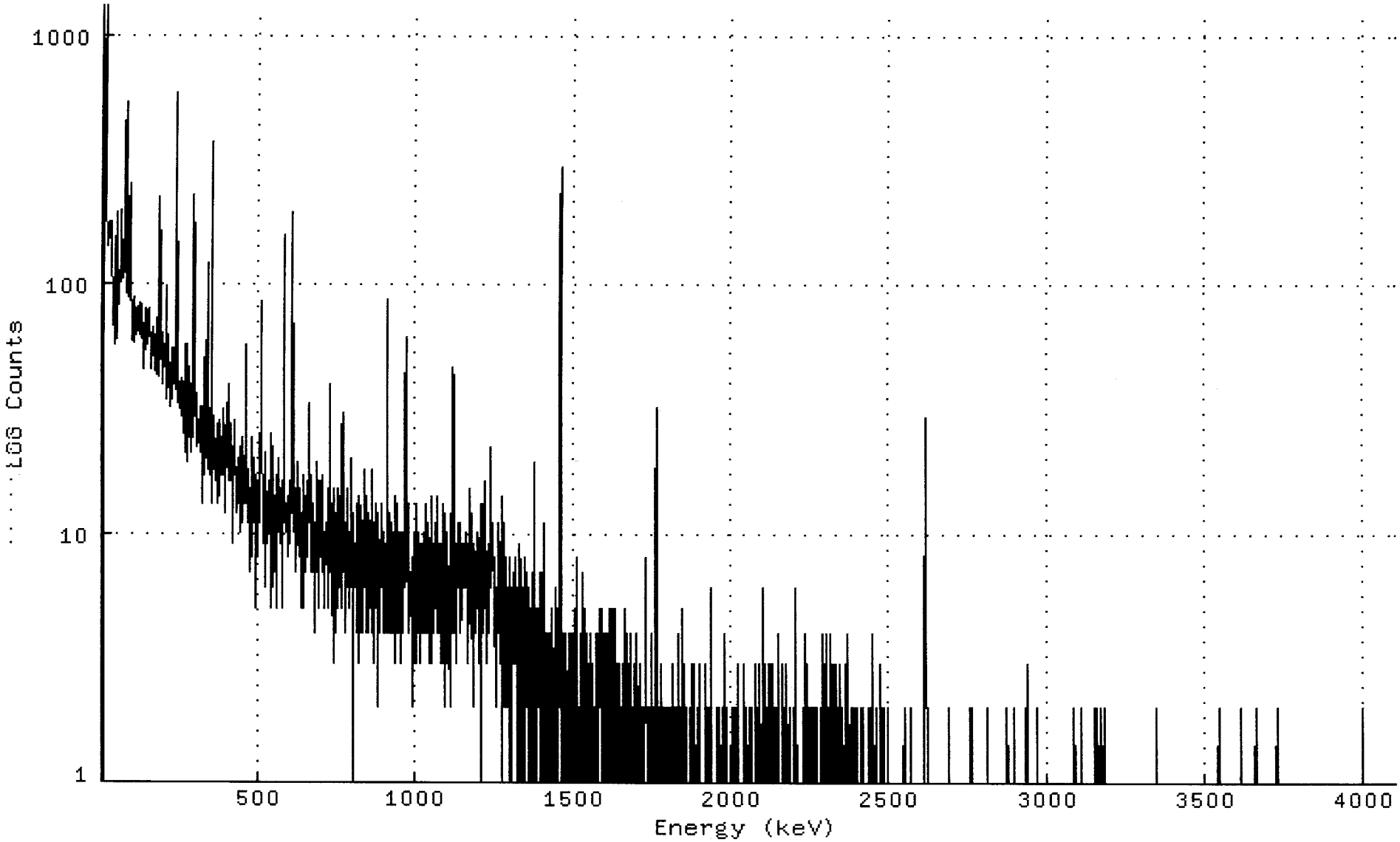
Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
HG-203	46.60D	1.62	7.293E-02	1.183E-01	1.269E-01	107.29	
AM-243	7380.00Y	1.00	7.765E-01	7.765E-01	1.347E-01	17.35	
			---	---			
	Total Activity :		8.494E-01	8.948E-01			

Grand Total Activity : 7.157E+01 7.189E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106517_GE2_GAS1102_172274.CNF;1
Title :
Sample Title: DY2-BKGD-W-31-111109
Start Time: 11-DEC-2011 12:18 Sample Time: 9-NOV-2011 00:00: Energy Offset: 6.87229E-02
Real Time : 0 01:00:01.14 Sample ID : 1111065-17 Energy Slope : 9.99625E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106517_GE2_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	25
9:	285	696	1295	911	480	946	1314	210
17:	142	146	153	156	142	140	159	167
25:	153	170	176	158	173	175	162	163
33:	142	110	101	75	104	87	67	79
41:	65	57	77	80	82	125	192	84
49:	60	80	83	100	104	86	82	96
57:	91	111	101	119	111	115	196	185
65:	107	104	128	147	110	128	110	117
73:	145	170	447	211	531	386	90	94
81:	98	93	87	147	123	98	220	196
89:	123	194	114	139	249	162	85	84
97:	78	65	78	80	59	66	66	58
105:	88	84	63	67	75	62	75	74
113:	78	80	80	70	66	64	65	62
121:	81	83	63	68	72	60	65	63
129:	81	79	65	59	68	61	45	65
137:	53	54	66	68	68	55	79	77
145:	70	64	60	68	57	63	75	73
153:	64	79	66	60	60	54	54	56
161:	45	57	65	63	66	51	64	50
169:	62	48	57	54	45	43	72	59
177:	50	49	47	47	42	60	49	61
185:	92	221	117	53	58	55	58	49
193:	52	47	39	63	47	51	46	47
201:	47	47	56	56	59	51	34	49
209:	97	81	47	38	41	42	44	39
217:	43	39	32	41	43	41	55	54
225:	36	38	42	34	44	50	55	41
233:	43	41	37	42	50	243	580	122
241:	98	145	65	33	35	33	40	31
249:	34	37	31	33	29	39	29	41
257:	30	39	40	36	25	37	30	32
265:	34	40	31	21	38	57	57	29
273:	28	30	32	19	53	40	29	30
281:	34	24	27	29	21	39	27	35
289:	23	26	24	35	39	36	224	136
297:	34	29	30	50	32	29	28	24
305:	36	22	24	24	23	28	24	25
313:	26	21	26	23	30	32	29	20
321:	26	24	13	32	24	19	49	50
329:	37	30	17	23	27	27	29	23
337:	29	121	96	30	18	18	23	23
345:	17	31	19	17	21	25	108	369
353:	119	13	26	27	28	18	24	19
361:	29	19	22	21	19	19	18	16
369:	18	18	13	17	27	14	14	21
377:	26	22	25	28	17	19	24	17
385:	24	19	21	17	17	27	22	31
393:	23	23	25	12	21	17	19	22
401:	24	27	33	23	30	16	18	19
409:	26	39	19	24	16	24	16	22
417:	22	9	10	22	18	20	18	20
425:	25	17	28	21	16	17	18	13

433:	18	12	14	20	13	15	17	19
441:	19	12	17	15	22	10	24	23
449:	13	16	15	11	15	19	15	18
457:	19	16	17	24	18	22	57	28
465:	13	18	13	13	11	14	14	15
473:	7	15	12	11	11	8	16	24
481:	12	9	13	12	18	11	12	19
489:	20	14	17	5	13	13	12	16
497:	8	8	16	10	12	14	11	25
505:	17	18	14	22	18	44	85	53
513:	24	12	13	12	10	9	11	12
521:	12	21	8	6	14	11	9	13
529:	11	14	14	15	15	16	10	15
537:	14	9	25	10	9	15	5	22
545:	13	7	6	14	11	12	7	7
553:	10	14	11	10	7	9	17	12
561:	5	17	12	13	20	17	18	10
569:	11	11	10	15	9	13	11	5
577:	16	14	11	9	13	43	155	105
585:	16	14	12	10	11	10	13	13
593:	8	10	8	14	9	9	16	9
601:	15	15	9	14	12	14	20	46
609:	192	191	25	17	15	20	10	12
617:	14	14	15	7	12	7	11	16
625:	19	10	13	9	13	14	11	8
633:	12	15	7	9	12	7	12	11
641:	5	10	9	12	17	5	11	9
649:	11	14	11	9	7	13	10	8
657:	13	16	15	11	25	33	16	13
665:	15	14	14	7	10	17	12	10
673:	11	11	7	10	13	9	7	11
681:	7	7	4	19	12	8	7	12
689:	7	9	12	14	16	5	9	8
697:	13	9	9	16	12	13	10	11
705:	12	7	17	6	6	10	8	7
713:	5	11	11	8	9	10	8	14
721:	15	6	5	12	7	17	39	31
729:	21	11	10	7	11	13	5	11
737:	10	7	3	9	11	6	15	7
745:	12	7	7	7	11	4	6	7
753:	7	8	15	7	9	8	14	6
761:	10	10	14	11	11	5	11	25
769:	30	13	8	19	7	10	8	4
777:	6	4	10	11	10	13	6	14
785:	9	15	6	5	8	10	8	7
793:	13	9	20	20	6	10	7	4
801:	0	6	8	12	6	6	8	9
809:	7	6	8	8	4	13	10	6
817:	9	3	7	9	13	5	14	12
825:	4	7	9	7	11	8	11	9
833:	4	5	7	18	10	9	7	14
841:	6	9	11	13	14	6	4	11
849:	4	7	6	12	7	7	8	6
857:	7	5	9	14	18	10	4	6
865:	5	7	3	8	11	8	6	13
873:	10	7	7	11	5	8	2	3
881:	7	4	12	5	8	8	6	4
889:	8	11	6	8	8	6	13	5
897:	8	9	10	4	8	8	8	9
905:	4	7	4	4	11	30	86	57

913:	14	12	7	5	4	9	12	4
921:	8	4	6	9	11	6	7	10
929:	4	5	8	5	6	14	8	6
937:	7	3	13	4	5	6	7	10
945:	7	5	6	4	9	10	10	10
953:	5	3	8	10	8	10	4	5
961:	5	4	9	16	18	9	7	32
969:	61	27	11	8	11	10	4	13
977:	5	8	5	6	5	7	5	6
985:	7	7	3	8	8	2	8	7
993:	3	9	5	7	10	4	3	4
1001:	13	10	6	6	7	10	6	5
1009:	4	4	7	3	5	9	5	7
1017:	7	5	4	7	8	9	8	5
1025:	4	10	5	7	6	13	4	6
1033:	7	9	7	4	9	4	8	11
1041:	4	8	3	4	6	7	9	10
1049:	9	7	3	14	3	6	6	6
1057:	9	4	7	6	6	6	11	5
1065:	9	8	4	8	11	14	6	5
1073:	4	9	5	5	5	4	6	9
1081:	3	4	7	5	7	13	3	7
1089:	6	8	2	5	7	12	9	6
1097:	7	5	10	3	8	9	6	7
1105:	6	6	5	4	2	3	11	8
1113:	8	12	5	4	5	7	12	46
1121:	40	20	10	9	4	4	7	3
1129:	4	7	6	9	8	11	6	7
1137:	8	6	9	7	9	8	11	4
1145:	5	9	8	7	5	6	7	6
1153:	6	7	9	8	6	8	7	8
1161:	10	6	9	5	5	5	5	3
1169:	6	8	7	10	15	7	5	11
1177:	9	12	8	7	2	9	5	6
1185:	9	4	9	8	8	4	8	8
1193:	5	6	8	5	10	6	6	6
1201:	3	9	6	8	9	10	13	6
1209:	5	1	7	11	4	5	13	9
1217:	6	5	16	10	8	10	10	6
1225:	3	3	8	8	8	9	6	4
1233:	8	5	5	10	9	22	14	8
1241:	6	8	11	11	10	10	8	8
1249:	6	7	7	5	6	2	6	2
1257:	6	2	4	6	11	6	6	4
1265:	5	5	3	7	5	6	6	14
1273:	8	3	2	4	2	1	6	5
1281:	11	2	2	8	6	8	7	4
1289:	4	2	6	6	3	5	2	3
1297:	5	7	1	4	8	5	6	2
1305:	4	4	0	5	4	7	4	4
1313:	4	3	3	8	5	3	5	5
1321:	2	3	1	3	3	6	3	6
1329:	4	0	5	9	7	1	1	7
1337:	3	4	6	5	2	2	0	5
1345:	1	8	3	5	3	4	3	7
1353:	3	7	2	4	4	1	2	6
1361:	0	2	2	0	2	1	0	4
1369:	5	3	3	2	1	7	2	7
1377:	9	19	8	5	0	0	2	4
1385:	2	5	3	5	5	4	2	2

1393:	2	4	7	1	1	2	2	4
1401:	7	7	3	4	1	1	3	11
1409:	1	4	1	4	3	4	2	0
1417:	1	3	1	4	3	3	2	3
1425:	3	3	1	4	1	5	1	4
1433:	2	3	4	0	1	3	3	0
1441:	2	6	4	3	1	2	2	3
1449:	1	2	3	1	5	2	5	2
1457:	2	5	44	183	291	135	28	1
1465:	1	0	1	0	3	2	1	4
1473:	3	2	1	3	0	4	2	1
1481:	0	2	1	2	3	1	3	4
1489:	1	3	1	0	3	2	0	4
1497:	4	1	0	0	3	3	4	5
1505:	4	1	3	3	4	8	0	3
1513:	1	2	2	2	2	1	2	1
1521:	2	2	4	3	4	1	0	4
1529:	3	7	1	2	1	1	0	1
1537:	2	5	2	1	3	0	2	4
1545:	2	3	2	1	3	3	1	1
1553:	3	2	1	4	0	1	1	3
1561:	3	0	1	1	1	1	0	2
1569:	0	1	3	3	2	2	4	1
1577:	0	4	3	3	4	2	3	5
1585:	4	4	3	5	5	2	1	1
1593:	4	4	0	2	2	3	2	3
1601:	2	0	0	2	4	1	4	2
1609:	4	1	2	2	2	5	1	1
1617:	1	2	1	2	5	1	3	5
1625:	1	0	1	1	3	3	5	3
1633:	2	1	1	1	1	3	3	2
1641:	0	0	3	3	1	0	3	1
1649:	0	2	1	1	1	1	1	1
1657:	1	3	2	1	5	2	1	2
1665:	0	5	2	2	4	2	0	1
1673:	2	1	1	3	0	0	1	4
1681:	1	3	1	2	1	0	2	0
1689:	2	0	1	3	3	1	1	1
1697:	2	0	4	4	0	1	2	0
1705:	1	0	0	2	3	2	2	0
1713:	0	1	1	0	1	2	1	1
1721:	1	2	0	0	2	0	3	4
1729:	6	8	4	3	2	2	0	2
1737:	2	1	1	1	2	1	2	0
1745:	1	0	4	1	1	0	1	1
1753:	2	1	2	2	0	3	1	0
1761:	0	3	11	30	32	12	2	0
1769:	2	1	0	2	2	0	1	1
1777:	1	0	1	3	0	2	1	0
1785:	1	1	0	1	2	2	1	0
1793:	2	1	1	1	2	0	0	0
1801:	1	2	1	0	1	1	1	2
1809:	1	1	1	1	1	0	0	2
1817:	3	0	1	1	1	0	1	2
1825:	2	1	0	1	1	1	0	4
1833:	0	0	1	0	1	1	2	0
1841:	0	1	1	1	1	1	5	1
1849:	1	2	3	2	0	2	0	2
1857:	0	0	0	0	1	0	0	0
1865:	1	0	0	0	0	1	2	2

1873:	0	2	3	0	1	0	2	0
1881:	0	3	0	2	1	1	1	0
1889:	1	1	1	0	1	1	0	2
1897:	1	2	3	1	2	1	0	1
1905:	0	0	0	1	1	1	1	0
1913:	1	0	1	0	3	0	0	1
1921:	0	0	2	2	0	1	2	2
1929:	0	0	1	1	1	0	1	6
1937:	1	0	0	1	0	0	1	0
1945:	0	0	1	1	1	1	1	1
1953:	0	1	2	0	0	0	1	1
1961:	0	0	2	1	1	1	0	0
1969:	1	1	0	1	1	2	0	4
1977:	0	3	0	1	1	0	2	0
1985:	1	0	0	0	0	0	0	0
1993:	1	0	1	0	0	0	1	2
2001:	1	1	0	2	1	0	2	0
2009:	0	0	1	1	1	2	1	1
2017:	1	1	3	1	1	2	0	0
2025:	1	1	1	1	1	1	0	1
2033:	1	0	1	0	0	0	3	0
2041:	0	0	1	1	0	1	1	2
2049:	1	0	1	0	0	0	1	2
2057:	0	1	0	2	1	2	0	0
2065:	0	1	0	1	1	1	0	1
2073:	0	1	1	1	3	1	0	2
2081:	0	0	0	0	0	0	1	0
2089:	0	3	0	0	0	1	0	0
2097:	0	1	2	2	6	3	3	3
2105:	1	1	1	1	1	1	0	1
2113:	0	0	2	0	1	2	3	3
2121:	0	0	0	0	3	0	0	3
2129:	0	1	0	1	2	1	1	0
2137:	2	1	0	0	0	1	2	0
2145:	2	1	3	1	4	1	0	1
2153:	0	1	0	1	0	0	2	0
2161:	2	3	2	1	2	1	1	0
2169:	1	1	0	0	0	0	3	1
2177:	0	1	1	0	0	0	2	2
2185:	2	1	0	0	0	1	1	1
2193:	1	1	1	0	2	1	2	0
2201:	1	3	6	2	6	2	0	1
2209:	0	1	1	1	1	0	1	1
2217:	0	0	1	1	1	0	0	1
2225:	1	1	0	2	1	0	4	1
2233:	1	1	0	0	0	3	1	0
2241:	3	0	0	2	0	0	2	1
2249:	1	2	1	1	1	0	1	1
2257:	1	0	2	2	0	0	1	2
2265:	0	0	0	0	2	1	1	1
2273:	0	0	0	1	0	0	0	1
2281:	1	1	2	0	2	0	1	4
2289:	1	0	3	0	1	1	0	3
2297:	1	1	0	1	4	1	0	0
2305:	0	0	2	0	0	4	3	0
2313:	2	2	0	3	2	0	0	0
2321:	0	0	1	3	2	0	1	0
2329:	2	1	2	0	3	0	1	1
2337:	0	1	2	0	2	3	1	0
2345:	3	1	1	0	0	1	2	0

2353:	0	0	1	1	0	2	2	1
2361:	0	3	1	1	1	0	1	4
2369:	1	3	0	0	0	0	0	0
2377:	1	0	1	1	0	2	0	0
2385:	1	0	0	2	0	2	0	2
2393:	0	1	2	0	1	1	2	1
2401:	1	0	1	1	0	0	0	1
2409:	1	1	2	1	1	2	0	2
2417:	1	1	0	0	1	0	0	0
2425:	0	0	0	0	0	0	1	1
2433:	1	0	0	2	1	0	0	1
2441:	2	1	1	1	1	0	4	2
2449:	1	1	0	0	0	1	0	0
2457:	0	1	0	2	1	0	0	0
2465:	1	0	1	0	1	3	0	1
2473:	0	0	0	0	1	0	2	1
2481:	0	0	2	1	1	0	1	1
2489:	1	0	1	0	2	2	0	0
2497:	0	0	1	1	0	0	0	0
2505:	0	1	0	0	1	0	1	0
2513:	0	0	1	1	1	0	0	0
2521:	0	0	0	0	1	0	1	0
2529:	0	0	0	0	0	0	0	0
2537:	0	0	0	0	0	0	1	0
2545:	1	2	0	0	1	1	1	0
2553:	0	0	0	0	0	0	0	0
2561:	0	1	1	0	0	0	1	2
2569:	0	0	1	0	0	0	1	1
2577:	0	0	0	0	0	0	0	0
2585:	1	0	0	1	1	0	0	0
2593:	0	0	0	0	0	0	0	0
2601:	0	0	1	1	1	0	1	0
2609:	1	0	2	6	11	26	29	14
2617:	3	2	2	0	0	0	1	1
2625:	0	0	0	0	1	0	0	0
2633:	0	0	0	0	0	1	0	0
2641:	0	0	0	1	0	0	0	0
2649:	0	0	1	1	1	0	0	1
2657:	0	0	1	0	0	0	1	0
2665:	0	0	0	1	1	0	0	0
2673:	1	0	0	0	0	0	0	0
2681:	0	1	0	0	0	0	0	2
2689:	0	0	0	1	1	1	0	1
2697:	0	1	0	0	0	0	0	0
2705:	1	0	0	1	0	1	0	0
2713:	0	0	0	1	0	1	0	1
2721:	0	1	0	0	0	0	0	0
2729:	0	0	0	0	0	0	1	0
2737:	0	1	1	0	1	0	1	0
2745:	1	1	0	1	1	1	0	1
2753:	0	2	0	1	0	1	1	2
2761:	0	1	1	0	0	1	0	1
2769:	0	1	0	0	0	0	0	0
2777:	0	1	1	0	0	0	0	0
2785:	0	0	0	0	1	0	0	0
2793:	0	0	1	0	0	1	0	0
2801:	0	0	0	0	1	0	0	2
2809:	1	2	1	0	0	0	1	1
2817:	1	0	0	0	0	0	0	0
2825:	0	0	0	1	0	1	1	0

2833:	0	1	0	0	0	0	0	0
2841:	0	1	1	0	0	0	0	0
2849:	0	0	0	0	1	1	0	1
2857:	0	1	0	0	0	0	0	1
2865:	0	0	1	0	0	0	0	0
2873:	2	0	0	0	1	0	0	0
2881:	0	0	1	0	0	1	0	0
2889:	1	0	0	1	0	1	2	1
2897:	0	0	0	0	1	0	0	0
2905:	0	0	0	0	0	0	0	1
2913:	0	0	0	0	0	0	1	0
2921:	1	0	0	0	0	1	0	0
2929:	0	0	2	0	0	0	0	1
2937:	3	1	2	1	0	0	0	0
2945:	0	1	0	0	0	0	0	0
2953:	1	1	0	0	0	0	0	0
2961:	0	0	0	0	0	0	0	2
2969:	0	0	0	0	0	0	0	0
2977:	1	0	0	1	0	0	0	0
2985:	0	0	0	0	0	1	1	0
2993:	0	1	0	0	1	0	0	1
3001:	0	0	0	0	0	0	0	0
3009:	0	0	0	0	0	0	0	1
3017:	0	0	0	1	0	0	0	0
3025:	0	0	0	0	1	0	0	0
3033:	0	0	0	0	0	0	0	0
3041:	0	1	0	0	0	0	0	0
3049:	0	0	0	1	0	0	0	0
3057:	1	1	0	0	0	0	0	0
3065:	0	0	0	0	0	0	0	0
3073:	0	0	1	0	0	0	0	0
3081:	1	0	0	0	2	0	1	1
3089:	1	0	0	0	1	0	0	0
3097:	0	0	0	0	0	0	0	0
3105:	0	0	2	0	1	0	0	0
3113:	0	0	0	0	0	0	0	0
3121:	0	0	0	0	1	1	0	0
3129:	1	0	0	0	0	0	0	0
3137:	1	0	0	0	0	0	0	0
3145:	0	0	0	1	2	0	0	0
3153:	0	0	0	0	0	2	0	1
3161:	0	0	1	0	0	0	1	0
3169:	0	2	1	0	0	0	1	0
3177:	2	1	0	0	0	0	0	0
3185:	1	0	0	0	0	0	0	1
3193:	0	0	0	0	1	0	0	0
3201:	0	1	1	0	0	1	0	0
3209:	0	0	0	0	0	1	0	0
3217:	1	0	0	0	0	0	0	0
3225:	0	0	1	0	0	0	0	1
3233:	0	0	1	0	0	1	0	0
3241:	0	0	1	0	0	0	0	1
3249:	0	1	0	0	0	0	0	0
3257:	0	0	0	0	0	1	1	0
3265:	0	0	1	0	0	0	0	0
3273:	1	0	0	0	0	0	0	0
3281:	0	0	0	0	0	0	0	0
3289:	0	0	0	0	0	0	0	0
3297:	1	1	0	0	0	0	0	0
3305:	0	0	1	0	0	0	0	0

3313:	0	0	1	0	0	0	0	0
3321:	0	1	0	0	0	1	1	0
3329:	0	0	0	0	0	0	0	0
3337:	0	0	0	0	0	0	0	2
3345:	0	0	1	0	0	0	1	0
3353:	0	0	1	0	0	0	0	0
3361:	0	1	0	0	0	0	1	0
3369:	0	0	1	0	0	0	0	0
3377:	0	0	0	1	0	0	0	0
3385:	0	0	0	0	0	0	0	0
3393:	0	0	0	0	0	0	1	0
3401:	0	0	0	0	0	0	0	0
3409:	0	0	0	0	0	0	1	0
3417:	0	0	0	0	0	0	0	0
3425:	0	0	1	0	0	1	0	0
3433:	0	0	0	0	0	0	0	0
3441:	0	0	0	0	1	0	0	0
3449:	0	0	0	0	0	0	0	0
3457:	1	1	0	0	0	1	0	0
3465:	0	0	0	0	0	0	0	0
3473:	0	0	0	0	1	0	0	0
3481:	0	0	0	0	0	0	0	0
3489:	0	0	0	0	0	1	0	0
3497:	0	0	0	1	1	0	0	0
3505:	0	0	0	0	0	0	0	0
3513:	1	0	0	0	0	0	1	0
3521:	0	0	0	0	0	0	1	0
3529:	1	0	0	0	0	0	0	0
3537:	0	0	0	0	2	0	0	0
3545:	0	0	1	0	0	0	0	0
3553:	0	0	0	0	0	0	0	1
3561:	0	0	0	0	1	0	0	0
3569:	0	0	0	1	0	0	0	0
3577:	0	0	0	0	1	0	0	0
3585:	0	0	0	0	0	0	0	0
3593:	0	0	0	0	0	0	0	0
3601:	0	0	0	0	0	0	0	0
3609:	0	1	2	0	0	0	0	0
3617:	0	1	0	0	0	0	0	0
3625:	0	0	0	1	0	0	0	0
3633:	0	0	0	0	0	0	1	1
3641:	0	0	0	0	0	0	1	0
3649:	0	0	0	0	0	0	0	0
3657:	2	0	0	0	0	1	0	0
3665:	0	0	0	1	0	0	0	0
3673:	0	0	0	0	0	1	0	0
3681:	0	0	0	0	0	0	0	0
3689:	0	0	0	0	0	0	0	1
3697:	0	0	0	0	1	0	0	0
3705:	1	0	0	0	0	0	0	0
3713:	0	0	0	0	0	1	0	0
3721:	0	0	2	0	0	0	0	0
3729:	0	0	0	0	0	0	0	0
3737:	0	0	0	0	0	0	0	0
3745:	0	0	0	1	0	0	0	1
3753:	0	0	0	0	0	1	0	0
3761:	1	0	0	0	1	0	0	1
3769:	0	0	0	0	0	0	0	1
3777:	0	0	0	0	0	0	0	0
3785:	0	0	0	0	0	0	0	0

3793:	0	0	0	0	0	0	0	0
3801:	0	0	0	0	0	0	0	0
3809:	0	0	0	0	0	0	0	0
3817:	0	0	0	0	0	0	0	0
3825:	0	0	0	0	0	0	0	0
3833:	0	0	0	0	0	0	0	1
3841:	0	0	0	0	0	0	0	0
3849:	0	0	0	0	1	0	0	0
3857:	0	0	1	0	0	0	0	0
3865:	0	1	1	0	0	0	0	0
3873:	0	0	0	0	0	0	1	0
3881:	0	1	1	0	0	0	0	0
3889:	0	0	0	1	0	1	0	0
3897:	0	0	0	0	0	0	1	0
3905:	0	0	1	0	0	0	0	0
3913:	0	0	0	0	0	0	1	0
3921:	0	0	0	0	0	0	0	0
3929:	0	0	1	0	0	0	0	0
3937:	0	0	0	0	0	0	0	0
3945:	0	0	0	0	1	0	0	0
3953:	0	0	0	0	0	0	1	0
3961:	0	0	0	0	0	0	0	0
3969:	0	0	1	0	0	0	0	0
3977:	0	0	0	0	0	0	0	0
3985:	0	0	0	1	0	0	0	0
3993:	2	0	0	0	0	0	0	0
4001:	1	0	0	0	0	0	1	0
4009:	0	0	1	0	0	0	0	1
4017:	0	0	0	0	0	0	0	0
4025:	0	0	0	0	1	0	0	0
4033:	0	0	0	0	0	0	0	0
4041:	0	0	0	0	0	1	0	1
4049:	0	0	0	0	0	0	0	0
4057:	0	0	0	0	0	0	0	0
4065:	0	0	0	1	0	0	0	0
4073:	1	0	0	0	0	0	0	1
4081:	0	0	0	0	0	0	0	0
4089:	1	0	0	0	0	0	0	0

Sample ID : 1111065-18 Acquisition date : 11-DEC-2011 12:20:02

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VAX/VMS Peak Search Report Generated 11-DEC-2011 13:21:02.80

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106518_GE3_GAS1102_172275.
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : MD-01-31-111109
Deposition Date :
Sample Date : 9-NOV-2011 00:00:00. Acquisition date : 11-DEC-2011 12:20:02
Sample ID : 1111065-18 Sample Quantity : 3.99890E+02 GRAM
Sample type : SOIL Sample Geometry : 0
Detector name : GE3 Detector Geometry: GAS-1102
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:46.67 1.3%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	16.55	307	4783	1.32	16.83	14	6	72.6		NB-93M
0	32.32	155	2808	1.16	32.60	31	4	98.2		
0	46.54*	2345	5789	1.12	46.82	44	6	11.1		PB-210
0	53.57	683	5598	1.37	53.85	52	5	33.7		
0	63.35*	1968	9392	1.24	63.64	61	6	16.2		TH-234
0	67.59	413	6493	1.13	67.88	67	4	56.1		TI-44
1	74.72*	5184	3724	1.23	75.00	74	8	3.8	1.10E+03	AM-243
1	77.61*	9379	7039	1.36	77.90	74	8	3.5		TI-44
0	88.14	2972	8835	1.28	88.42	86	6	10.7		SN-126
										CD-109
0	93.51*	2126	7775	1.08	93.79	91	6	14.1		
0	144.15*	393	5276	1.68	144.44	142	6	59.3		U-235
										CE-141
0	154.79	402	5167	1.38	155.08	153	6	57.6		
0	164.07*	198	4631	1.61	164.36	162	6	110.1		U-235
0	186.43*	4990	6460	1.59	186.72	183	9	6.5		RA-226
0	242.20*	5155	4443	1.72	242.49	238	9	5.5		RA-224
0	248.61	191	2265	3.53	248.90	247	6	80.2		
0	257.90	635	4091	4.03	258.19	254	11	39.8		
0	270.64*	731	2681	2.88	270.93	267	7	24.6		LU-173
0	295.55*	10725	2444	1.31	295.84	292	7	2.5		PB-214
0	323.60	224	1828	1.73	323.90	321	7	64.7		RA-223
0	329.78	148	1311	1.98	330.08	328	5	75.3		
0	338.71*	129	1345	1.10	339.01	337	5	87.1		
5	348.02	90	1077	1.87	348.32	347	11	104.0	1.55E+01	
5	352.28*	17958	1027	1.41	352.58	347	11	1.6		PB-214
0	388.45	329	1864	3.87	388.75	385	9	48.6		
0	403.79	364	2633	5.25	404.09	398	12	57.4		
0	427.14	179	1559	3.86	427.44	424	8	78.1		
0	454.40	145	873	1.88	454.71	452	6	66.4		
0	463.14	98	962	2.55	463.45	460	7	106.5		
0	481.00	69	703	1.05	481.31	480	5	118.0		
0	487.48	93	894	1.57	487.79	485	7	108.7		
0	511.09*	205	1025	2.74	511.40	508	9	58.6		
0	533.98	104	1007	4.06	534.29	530	9	111.1		
0	543.81	69	630	2.37	544.12	541	6	117.1		

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Sample ID : 1111065-18 Acquisition date : 11-DEC-2011 12:20:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	572.84	116	776	4.19	573.15	569	8	85.6		
0	582.52	297	844	1.47	582.84	579	9	37.3		TL-208
0	609.72*	12499	972	1.47	610.04	605	10	2.0		BI-214
0	665.39	477	778	1.85	665.71	660	12	25.1		
0	703.56	120	589	1.50	703.88	700	8	72.6		
0	720.09	221	678	7.91	720.41	715	11	47.5		
0	743.24	95	466	3.89	743.57	740	8	82.1		
0	768.82	1159	640	1.69	769.15	764	10	10.1		
0	786.25	349	581	2.07	786.57	782	10	27.9		
0	806.68	301	529	1.55	807.01	802	9	29.9		
0	911.61	111	440	1.36	911.94	909	7	65.6		
0	934.42	561	558	1.75	934.76	931	9	17.4		
0	963.72	110	348	2.63	964.06	961	7	59.3		
0	970.99	103	479	1.76	971.32	968	9	79.2		
0	1001.71*	92	358	1.69	1002.05	998	7	71.8		PA-234M
0	1051.96	95	375	1.51	1052.30	1048	9	76.0		
4	1064.22	52	186	2.27	1064.56	1062	23	82.3	1.32E+00	
4	1071.01	113	339	2.90	1071.35	1062	23	62.3		
0	1106.39	120	467	6.00	1106.74	1101	12	74.4		
0	1120.82*	2419	481	1.89	1121.17	1116	11	5.4		BI-214
0	1155.67	324	398	1.71	1156.02	1151	10	25.6		
0	1190.15	60	233	2.72	1190.50	1188	7	88.3		
0	1209.33	123	419	2.28	1209.68	1205	12	68.6		
0	1238.74*	909	358	1.77	1239.09	1234	10	10.2		
0	1253.92	40	171	1.11	1254.27	1252	5	103.4		
2	1281.49	249	206	2.08	1281.85	1278	11	22.0	2.45E+00	
2	1285.21	35	182	2.52	1285.56	1278	11	134.7		
0	1336.24	39	152	1.56	1336.60	1335	6	105.2		
4	1378.34	702	195	2.55	1378.71	1372	20	10.1	2.84E+00	
4	1385.97	150	197	3.11	1386.33	1372	20	39.3		
0	1401.81	173	318	2.58	1402.18	1397	10	41.4		
0	1408.54	331	238	2.09	1408.91	1406	8	19.5		
0	1425.76	56	141	3.29	1426.13	1423	7	75.8		
0	1432.73	54	218	2.62	1433.09	1430	9	102.6		
0	1461.42*	619	286	2.09	1461.79	1456	11	13.3		K-40
0	1509.61	252	331	1.85	1509.98	1505	10	29.8		
0	1537.99	46	231	2.51	1538.36	1536	7	113.3		
0	1544.01	77	224	2.54	1544.38	1542	8	73.1		
0	1583.36	88	125	3.40	1583.74	1581	7	46.9		
0	1600.43	34	101	2.06	1600.80	1599	5	97.8		
0	1661.81	156	138	2.22	1662.19	1656	12	34.1		
0	1730.77	420	178	2.23	1731.15	1723	20	18.3		
0	1765.22	2041	123	2.36	1765.61	1760	13	5.0		BI-214
0	1778.88	16	28	1.05	1779.27	1776	6	120.7		
6	1839.34	41	92	4.08	1839.73	1829	33	95.8	1.87E+00	
6	1848.29	312	50	2.83	1848.68	1829	33	13.6		
0	1874.81	28	69	1.69	1875.20	1871	9	115.5		
0	1935.30	51	45	4.82	1935.70	1930	12	59.2		
0	1970.69	41	99	11.97	1971.08	1962	19	121.4		
0	2016.01	38	64	12.71	2016.42	2008	17	102.8		
0	2090.30	24	14	1.65	2090.71	2087	7	65.9		

Sample ID : 1111065-18 Acquisition date : 11-DEC-2011 12:20:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	2105.65	13	18	2.64	2106.05	2103	22	105.7	1.30E+00	
1	2119.45*	126	17	2.47	2119.85	2103	22	21.1		
0	2129.86	22	22	2.91	2130.27	2125	13	99.5		
0	2205.01*	549	29	2.83	2205.42	2199	13	9.5		BI-214
0	2260.28	16	8	1.37	2260.69	2254	12	89.3		
0	2294.45	29	9	3.27	2294.87	2291	10	51.2		
0	2448.65	166	0	2.63	2449.08	2445	9	15.5		
0	2615.56*	55	2	2.98	2616.00	2611	10	29.8		TL-208

Sample ID : 1111065-18 Acquisition date : 11-DEC-2011 12:20:02

Total number of lines in spectrum	93	
Number of unidentified lines	52	
Number of lines tentatively identified by NID	41	44.09%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.877E+01	2.877E+01	0.476E+01	16.53	
TL-208	1.41E+10Y	1.00	1.089E+00	1.089E+00	0.285E+00	26.20	
PB-210	22.26Y	1.00	6.214E+01	6.231E+01	0.965E+01	15.49	
BI-214	1602.00Y	1.00	6.724E+01	6.724E+01	0.394E+01	5.86	
PB-214	1602.00Y	1.00	7.097E+01	7.097E+01	0.491E+01	6.91	
RA-223	3.28E+04Y	1.00	7.918E+00	7.918E+00	5.177E+00	65.38	
RA-224	1.41E+10Y	1.00	1.415E+02	1.415E+02	0.159E+02	11.27	
RA-226	1602.00Y	1.00	1.395E+02	1.395E+02	2.558E+02	183.35	
PA-234M	4.47E+09Y	1.00	3.769E+01	3.769E+01	2.730E+01	72.44	
TH-234	4.47E+09Y	1.00	4.384E+01	4.384E+01	0.834E+01	19.01	
U-235	7.04E+08Y	1.00	3.599E+00	3.599E+00	4.028E+00	111.92	
			---	---			
	Total Activity :		6.042E+02	6.044E+02			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
TI-44	63.00Y	1.00	3.574E-01	3.578E-01	2.044E-01	57.14	
LU-173	1.37Y	1.05	4.096E+00	4.285E+00	1.127E+00	26.30	
AM-243	7380.00Y	1.00	6.188E+00	6.188E+00	0.802E+00	12.96	
			---	---			
	Total Activity :		1.064E+01	1.083E+01			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NB-93M	14.60Y	1.00	2.563E+01	2.574E+01	2.670E+01	103.73	
CD-109	464.00D	1.05	6.065E+01	6.367E+01	1.257E+01	19.75	
SN-126	1.00E+05Y	1.00	6.102E+00	6.102E+00	1.144E+00	18.75	
CE-141	32.50D	2.00	6.616E-01	1.324E+00	0.860E+00	64.93	
			---	---			
	Total Activity :		9.304E+01	9.684E+01			

Grand Total Activity : 7.079E+02 7.121E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111065-18 Acquisition date : 11-DEC-2011 12:20:02

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
K-40	1460.81	10.67*	3.789E-01	2.877E+01	2.877E+01	16.53	OK
	Final Mean for 1 Valid Peaks = 2.877E+01+/- 4.756E+00 (16.53%)						
TL-208	583.14	30.22*	8.029E-01	2.296E+00	2.296E+00	38.78	OK
	860.37	4.48	5.645E-01	----- Line Not Found		-----	Absent
	2614.66	35.85	3.019E-01	9.506E-01	9.506E-01	31.68	OK
	Final Mean for 2 Valid Peaks = 1.089E+00+/- 2.853E-01 (26.20%)						
PB-210	46.50	4.05*	1.750E+00	6.214E+01	6.231E+01	15.49	OK
	Final Mean for 1 Valid Peaks = 6.231E+01+/- 9.653E+00 (15.49%)						
BI-214	609.31	46.30*	7.707E-01	6.576E+01	6.576E+01	10.76	OK
	1120.29	15.10	4.552E-01	6.609E+01	6.609E+01	11.85	OK
	1764.49	15.80	3.416E-01	7.101E+01	7.102E+01	10.99	OK
	2204.22	4.98	3.132E-01	6.605E+01	6.606E+01	14.06	OK
	Final Mean for 4 Valid Peaks = 6.724E+01+/- 3.943E+00 (5.86%)						
PB-214	295.21	19.19	1.480E+00	7.088E+01	7.088E+01	9.56	OK
	351.92	37.19*	1.276E+00	7.107E+01	7.107E+01	10.01	OK
	Final Mean for 2 Valid Peaks = 7.097E+01+/- 4.907E+00 (6.91%)						
RA-223	323.87	3.88*	1.370E+00	7.918E+00	7.918E+00	65.38	OK
	Final Mean for 1 Valid Peaks = 7.918E+00+/- 5.177E+00 (65.38%)						
RA-224	240.98	3.95*	1.732E+00	1.415E+02	1.415E+02	11.27	OK
	Final Mean for 1 Valid Peaks = 1.415E+02+/- 1.594E+01 (11.27%)						
RA-226	186.21	3.28*	2.048E+00	1.395E+02	1.395E+02	183.35	OK
	Final Mean for 1 Valid Peaks = 1.395E+02+/- 2.558E+02 (183.35%)						
PA-234M	1001.03	0.92*	4.973E-01	3.769E+01	3.769E+01	72.44	OK
	Final Mean for 1 Valid Peaks = 3.769E+01+/- 2.730E+01 (72.44%)						
TH-234	63.29	3.80*	2.218E+00	4.384E+01	4.384E+01	19.01	OK
	Final Mean for 1 Valid Peaks = 4.384E+01+/- 8.337E+00 (19.01%)						
U-235	143.76	10.50*	2.314E+00	3.036E+00	3.036E+00	62.33	<<WM Interf
	163.35	4.70	2.193E+00	3.599E+00	3.599E+00	111.92	OK
	205.31	4.70	1.931E+00	----- Line Not Found		-----	Absent
	Final Mean for 1 Valid Peaks = 3.599E+00+/- 4.028E+00 (111.92%)						

Sample ID : 1111065-18 Acquisition date : 11-DEC-2011 12:20:02

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
TI-44	67.88	94.40*	2.297E+00	3.574E-01	3.578E-01	57.14	OK
	78.34	96.00	2.417E+00	7.588E+00	7.595E+00	13.68	<<WM N-Sigma
Final Mean for 1 Valid Peaks = 3.578E-01+/- 2.044E-01 (57.14%)							
LU-173	100.72	5.24	2.489E+00	----- Line Not Found		-----	Absent
	272.11	21.20*	1.580E+00	4.096E+00	4.285E+00	26.30	OK
Final Mean for 1 Valid Peaks = 4.285E+00+/- 1.127E+00 (26.30%)							
AM-243	74.67	66.00*	2.383E+00	6.188E+00	6.188E+00	12.96	OK
Final Mean for 1 Valid Peaks = 6.188E+00+/- 8.020E-01 (12.96%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error	Status
NB-93M	16.57	9.43*	2.383E-01	2.563E+01	2.574E+01	103.73	OK
Final Mean for 1 Valid Peaks = 2.574E+01+/- 2.670E+01 (103.73%)							
CD-109	88.03	3.72*	2.473E+00	6.065E+01	6.367E+01	19.75	OK
Final Mean for 1 Valid Peaks = 6.367E+01+/- 1.257E+01 (19.75%)							
SN-126	87.57	37.00*	2.471E+00	6.102E+00	6.102E+00	18.75	OK
Final Mean for 1 Valid Peaks = 6.102E+00+/- 1.144E+00 (18.75%)							
CE-141	145.44	48.40*	2.304E+00	6.616E-01	1.324E+00	64.93	OK
Final Mean for 1 Valid Peaks = 1.324E+00+/- 8.598E-01 (64.93%)							

Flag: "*" = Keyline

Sample ID : 1111065-18 Acquisition date : 11-DEC-2011 12:20:02

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
K-40	2.877E+01	4.756E+00	3.066E+00	2.750E-01	9.382
TI-44	3.578E-01	2.044E-01	3.196E-01	3.246E-02	1.119
NB-93M	2.574E+01	2.670E+01	1.987E+01	1.469E+01	1.295
CD-109	6.367E+01	1.257E+01	8.231E+00	1.327E+00	7.736
SN-126	6.102E+00	1.144E+00	7.885E-01	1.174E-01	7.738
CE-141	1.324E+00	8.598E-01	9.550E-01	2.490E-01	1.387
LU-173	4.285E+00	1.127E+00	1.166E+00	9.683E-02	3.674
TL-208	1.089E+00	2.853E-01	8.273E-01	8.193E-02	1.316
PB-210	6.231E+01	9.653E+00	7.331E+00	7.383E-01	8.500
BI-214	6.724E+01	3.943E+00	5.477E-01	5.356E-02	122.767
PB-214	7.097E+01	4.907E+00	6.499E-01	5.877E-02	109.208
RA-223	7.918E+00	5.177E+00	5.815E+00	5.061E-01	1.362
RA-224	1.415E+02	1.594E+01	6.443E+00	5.806E-01	21.959
RA-226	1.395E+02	2.558E+02	7.144E+00	1.309E+01	19.527
PA-234M	3.769E+01	2.730E+01	3.487E+01	3.086E+00	1.081
TH-234	4.384E+01	8.337E+00	7.632E+00	6.946E-01	5.745
U-235	3.599E+00	4.028E+00	2.163E+00	4.038E-01	1.663
AM-243	6.188E+00	8.020E-01	4.483E-01	5.260E-02	13.803

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
BE-7	-5.437E-01		2.528E+00	3.663E+00	3.644E-01	-0.148
NA-22	-4.780E-03		2.183E-01	3.295E-01	3.020E-02	-0.015
AL-26	4.733E-02		1.179E-01	2.101E-01	1.880E-02	0.225
SC-46	-2.173E-02		2.542E-01	4.346E-01	3.522E-02	-0.050
V-48	2.608E-01		7.274E-01	1.263E+00	1.100E-01	0.207
CR-51	3.025E-01		3.474E+00	5.184E+00	4.724E-01	0.058
MN-54	-2.208E-01		2.069E-01	3.418E-01	2.942E-02	-0.646
CO-56	-1.414E-01		2.364E-01	3.980E-01	3.386E-02	-0.355
CO-57	-1.004E-01		1.584E-01	2.617E-01	3.040E-02	-0.384
CO-58	-1.826E-01		2.592E-01	3.879E-01	3.418E-02	-0.471
FE-59	-1.220E-01		6.162E-01	9.280E-01	9.509E-02	-0.131
CO-60	8.856E-02		1.946E-01	3.364E-01	3.419E-02	0.263
ZN-65	2.574E-01		5.781E-01	7.238E-01	7.052E-02	0.356
SE-75	-1.552E-01		3.444E-01	4.473E-01	3.826E-02	-0.347
RB-82	1.085E+00		3.922E+00	4.964E+00	4.475E-01	0.219
RB-83	-2.374E-02		4.194E-01	6.641E-01	1.092E-01	-0.036
KR-85	4.897E+01		3.719E+01	6.078E+01	6.087E+00	0.806
SR-85	3.014E-01		2.289E-01	3.741E-01	3.746E-02	0.806
Y-88	2.679E-01		1.653E-01	3.164E-01	2.829E-02	0.847
NB-94	4.091E-02		1.771E-01	3.071E-01	2.544E-02	0.133
NB-95	2.287E+00		4.666E-01	7.523E-01	6.830E-02	3.041
ZR-95	-4.753E-02		4.091E-01	7.062E-01	7.026E-02	-0.067
RU-103	4.879E-02		2.906E-01	4.645E-01	6.985E-02	0.105
RU-106	-1.348E+00		1.492E+00	2.513E+00	3.539E-01	-0.537
AG-108M	9.802E-02		1.963E-01	3.122E-01	2.892E-02	0.314

Sample ID : 1111065-18 Acquisition date : 11-DEC-2011 12:20:02

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
AG-110M	2.500E-02		1.744E-01	2.763E-01	2.605E-02	0.090
SN-113	1.971E-01		3.176E-01	4.756E-01	4.618E-02	0.415
TE123M	1.784E-01		2.432E-01	3.318E-01	3.385E-02	0.537
SB-124	6.587E-03		2.443E-01	3.850E-01	3.779E-02	0.017
I-125	1.259E+00		4.856E+00	7.824E+00	1.097E+00	0.161
SB-125	1.094E+00	+	8.628E-01	9.534E-01	9.412E-02	1.148
SB-126	7.204E+00	+	3.501E+00	3.337E+00	3.093E-01	2.159
I-129	-8.604E-02		4.970E-01	7.985E-01	1.485E-01	-0.108
I-131	1.452E+00		2.840E+00	4.620E+00	4.244E-01	0.314
BA-133	1.109E+00		3.135E-01	4.459E-01	6.025E-02	2.488
CS-134	1.471E-01		1.779E-01	2.871E-01	2.821E-02	0.512
CS-135	2.461E+00		1.141E+00	1.561E+00	1.312E-01	1.576
CS-136	5.860E-01		1.388E+00	2.172E+00	2.057E-01	0.270
CS-137	1.711E-01		1.871E-01	3.039E-01	2.859E-02	0.563
LA-138	1.251E-01		3.195E-01	4.930E-01	4.283E-02	0.254
CE-139	1.272E-01		2.184E-01	3.363E-01	3.340E-02	0.378
BA-140	3.362E+00		4.652E+00	5.953E+00	1.996E+00	0.565
LA-140	1.674E+00		1.327E+00	2.147E+00	1.907E-01	0.779
CE-144	-2.132E+00		1.317E+00	2.108E+00	2.353E-01	-1.011
PM-144	1.296E-02		1.768E-01	2.777E-01	2.596E-02	0.047
PM-145	-8.845E-01		1.139E+00	1.547E+00	1.019E+00	-0.572
PM-146	6.815E-01	+	4.580E-01	6.587E-01	6.495E-02	1.035
ND-147	6.836E+00		9.081E+00	1.471E+01	1.474E+00	0.465
EU-152	1.079E+01	+	2.448E+00	3.517E+00	3.844E-01	3.067
GD-153	-3.563E-02		6.060E-01	1.015E+00	1.353E-01	-0.035
EU-154	-1.208E-02		6.045E-01	9.124E-01	8.362E-02	-0.013
EU-155	3.758E+00		8.592E-01	1.059E+00	1.548E-01	3.548
EU-156	-3.175E+00		7.865E+00	1.191E+01	2.729E+00	-0.267
HO-166M	1.306E-01		3.870E-01	4.934E-01	4.588E-02	0.265
HF-172	3.751E-01		1.155E+00	1.932E+00	2.214E-01	0.194
LU-172	-1.594E+00		8.635E+00	1.460E+01	1.397E+00	-0.109
HF-175	2.376E-01		3.067E-01	4.080E-01	3.649E-02	0.582
LU-176	-1.728E-02		1.509E-01	2.435E-01	2.065E-02	-0.071
TA-182	3.485E+01	+	4.131E+00	3.499E+00	3.422E-01	9.958
IR-192	1.911E-01		4.617E-01	6.854E-01	6.797E-02	0.279
HG-203	-6.150E-01		3.117E-01	4.787E-01	4.004E-02	-1.285
BI-207	-1.745E-02		1.718E-01	2.699E-01	2.686E-02	-0.065
BI-210M	8.993E-02		3.306E-01	4.992E-01	4.273E-02	0.180
PB-211	2.095E+01	+	1.221E+01	9.754E+00	9.333E-01	2.148
BI-212	5.270E-01		1.455E+00	2.306E+00	2.132E-01	0.229
PB-212	5.332E-01		3.939E-01	6.025E-01	5.456E-02	0.885
RN-219	5.609E+00		2.628E+00	4.301E+00	4.105E-01	1.304
RA-225	-1.361E+00		2.895E+00	4.593E+00	5.479E-01	-0.296
TH-227	-2.707E-01		1.436E+00	2.154E+00	1.961E-01	-0.126
AC-228	1.401E+00	+	9.279E-01	1.312E+00	1.065E-01	1.068
TH-230	9.132E+01	+	5.217E+01	8.264E+01	8.353E+00	1.105
PA-231	3.020E-01		6.379E+00	1.033E+01	8.705E-01	0.029
TH-231	1.277E+00		2.361E+00	4.088E+00	1.012E+00	0.312

Sample ID : 1111065-18 Acquisition date : 11-DEC-2011 12:20:02

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	MDA error	Act/MDA
PA-233	1.783E-01		8.263E-01	1.341E+00	3.008E-01	0.133
PA-234	3.197E-01		6.271E-01	1.049E+00	1.180E-01	0.305
NP-237	9.093E+00		2.080E+00	2.565E+00	3.748E-01	3.545
AM-241	9.690E-01		5.764E-01	8.185E-01	6.742E-02	1.184
CM-243	-8.838E-01		1.041E+00	1.658E+00	1.351E-01	-0.533

Sample ID : 1111065-18 Acquisition date : 11-DEC-2011 12:20:02

Total number of lines in spectrum	93	
Number of unidentified lines	52	
Number of lines tentatively identified by NID	41	44.09%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.877E+01	2.877E+01	0.476E+01	16.53	
TL-208	1.41E+10Y	1.00	1.089E+00	1.089E+00	0.285E+00	26.20	
PB-210	22.26Y	1.00	6.214E+01	6.231E+01	0.965E+01	15.49	
BI-214	1602.00Y	1.00	6.724E+01	6.724E+01	0.394E+01	5.86	
PB-214	1602.00Y	1.00	7.097E+01	7.097E+01	0.491E+01	6.91	
RA-223	3.28E+04Y	1.00	7.918E+00	7.918E+00	5.177E+00	65.38	
RA-224	1.41E+10Y	1.00	1.415E+02	1.415E+02	0.159E+02	11.27	
RA-226	1602.00Y	1.00	1.395E+02	1.395E+02	2.558E+02	183.35	
PA-234M	4.47E+09Y	1.00	3.769E+01	3.769E+01	2.730E+01	72.44	
TH-234	4.47E+09Y	1.00	4.384E+01	4.384E+01	0.834E+01	19.01	
U-235	7.04E+08Y	1.00	3.599E+00	3.599E+00	4.028E+00	111.92	
			---	---			
	Total Activity :		6.042E+02	6.044E+02			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
TI-44	63.00Y	1.00	3.574E-01	3.578E-01	2.044E-01	57.14	
LU-173	1.37Y	1.05	4.096E+00	4.285E+00	1.127E+00	26.30	
AM-243	7380.00Y	1.00	6.188E+00	6.188E+00	0.802E+00	12.96	
			---	---			
	Total Activity :		1.064E+01	1.083E+01			

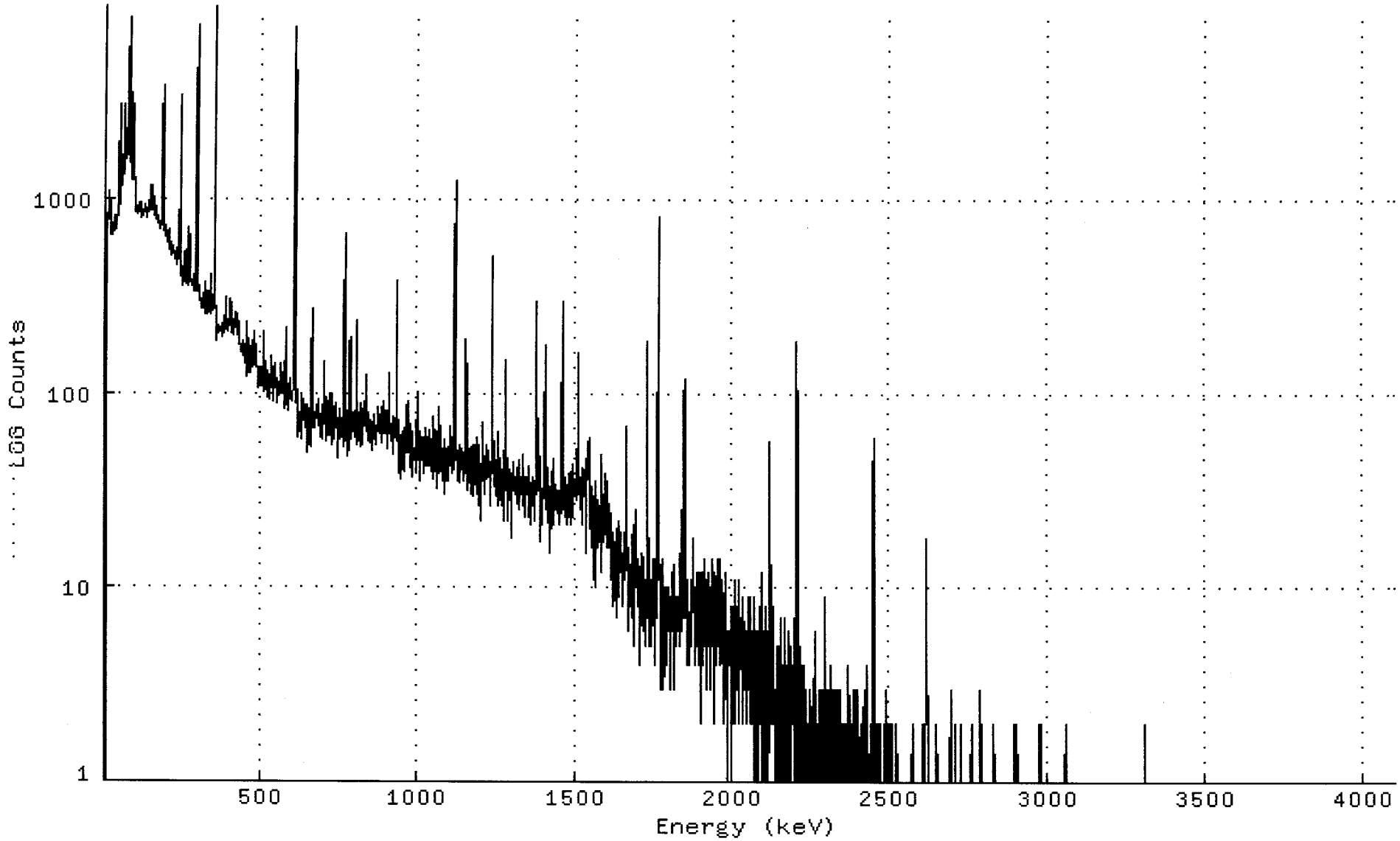
Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/GRAM	Wtd Mean Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NB-93M	14.60Y	1.00	2.563E+01	2.574E+01	2.670E+01	103.73	
CD-109	464.00D	1.05	6.065E+01	6.367E+01	1.257E+01	19.75	
SN-126	1.00E+05Y	1.00	6.102E+00	6.102E+00	1.144E+00	18.75	
CE-141	32.50D	2.00	6.616E-01	1.324E+00	0.860E+00	64.93	
			---	---			
	Total Activity :		9.304E+01	9.684E+01			

Grand Total Activity : 7.079E+02 7.121E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106518_GE3_GAS1102_172275.CNF;1
Title :
Sample Title: MD-01-31-111109
Start Time: 11-DEC-2011 12:20 Sample Time: 9-NOV-2011 00:00: Energy Offset: -2.78447E-01
Real Time : 0 01:00:46.67 Sample ID : 1111065-18 Energy Slope : 9.99940E-01
Live Time : 0 01:00:00.00 Sample Type: SOIL Energy Quad : 0.00000E+00



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Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106518_GE3_GAS1102_1722

Channel

1:	0	0	0	0	0	0	0	0
9:	54	796	835	773	955	841	801	1064
17:	897	730	757	701	682	640	703	640
25:	671	708	729	741	673	695	731	727
33:	804	701	690	688	784	741	690	802
41:	809	824	867	925	936	1240	3024	1141
49:	923	1115	1120	1017	1328	1645	1141	1150
57:	1158	1245	1325	1451	1525	1663	1977	2982
65:	1675	1599	1647	1996	1683	1580	1667	1749
73:	1814	1973	5827	3903	5716	8474	1629	1944
81:	1616	1768	1242	2285	1855	1219	2265	3435
89:	1378	1886	1624	1232	3001	1625	1339	1170
97:	837	940	1044	942	850	866	904	874
105:	852	886	816	837	896	889	863	942
113:	922	945	862	876	858	789	901	832
121:	808	811	844	825	842	861	848	864
129:	832	859	911	798	822	827	784	802
137:	872	862	832	877	880	864	878	1067
145:	1149	857	865	904	893	930	906	965
153:	863	987	1149	899	846	825	826	866
161:	813	770	839	889	789	775	777	739
169:	795	737	726	760	744	743	695	745
177:	682	726	687	725	741	774	746	771
185:	796	2387	3746	900	721	727	696	677
193:	652	710	666	683	645	627	649	637
201:	646	651	669	584	594	686	577	590
209:	613	540	583	549	569	504	540	518
217:	539	557	553	534	515	524	501	523
225:	511	484	497	487	483	505	535	446
233:	551	476	475	597	711	496	856	621
241:	544	2412	3324	543	419	389	415	443
249:	429	426	389	354	368	387	422	405
257:	526	433	532	527	381	391	364	358
265:	377	394	351	355	426	694	592	628
273:	371	413	469	420	374	350	352	376
281:	349	351	358	400	369	347	386	325
289:	335	328	356	359	359	405	2794	7698
297:	1235	325	355	349	392	317	316	325
305:	339	295	337	270	282	299	283	279
313:	280	278	320	267	291	280	279	252
321:	280	271	294	366	313	279	249	266
329:	280	328	330	255	276	325	295	290
337:	268	282	398	279	253	272	311	263
345:	315	280	261	307	274	325	665	7653
353:	9827	757	270	276	232	237	208	183
361:	219	216	218	213	212	217	204	201
369:	211	214	205	204	211	212	216	196
377:	198	216	223	191	218	220	222	207
385:	200	227	266	273	268	307	228	209
393:	215	205	214	235	225	230	219	219
401:	240	294	300	276	258	285	241	236
409:	199	226	195	230	209	225	236	219
417:	225	256	222	216	224	245	222	197
425:	218	250	235	241	220	191	186	182

433:	175	177	167	177	160	168	166	174
441:	170	158	153	153	182	174	175	167
449:	162	147	147	141	155	175	230	197
457:	120	173	161	124	141	173	186	165
465:	145	126	141	150	139	171	143	136
473:	142	166	185	133	148	174	152	136
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497:	113	118	123	130	110	132	123	134
505:	116	117	110	101	128	150	196	204
513:	158	135	118	111	130	121	103	128
521:	112	104	94	111	110	91	122	105
529:	105	111	112	105	132	155	138	115
537:	139	104	126	112	90	113	127	139
545:	122	108	108	129	104	106	107	109
553:	117	117	87	101	98	111	102	110
561:	95	106	109	141	103	98	111	120
569:	99	113	122	116	125	122	102	93
577:	82	108	95	130	157	115	136	213
585:	126	88	81	95	109	94	85	85
593:	95	99	111	116	94	107	94	99
601:	97	89	98	95	108	117	112	184
609:	2228	7587	2755	178	114	98	88	97
617:	82	89	102	88	69	58	78	74
625:	63	66	76	79	57	72	85	89
633:	75	99	86	71	72	72	73	81
641:	76	74	70	65	85	73	78	64
649:	69	85	66	79	49	56	82	60
657:	75	64	76	52	88	99	85	69
665:	131	267	179	70	79	71	65	66
673:	71	75	75	69	74	83	74	84
681:	78	85	74	92	83	67	67	67
689:	81	72	76	73	67	58	72	57
697:	86	68	84	70	76	85	108	143
705:	79	80	68	74	66	89	68	93
713:	56	63	64	76	85	81	84	98
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729:	76	74	68	96	57	83	73	60
737:	70	69	66	65	68	71	88	84
745:	65	74	46	60	53	68	57	68
753:	82	81	63	70	72	64	72	59
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777:	61	62	63	80	50	64	70	68
785:	63	176	193	95	70	74	57	61
793:	70	62	70	79	71	65	80	61
801:	62	64	59	60	63	120	234	121
809:	56	53	57	63	66	68	69	79
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825:	54	70	82	72	63	68	81	81
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849:	65	72	70	55	67	65	65	50
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873:	65	71	63	62	68	62	63	74
881:	77	61	64	64	84	68	55	78
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897:	80	75	66	63	61	58	77	60
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913:	83	67	57	62	63	62	68	56
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929:	63	66	62	59	81	228	372	148
937:	59	57	53	68	53	38	72	48
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993:	52	52	56	57	71	39	61	65
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1409:	177	86	37	36	33	28	41	31
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1833:	14	15	9	6	6	16	16	25
1841:	15	11	9	7	9	18	42	89
1849:	116	58	8	9	8	7	8	6
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1889:	9	11	12	9	8	7	4	7
1897:	12	9	12	9	7	2	12	9
1905:	9	7	8	4	6	8	5	9
1913:	9	6	14	7	7	5	9	3
1921:	11	6	12	8	5	6	10	7
1929:	3	5	9	6	10	5	10	14
1937:	14	7	6	8	2	5	6	6
1945:	12	11	7	6	8	4	9	14
1953:	5	5	10	7	7	7	14	8
1961:	4	7	9	8	7	11	10	11
1969:	8	2	8	5	6	4	9	10
1977:	12	5	5	3	7	1	6	4
1985:	4	6	5	4	6	5	4	5
1993:	4	8	1	8	3	7	4	2
2001:	3	6	8	6	8	4	4	2
2009:	7	3	11	10	5	3	5	8
2017:	7	5	7	6	6	4	11	2
2025:	7	4	4	6	5	6	6	4
2033:	3	2	2	9	5	5	3	5
2041:	6	5	5	2	3	6	6	4
2049:	7	5	7	3	8	9	5	5
2057:	2	9	5	3	2	2	6	5
2065:	5	3	3	5	2	4	0	9
2073:	1	5	2	4	1	6	1	6
2081:	4	0	4	1	8	2	2	4
2089:	7	3	8	12	2	2	4	1
2097:	2	6	1	2	1	4	2	2
2105:	3	8	4	4	1	5	2	6
2113:	4	2	1	2	2	14	36	56
2121:	29	6	2	2	2	5	3	2
2129:	8	4	6	3	3	2	1	3
2137:	2	1	3	2	4	5	1	2
2145:	4	1	5	3	3	1	1	4
2153:	7	1	3	2	2	2	0	4
2161:	1	3	4	1	3	7	5	2
2169:	1	2	4	1	1	4	1	1
2177:	5	6	2	5	6	1	3	4
2185:	3	1	5	5	2	2	4	2
2193:	2	4	4	5	3	7	0	4
2201:	1	8	27	110	168	182	59	13
2209:	5	4	0	2	2	1	5	0
2217:	4	3	1	3	1	1	4	1
2225:	4	1	1	3	4	2	3	2
2233:	1	3	2	1	0	0	1	2
2241:	2	2	1	1	0	3	1	0
2249:	1	1	2	2	1	2	3	2
2257:	1	0	2	2	6	2	2	2
2265:	0	0	2	1	2	1	1	1
2273:	0	2	1	2	3	2	2	0
2281:	3	1	2	3	3	1	1	3
2289:	1	0	0	1	4	9	9	9
2297:	1	2	1	2	1	3	0	1
2305:	0	2	3	0	0	0	2	4
2313:	0	3	2	3	2	1	1	0
2321:	3	2	0	0	2	3	1	3
2329:	2	2	2	2	0	1	1	3
2337:	1	0	2	1	2	1	3	1
2345:	1	0	2	0	2	0	0	0

2353:	1	1	1	0	2	1	1	2
2361:	0	0	1	2	2	2	0	0
2369:	0	4	2	0	2	1	0	0
2377:	2	2	2	1	1	1	1	0
2385:	3	2	2	0	0	1	1	3
2393:	0	2	1	0	0	0	0	3
2401:	0	1	0	0	0	0	0	0
2409:	1	1	2	0	0	1	1	0
2417:	1	2	3	2	1	2	2	1
2425:	2	0	0	4	1	2	0	1
2433:	0	1	0	0	2	0	0	1
2441:	1	1	1	0	0	3	13	34
2449:	58	40	12	6	0	0	0	2
2457:	0	1	1	1	1	0	2	0
2465:	1	1	1	1	2	0	0	1
2473:	0	0	1	1	0	0	1	0
2481:	1	1	1	2	1	0	1	1
2489:	3	1	0	1	0	2	1	1
2497:	0	1	1	1	1	2	0	0
2505:	0	2	1	0	0	1	0	0
2513:	0	1	0	0	0	0	0	1
2521:	2	0	1	0	1	1	1	0
2529:	0	0	0	1	0	0	0	0
2537:	0	1	1	0	0	0	1	0
2545:	0	0	0	0	1	1	1	0
2553:	0	0	0	0	0	0	0	1
2561:	0	0	0	0	0	0	0	1
2569:	0	0	2	0	1	0	0	0
2577:	0	0	1	1	0	0	0	0
2585:	0	0	0	1	0	0	0	1
2593:	0	0	0	0	0	0	0	0
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2609:	0	1	0	2	2	3	15	18
2617:	14	4	2	0	0	0	0	0
2625:	1	0	0	0	1	0	0	1
2633:	0	1	0	0	0	0	0	1
2641:	1	0	0	0	1	0	0	0
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2665:	0	1	0	0	0	0	1	0
2673:	0	0	0	0	0	0	0	0
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2697:	0	0	0	0	1	1	0	0
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2713:	0	0	1	0	0	0	1	0
2721:	0	0	0	0	2	1	1	1
2729:	0	1	0	0	0	0	0	0
2737:	0	0	0	1	0	0	0	0
2745:	0	1	0	0	0	0	0	0
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2761:	0	0	1	0	1	0	0	0
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2777:	0	0	0	0	0	0	0	1
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2793:	0	0	0	0	1	0	0	1
2801:	0	0	0	1	0	0	0	0
2809:	0	0	0	0	0	0	1	0
2817:	0	0	0	0	0	1	0	0
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2849:	1	0	0	0	0	1	0	0
2857:	0	0	1	0	0	0	0	1
2865:	0	1	0	0	0	0	0	0
2873:	0	1	1	0	0	0	0	0
2881:	0	1	1	0	0	0	0	0
2889:	0	0	0	0	0	0	2	0
2897:	0	0	0	0	0	0	2	0
2905:	0	0	0	0	0	0	1	0
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3081:	0	0	0	1	0	0	1	0
3089:	0	0	0	0	0	0	0	0
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3217:	1	1	0	0	0	0	0	1
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3361:	0	0	1	0	0	0	0	0
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3377:	0	0	0	1	0	0	0	0
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3441:	0	0	0	1	0	0	0	0
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3465:	0	0	0	0	0	0	0	0
3473:	0	0	0	0	0	0	0	1
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3497:	0	0	0	0	0	0	0	0
3505:	0	0	0	0	0	0	0	0
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3529:	0	0	0	0	0	0	0	0
3537:	0	0	0	0	0	0	0	0
3545:	0	0	0	0	0	1	0	0
3553:	0	0	0	0	0	0	0	0
3561:	0	0	0	0	0	1	0	0
3569:	0	0	0	0	1	0	0	0
3577:	0	0	0	1	1	1	0	0
3585:	0	0	0	0	0	0	0	0
3593:	1	0	0	0	0	1	0	0
3601:	0	0	0	0	0	0	0	0
3609:	0	0	0	0	0	0	0	0
3617:	0	0	0	0	0	0	0	0
3625:	1	0	0	0	0	0	0	1
3633:	0	0	0	0	0	0	1	0
3641:	0	0	0	0	0	1	0	0
3649:	0	0	1	0	0	0	0	0
3657:	0	0	0	0	1	0	0	0
3665:	0	0	0	1	0	0	0	0
3673:	0	0	0	0	0	0	0	0
3681:	0	0	0	0	0	0	0	0
3689:	1	0	1	0	0	0	0	0
3697:	0	0	0	0	0	1	0	0
3705:	0	1	0	0	0	0	0	0
3713:	0	0	0	0	0	0	0	0
3721:	0	0	0	0	0	0	0	0
3729:	0	0	0	0	0	0	0	0
3737:	1	0	0	0	0	0	0	0
3745:	0	0	0	0	0	0	1	0
3753:	0	0	0	0	0	0	1	0
3761:	0	0	0	0	0	0	0	0
3769:	0	0	0	0	1	0	0	0
3777:	0	0	0	0	0	0	0	1
3785:	0	0	0	0	0	1	0	0

3793:	0	0	0	0	0	0	0	1
3801:	0	0	0	0	0	0	0	0
3809:	0	0	0	0	0	0	0	0
3817:	0	0	0	0	0	0	0	0
3825:	0	0	0	0	0	0	0	0
3833:	0	0	0	0	1	0	1	0
3841:	0	0	0	1	0	0	0	0
3849:	0	0	0	0	0	0	0	0
3857:	0	0	0	0	0	0	0	0
3865:	0	0	0	0	0	0	1	0
3873:	0	0	0	0	0	0	0	0
3881:	0	0	0	0	0	0	0	0
3889:	0	0	0	0	0	0	1	0
3897:	0	1	0	0	1	0	0	1
3905:	0	1	0	0	0	0	0	0
3913:	0	0	0	0	0	0	0	0
3921:	0	0	0	0	0	0	1	1
3929:	0	0	0	0	0	0	0	0
3937:	0	0	0	0	0	0	0	0
3945:	0	0	1	0	0	1	0	0
3953:	0	0	0	1	0	0	0	0
3961:	0	0	0	0	0	0	0	0
3969:	0	0	1	0	0	0	0	0
3977:	0	0	0	0	0	0	0	0
3985:	0	0	0	0	0	0	0	1
3993:	0	0	0	0	0	0	0	0
4001:	0	0	0	1	0	0	0	0
4009:	1	0	0	1	0	1	0	0
4017:	1	0	0	0	0	0	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	1	0	0	0	1	0	0
4041:	0	0	0	0	0	0	0	0
4049:	0	1	0	0	0	0	0	0
4057:	0	0	0	0	0	0	0	0
4065:	0	0	0	1	0	0	0	0
4073:	0	1	0	0	0	0	0	0
4081:	0	1	0	0	0	0	0	0
4089:	0	0	0	0	0	0	0	1

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE1.QAF;1

Sample ID : Bkgrnd Check
Sample date : 10-DEC-2011 03:58:39
Elapsed live time: 0 00:15:00.00

Sample quantity : 1.00 EACH
Acquisition date : 10-DEC-2011 03:58:39
Elapsed real time: 0 00:15:00.09

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
Background Counts [1838+/-225]	1784	-0.24	
Background Rate [2.05+/-0.24]	1.98	-0.26	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: KB Approval Date: 12 / 10 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE2.QAF;1

Sample ID : Bkgrnd Check
Sample date : 10-DEC-2011 04:37:58
Elapsed live time: 0 00:15:00.00
Sample quantity : 1.00 EACH
Acquisition date : 10-DEC-2011 04:37:58
Elapsed real time: 0 00:15:00.12

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Counts [3039+/-3853]	2350	-0.18	
*Background Rate [33+/-558]	2.6	-0.05	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: ICB Approval Date: 12 / 10 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE3.QAF;1

Sample ID : Bkgrnd Check
Sample date : 10-DEC-2011 04:19:45
Elapsed live time: 0 00:15:00.00

Sample quantity : 1.00 EACH
Acquisition date : 10-DEC-2011 04:19:45
Elapsed real time: 0 00:15:03.55

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
Background Counts [2.96E+03+/-4.23E+04]	1.68E+03	-0.03	
*Background Rate [3.3+/-47]	1.9	-0.03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: ICB Approval Date: 12 / 10 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE4.QAF;1

Sample ID : Bkgrnd Check
Sample date : 10-DEC-2011 04:00:03
Elapsed live time: 0 00:15:00.00

Sample quantity : 1.00 EACH
Acquisition date : 10-DEC-2011 04:00:03
Elapsed real time: 0 00:15:00.19

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
Background Counts [1424+/-47]	1426	0.04	
Background Rate [1.583+/-0.052]	1.584	0.04	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: ICB Approval Date: 12 / 10 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE1_GAS1102.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00
Sample quantity : 736. GRAM
Acquisition date : 10-DEC-2011 04:18:48
Elapsed real time: 0 00:15:20.80

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	59	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1173	
*Peak Centroid 1332.49 kev	1331	1334	1333	
*Peak Centroid 1836.01 kev	1835	1838	1836	
*Peak FWHM Am-241 59.54 kev	0.5	3.0	1.7	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	1.8	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.0	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.1	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.4	
*DC Activity Am-241 59.54 kev	180	244	176	Below
*DC Activity Cs-137 661.65 kev	68	92	80	
*DC Activity Co-60 1173.22 kev	112	152	131	
*DC Activity Co-60 1332.49 kev	112	152	132	
*DC Activity Y-88 1836.01 kev	236	319	273	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: KCB Approval Date: 12 / 10 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE2_GAS1102.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00
Sample quantity : 736. GRAM
Acquisition date : 10-DEC-2011 03:59:00
Elapsed real time: 0 00:15:15.59

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	60	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1173	
*Peak Centroid 1332.49 kev	1331	1334	1333	
*Peak Centroid 1836.01 kev	1835	1838	1836	
*Peak FWHM Am-241 59.54 kev	0.5	3.0	1.6	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	1.7	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.1	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.2	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.6	
*DC Activity Am-241 59.54 kev	180	244	218	
*DC Activity Cs-137 661.65 kev	68	92	83	
*DC Activity Co-60 1173.22 kev	112	152	134	
*DC Activity Co-60 1332.49 kev	112	152	135	
*DC Activity Y-88 1836.01 kev	236	319	275	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: ICB Approval Date: 12 / 10 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE3_GAS1102.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00
Sample quantity : 736. GRAM
Acquisition date : 10-DEC-2011 05:13:35
Elapsed real time: 0 00:15:47.46

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	60	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1174	
*Peak Centroid 1332.49 kev	1331	1334	1333	
*Peak Centroid 1836.01 kev	1835	1838	1837	
*Peak FWHM Am-241 59.54 kev	0.5	3.0	1.3	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	1.6	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.0	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.1	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.5	
*DC Activity Am-241 59.54 kev	180	244	233	
*DC Activity Cs-137 661.65 kev	68	92	80	
*DC Activity Co-60 1173.22 kev	112	152	132	
*DC Activity Co-60 1332.49 kev	112	152	132	
*DC Activity Y-88 1836.01 kev	236	319	254	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: ICB Approval Date: 12 / 10 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE4_GAS1102.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00
Sample quantity : 736. GRAM
Acquisition date : 10-DEC-2011 04:56:51
Elapsed real time: 0 00:15:16.98

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	59	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1174	
*Peak Centroid 1332.49 kev	1331	1334	1333	
*Peak Centroid 1836.01 kev	1835	1838	1837	
*Peak FWHM Am-241 59.54 kev	0.5	3.0	2.1	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	2.1	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.3	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.4	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.7	
*DC Activity Am-241 59.54 kev	180	244	217	
*DC Activity Cs-137 661.65 kev	68	92	80	
*DC Activity Co-60 1173.22 kev	112	152	132	
*DC Activity Co-60 1332.49 kev	112	152	134	
*DC Activity Y-88 1836.01 kev	236	319	290	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: ICB Approval Date: 12 / 10 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE1.QAF;1

Sample ID : Bkgrnd Check
Sample date : 11-DEC-2011 10:25:33
Elapsed live time: 0 00:15:00.00

Sample quantity : 1.00 EACH
Acquisition date : 11-DEC-2011 10:25:33
Elapsed real time: 0 00:15:00.09

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
Background Counts [1838+/-225]	1833	-0.02	
Background Rate [2.05+/-0.24]	2.04	-0.04	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: AG Approval Date: 12 / 11 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE2.QAF;1

Sample ID : Bkgrnd Check
Sample date : 11-DEC-2011 10:01:39
Elapsed live time: 0 00:15:00.00

Sample quantity : 1.00 EACH
Acquisition date : 11-DEC-2011 10:01:39
Elapsed real time: 0 00:15:00.13

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Counts [3039+/-3853]	2353	-0.18	
*Background Rate [33+/-558]	2.6	-0.05	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: AG Approval Date: 12 / 11 / 11

A

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE3.QAF;1

Sample ID : Bkgrnd Check
Sample date : 11-DEC-2011 10:02:28
Elapsed live time: 0 00:15:00.00

Sample quantity : 1.00 EACH
Acquisition date : 11-DEC-2011 10:02:28
Elapsed real time: 0 00:15:03.10

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
Background Counts [2.96E+03+/-4.23E+04]	1.67E+03	-0.03	
*Background Rate [3.3+/-47]	1.8	-0.03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: AG Approval Date: 12 / 11 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE4.QAF;1

Sample ID : Bkgrnd Check
Sample date : 11-DEC-2011 10:02:52
Elapsed live time: 0 00:15:00.00

Sample quantity : 1.00 EACH
Acquisition date : 11-DEC-2011 10:02:52
Elapsed real time: 0 00:15:00.18

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
Background Counts [1424+/-47]	1425	0.02	
Background Rate [1.583+/-0.052]	1.583	0.02	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: AG Approval Date: 12 / 11 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE1_GAS1102.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00
Sample quantity : 736. GRAM
Acquisition date : 11-DEC-2011 10:02:09
Elapsed real time: 0 00:15:20.96

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	59	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1173	
*Peak Centroid 1332.49 kev	1331	1334	1333	
*Peak Centroid 1836.01 kev	1835	1838	1836	
*Peak FWHM Am-241 59.54 kev	0.5	3.0	1.7	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	1.8	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.1	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.1	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.4	
*DC Activity Am-241 59.54 kev	180	244	180	Below
*DC Activity Cs-137 661.65 kev	68	92	80	
*DC Activity Co-60 1173.22 kev	112	152	133	
*DC Activity Co-60 1332.49 kev	112	152	132	
*DC Activity Y-88 1836.01 kev	236	319	276	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: AG Approval Date: 12 / 11 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE2_GAS1102.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00
Sample quantity : 736. GRAM
Acquisition date : 11-DEC-2011 10:26:10
Elapsed real time: 0 00:15:15.80

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	60	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1173	
*Peak Centroid 1332.49 kev	1331	1334	1332	
*Peak Centroid 1836.01 kev	1835	1838	1836	
*Peak FWHM Am-241 59.54 kev	0.5	3.0	1.6	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	1.7	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.1	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.2	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.5	
*DC Activity Am-241 59.54 kev	180	244	219	
*DC Activity Cs-137 661.65 kev	68	92	82	
*DC Activity Co-60 1173.22 kev	112	152	135	
*DC Activity Co-60 1332.49 kev	112	152	136	
*DC Activity Y-88 1836.01 kev	236	319	275	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: AG Approval Date: 12 / 11 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE3_GAS1102.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00

Sample quantity : 736. GRAM
Acquisition date : 11-DEC-2011 10:52:08
Elapsed real time: 0 00:15:48.14

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	60	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1174	
*Peak Centroid 1332.49 kev	1331	1334	1333	
*Peak Centroid 1836.01 kev	1835	1838	1837	
*Peak FWHM Am-241 59.54 kev	0.5	3.0	1.3	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	1.6	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.1	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.1	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.5	
*DC Activity Am-241 59.54 kev	180	244	238	
*DC Activity Cs-137 661.65 kev	68	92	82	
*DC Activity Co-60 1173.22 kev	112	152	134	
*DC Activity Co-60 1332.49 kev	112	152	131	
*DC Activity Y-88 1836.01 kev	236	319	252	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: AG Approval Date: 12 / 11 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE4_GAS1102.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00

Sample quantity : 736. GRAM
Acquisition date : 11-DEC-2011 11:10:31
Elapsed real time: 0 00:15:17.20

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	59	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1174	
*Peak Centroid 1332.49 kev	1331	1334	1333	
*Peak Centroid 1836.01 kev	1835	1838	1838	Above
*Peak FWHM Am-241 59.54 kev	0.5	3.0	2.1	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	2.1	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.4	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.4	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.6	
*DC Activity Am-241 59.54 kev	180	244	219	
*DC Activity Cs-137 661.65 kev	68	92	82	
*DC Activity Co-60 1173.22 kev	112	152	138	
*DC Activity Co-60 1332.49 kev	112	152	140	
*DC Activity Y-88 1836.01 kev	236	319	294	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: AG Approval Date: 12 / 11 / 11

WESTON SOLUTIONS, INC.

Dysart #2 Uranium Mine

STANDARD LEVEL IV
REPORT OF ANALYSIS

WORK ORDER #11-11066-OR

December 15, 2011

EBERLINE ANALYTICAL/OAK RIDGE LABORATORY
OAK RIDGE, TN

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Eberline Services – Oak Ridge Laboratory

LABORATORY DATA SUPPORT CHECKLIST

MP-001-3

Eberline Services Work Order # 11-11066

The checklist items listed below are to be initialed by appropriate staff upon completion/verification.

Date for Partial	Initials	Date	Initials	Checklist Items
		11.11.11	SWM	Sample Log-In
		11/28/11	KBS	Data Compilation
		12-5-11	MLT	First Technical Data Review
		12/5/11	[illegible]	Second Technical Data Review
		12/7/11	[illegible]	Data Entry/Electronic Deliverable
		12/7/11	[illegible]	Case Narrative
		12/14/11	[illegible]	Electronic Deliverable Proof
		12/14/11	[illegible]	Samples Analyzed within Holding Time Yes? [ ] No? [ ] CES
		12/14/11	[illegible]	QA/QC Review
				Client in Possession of Data Electronic or Hard Copy
				Invoiced by Laboratory

Technical/Clerical Corrections, Signatures Needed, Problems, Etc	Date/Initials

Date package approved by: [signature] 12/15/11

Laboratory Manager — Date

Copy No. _____

SECTION I

CHAIN OF CUSTODY
& pH CHECK

USEPA
DateShipped: 11/10/2011
CarrierName: FedEx
AirbillNo: 797722979081

CHAIN OF CUSTODY RECORD
Dysart #2 Uranium Mine
Contact Name: Kristie Warr
Contact Phone: 713-985-6636

11-11066

No: TO0035110901-111110-0002
Cooler #: 1
Lab: Eberline Services
Lab Phone: 865-481-0683

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Container	Preservative	MS/MSD	Samp_Concentration	Sampler
	DY2-11-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:35	16 oz jar	None	N	143,634 cpm	START
	DY2-17-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:37	16 oz jar	None	N	198,698 cpm	START
	DY2-17-32-111109	Gamma Spectroscopy	Soil	11/9/2011	08:37	16 oz jar	None	N	198,698 cpm	START
	DY2-32-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:46	16 oz jar	None	N	190,346 cpm	START
	DY2-33-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:51	16 oz jar	None	N	149,740 cpm	START
	DY2-41-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:15	16 oz jar	None	N	145,036 cpm	START
	DY2-44-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:10	16 oz jar	None	N	139,861 cpm	START
	DY2-48-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:05	16 oz jar	None	N	123,889 cpm	START
	DY2-65-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:31	16 oz jar	None	N	104,090 cpm	START
	DY2-77-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:29	16 oz jar	None	N	70,936 cpm	START
	DY2-BKGD-E-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:25	16 oz jar	None	N	17,123 cpm	START
	DY2-BKGD-N-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:15	16 oz jar	None	N	18,478 cpm	START
	DY2-BKGD-S-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:45	16 oz jar	None	N	17,866 cpm	START
	DY2-BKGD-W-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:00	16 oz jar	None	N	19,017 cpm	START
	MD-01-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:19	16 oz jar	None	N	104,285 cpm	START
4	ST1-01-111108	Gamma Spectroscopy	Surface Water	11/8/2011	10:40	4 L cubitainer	4 C	N	<25,000 cpm	START
	ST1-01-111108	Isotopic U, Isotopic Th (HOLD)	Surface Water	11/8/2011	10:40	500mL Polyethylene	HNO3 pH<2	N	<25,000 cpm	START

Special Instructions: Level IV Deliverable, Standard TAT. HOLD Alpha Spec for Isotopic U and Isotopic Th ASTM 3972-90M until Gamma Spec results are aquired.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
17/Samples	[illegible]	11/9/11	Jason M[illegible]	11.11.11	0900						

REC'D NOV 11 2011

EBERLINE SERVICES Oak Ridge Laboratory	Internal Chain of Custody	Work Order #	11-11066
		Lab Deadline	12/5/2011
		Analysis	Gamma - Level 4
		Sample Matrix	Water

Comments	Sample Fraction	HP 210 / 270 Detector Activity	Storage Location
KBS 11/23/11 ~~21 day ingrowth~~: Report Ac228, Bi214, K40, Pa234m, Pb212/214, Th234, Tl208, Ra226 from Bi214 & any positives.	04	26	U1.2

	Location (circle one)					Initials	Date
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room	MK	22Nov11
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room	MK	23Nov11 0730
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room	[illegible]	11/27/11 0770
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room	[illegible]	11/28/11 0785
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		

EBERLINE SERVICES

Sample Receiving Report
(Volumes, pH, & CPM)

Internal Work Order: **11-11066**

Received By: JMCKAMEY

FR	ClientID	# Btls	Comments	Matrix	Storage	Rec Vol Ttl	CPM Max
01	LCS	0		WA	U1.2		
02	BLANK	0		WA	U1.2		
03	DUP	0		WA	U1.2		
04	ST1-01-111108	2		WA	U1.2	4.26	26
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	7	<2	3.7600	26
			2	<2	<2	0.5000	20

11/11/11

Received by: Justin McKamey Date: 11-11-11

MP-001, Rev 5
Effective: 11/22/02

0007

SECTION II

SAMPLE ACKNOWLEDGEMENT

Client Name	Contract/PO	Project Type	Date Received	Required Turnaround Days	Eberline Services Work Order
Weston Solutions, Inc.	0070138	Environmental	11/11/2011	28	11-11066
Project Name	**Client WO**	**Sample Disp**	**Lab Deadline**	**Internal Deadline**	**Client Deadline**
0070138 U Mines	Dysart #2 Uranium Mine	W	12/05/2011	12/08/2011	12/09/2011

Internal ID	Client ID	Sample Date	Matrix	Storage	Gamma	Ttl
01	LCS	11/11/11	WA	U1.2	X	1
02	BLANK	11/11/11	WA	U1.2	X	1
03	DUP	11/11/11	WA	U1.2	X	1
04	ST1-01-111108	11/08/11 10:40	WA	U1.2	X	1
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
	Totals Per Analysis (non QA samples)				1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

EBERLINE SERVICES

Sample Log In Report

Oak Ridge Laboratory
601 Scarboro Rd.
Oak Ridge, TN 37830

Voice: (865) 481-0683
Fax: (865) 483-4621

Invoice	ACCOUNTS PAYABLE Weston Solutions, Inc. 5599 San Felipe Suite 700 Houston, TX 77056
Voice	713-985-6686
Fax	713-985-6703
Contact	Kristie Warr
Voice	713-985-6636
Fax	713-985-6703

Report Data	Kristie Warr Weston Solutions, Inc. 5599 San Felipe Suite 700 Houston, TX 77056
Voice	713-985-6636
Fax	713-985-6703

Printed: 11/11/2011 11:33 AM

Eberline Services – Oak Ridge Laboratory

SAMPLE RECEIPT CHECKLIST
MP-001-2

WORK ORDER # 11-11066

SAMPLE MATRIX/MATRICES: (CIRCLE ONE OR BOTH)

AQUEOUS NON-AQUEOUS

(CIRCLE EITHER YES, NO, OR N/A)

WERE SAMPLES:

Received in good condition?	Y	N	
If aqueous, properly preserved	Y	N	N/A

WERE CHAIN OF CUSTODY SEALS:

Present on outside of package?	Y	N
Unbroken on outside of package?	Y	N
Present on samples?	Y	N
Unbroken on samples?	Y	N
Was chain of custody present upon sample receipt?	Y	N

IF THE RESPONSE TO ANY OF THE ABOVE IS **NO**, A DISCREPANT SAMPLE RECEIPT REPORT (DSR) HAS BEEN ISSUED.

REMARKS: (1) 4L cube of unpreserved H_2O.
(1) .500mL of preserved H_2O.

SIGNATURE: Justin McKay DATE: 11-11-11

SECTION III

CASE NARRATIVE

EBERLINE SERVICES

EBERLINE ANALYTICAL CORPORATION
601 SCARBORO ROAD
OAK RIDGE, TENNESSEE 37830
PHONE (865) 481-0683
FAX (865) 483-4621

EBS-OR-33096

December 15, 2011

Kristie Warr
Weston Solutions, Inc.
5599 San Felipe Suite 700
Houston, TX 77056

CASE NARRATIVE
Work Order # 11-11066-OR

SAMPLE RECEIPT

This work order contains one water sample received 11/11/2011. This sample was analyzed by Gamma Spectroscopy.

CLIENT ID	LAB ID
ST1-01-111108	11-11066-04

ANALYTICAL METHODS

Gamma Spectroscopy was performed using EPA Method 901.1 Modified.

ANALYTICAL RESULTS

Combined Standard Uncertainty is reported at 2-sigma value.

GAMMA SPECTROSCOPY

Sample for Gamma Spectroscopy analysis was prepared by transferring a known mass/aliquot of the prepared and homogenized sample to a standard geometry container. Sample was counted on a High Purity Germanium (HPGe) gamma ray detector.

Sample demonstrated acceptable results for all gamma-emitting radionuclides as reported. The method blank demonstrated acceptable results for all radionuclides as reported. Results for the Actinium-228 and Bismuth-214 duplicate demonstrated a high relative percent difference; however, normalized difference is within acceptable limits for the analytical technique. Results for the Potassium-40 duplicate demonstrated an acceptable relative percent difference and normalized difference. Results for the Cobalt-60 and Cesium-137 laboratory control sample demonstrated an acceptable percent recovery.

CERTIFICATION OF ACCURACY

I certify that this data report is in compliance with the terms and conditions of the Purchase Order, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the cognizant project manager or his/her designee to be accurate as verified by the following signature.

M.R. McDougall
Laboratory Manager

Date: 12/15/2011

SECTION IV

ANALYTICAL RESULTS SUMMARY

Eberline Analytical
Final Report of Analysis

Report To:	Work Order Details:	
Kristie Warr	SDG:	11-11066
Weston Solutions, Inc.	Purchase Order:	0070138
5599 San Felipe Suite 700	Analysis Category:	ENVIRONMENTAL
Houston, TX 77056	Sample Matrix:	WA

Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-11066-01	LCS	KNOWN	11/11/11 00:00	11/11/2011	11/26/2011	11-11066	Cobalt-60	EPA 901.1 Modified	1.94E+05	7.65E+03			pCi/l
11-11066-01	LCS	KNOWN	11/11/11 00:00	11/11/2011	11/26/2011	11-11066	Cesium-137	EPA 901.1 Modified	1.21E+05	4.85E+03			pCi/l
11-11066-01	LCS	SPIKE	11/11/11 00:00	11/11/2011	11/26/2011	11-11066	Cobalt-60	EPA 901.1 Modified	1.99E+05	1.36E+04	1.70E+04	6.63E+02	pCi/l
11-11066-01	LCS	SPIKE	11/11/11 00:00	11/11/2011	11/26/2011	11-11066	Cesium-137	EPA 901.1 Modified	1.27E+05	1.24E+04	1.40E+04	4.97E+02	pCi/l
11-11066-02	MBL	BLANK	11/11/11 00:00	11/11/2011	11/25/2011	11-11066	Actinium-228	EPA 901.1 Modified	-3.15E+00	8.27E+00	8.27E+00	1.44E+01	pCi/l
11-11066-02	MBL	BLANK	11/11/11 00:00	11/11/2011	11/25/2011	11-11066	Bismuth-214	EPA 901.1 Modified	6.40E+00	7.15E+00	7.16E+00	1.00E+01	pCi/l
11-11066-02	MBL	BLANK	11/11/11 00:00	11/11/2011	11/25/2011	11-11066	Potassium-40	EPA 901.1 Modified	-9.39E+00	2.49E+01	2.49E+01	4.65E+01	pCi/l
11-11066-02	MBL	BLANK	11/11/11 00:00	11/11/2011	11/25/2011	11-11066	Protactinium-234m	EPA 901.1 Modified	2.51E+01	2.24E+02	2.24E+02	4.03E+02	pCi/l
11-11066-02	MBL	BLANK	11/11/11 00:00	11/11/2011	11/25/2011	11-11066	Lead-212	EPA 901.1 Modified	-1.69E+00	3.50E+00	3.50E+00	6.09E+00	pCi/l
11-11066-02	MBL	BLANK	11/11/11 00:00	11/11/2011	11/25/2011	11-11066	Lead-214	EPA 901.1 Modified	7.77E+00	7.48E+00	7.49E+00	8.32E+00	pCi/l
11-11066-02	MBL	BLANK	11/11/11 00:00	11/11/2011	11/25/2011	11-11066	Radium-226	EPA 901.1 Modified	6.40E+00	7.15E+00	7.16E+00	1.00E+01	pCi/l
11-11066-02	MBL	BLANK	11/11/11 00:00	11/11/2011	11/25/2011	11-11066	Thorium-234	EPA 901.1 Modified	-5.31E+01	3.45E+01	3.46E+01	5.92E+01	pCi/l
11-11066-02	MBL	BLANK	11/11/11 00:00	11/11/2011	11/25/2011	11-11066	Thallium-208	EPA 901.1 Modified	-3.94E+00	6.21E+00	6.21E+00	1.07E+01	pCi/l
11-11066-03	DUP	ST1-01-111108	11/08/11 10:40	11/11/2011	11/25/2011	11-11066	Actinium-228	EPA 901.1 Modified	-2.55E+00	7.00E+00	7.00E+00	1.27E+01	pCi/l
11-11066-03	DUP	ST1-01-111108	11/08/11 10:40	11/11/2011	11/25/2011	11-11066	Bismuth-214	EPA 901.1 Modified	3.26E+00	4.12E+00	4.13E+00	7.74E+00	pCi/l
11-11066-03	DUP	ST1-01-111108	11/08/11 10:40	11/11/2011	11/25/2011	11-11066	Potassium-40	EPA 901.1 Modified	4.34E+01	3.35E+01	3.35E+01	3.02E+01	pCi/l
11-11066-03	DUP	ST1-01-111108	11/08/11 10:40	11/11/2011	11/25/2011	11-11066	Protactinium-234m	EPA 901.1 Modified	3.30E+02	2.58E+02	2.58E+02	3.50E+02	pCi/l
11-11066-03	DUP	ST1-01-111108	11/08/11 10:40	11/11/2011	11/25/2011	11-11066	Lead-212	EPA 901.1 Modified	-3.86E-01	3.26E+00	3.26E+00	5.51E+00	pCi/l
11-11066-03	DUP	ST1-01-111108	11/08/11 10:40	11/11/2011	11/25/2011	11-11066	Lead-214	EPA 901.1 Modified	-2.15E-01	3.80E+00	3.80E+00	6.87E+00	pCi/l
11-11066-03	DUP	ST1-01-111108	11/08/11 10:40	11/11/2011	11/25/2011	11-11066	Radium-226	EPA 901.1 Modified	3.26E+00	4.12E+00	4.13E+00	7.74E+00	pCi/l
11-11066-03	DUP	ST1-01-111108	11/08/11 10:40	11/11/2011	11/25/2011	11-11066	Thorium-234	EPA 901.1 Modified	-1.28E+01	3.99E+01	3.99E+01	7.09E+01	pCi/l
11-11066-03	DUP	ST1-01-111108	11/08/11 10:40	11/11/2011	11/25/2011	11-11066	Thallium-208	EPA 901.1 Modified	-2.54E+00	5.75E+00	5.75E+00	1.00E+01	pCi/l
11-11066-04	DO	ST1-01-111108	11/08/11 10:40	11/11/2011	11/26/2011	11-11066	Actinium-228	EPA 901.1 Modified	3.29E-02	8.06E+00	8.06E+00	1.40E+01	pCi/l
11-11066-04	DO	ST1-01-111108	11/08/11 10:40	11/11/2011	11/26/2011	11-11066	Bismuth-214	EPA 901.1 Modified	1.11E+01	6.02E+00	6.05E+00	8.93E+00	pCi/l
11-11066-04	DO	ST1-01-111108	11/08/11 10:40	11/11/2011	11/26/2011	11-11066	Potassium-40	EPA 901.1 Modified	3.88E+01	2.73E+01	2.73E+01	2.69E+01	pCi/l
11-11066-04	DO	ST1-01-111108	11/08/11 10:40	11/11/2011	11/26/2011	11-11066	Protactinium-234m	EPA 901.1 Modified	4.10E+01	2.45E+02	2.45E+02	4.61E+02	pCi/l
11-11066-04	DO	ST1-01-111108	11/08/11 10:40	11/11/2011	11/26/2011	11-11066	Lead-212	EPA 901.1 Modified	1.65E+00	3.20E+00	3.20E+00	5.64E+00	pCi/l
11-11066-04	DO	ST1-01-111108	11/08/11 10:40	11/11/2011	11/26/2011	11-11066	Lead-214	EPA 901.1 Modified	6.30E-01	3.69E+00	3.69E+00	6.78E+00	pCi/l
11-11066-04	DO	ST1-01-111108	11/08/11 10:40	11/11/2011	11/26/2011	11-11066	Radium-226	EPA 901.1 Modified	1.11E+01	6.02E+00	6.05E+00	8.93E+00	pCi/l
11-11066-04	DO	ST1-01-111108	11/08/11 10:40	11/11/2011	11/26/2011	11-11066	Thorium-234	EPA 901.1 Modified	-2.42E+01	3.91E+01	3.91E+01	6.90E+01	pCi/l
11-11066-04	DO	ST1-01-111108	11/08/11 10:40	11/11/2011	11/26/2011	11-11066	Thallium-208	EPA 901.1 Modified	-3.99E+00	6.02E+00	6.03E+00	1.02E+01	pCi/l

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

EBERLINE SERVICES

EBERLINE ANALYTICAL CORPORATION
601 SCARBORO ROAD OAK RIDGE, TN 37830 865/481-0683 FAX 865/483-4621

SECTION V

ANALYTICAL STANDARD

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

GAW-11
~~CAS-110~~
~~LPGAS~~ -

83906-416

500 mL Solid in 590G GA-MA Beaker

Customer: Eberline Services / Eberline Analytical Corp.
P.O. No.: 6705, Item 1
Reference Date: 01-Jan-2011 12:00 PM EST **Grams of Master Source:** 0.016757

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101. Density of solid matrix 1.15 g/cc.

Nuclide	Gamma-Ray Energy (keV)	Half-Life, Days	Master Source* γps/gram	This Source γps	Uncertainty, % Type u_A	u_B	U	Calibration Method
Am-241	59.5	1.580E+05	———	2.069E+03	0.1	1.7	3.5	4π LS
Cd-109	88.0	4.626E+02	1.697E+05	2.844E+03	0.8	2.3	4.9	HPGe
Co-57	122.1	2.718E+02	8.711E+04	1.460E+03	0.5	2.0	4.1	HPGe
Ce-139	165.9	1.376E+02	1.247E+05	2.090E+03	0.5	1.9	3.9	HPGe
Hg-203	279.2	4.661E+01	2.753E+05	4.613E+03	0.4	1.9	3.9	HPGe
Sn-113	391.7	1.151E+02	1.769E+05	2.964E+03	0.5	1.9	3.9	HPGe
Cs-137	661.7	1.098E+04	1.109E+05	1.858E+03	0.7	1.9	4.0	HPGe
Y-88	898.0	1.066E+02	4.224E+05	7.078E+03	0.5	1.9	3.9	HPGe
Co-60	1173.2	1.925E+03	2.142E+05	3.589E+03	0.6	1.9	4.0	HPGe
Co-60	1332.5	1.925E+03	2.143E+05	3.591E+03	0.6	1.9	4.0	HPGe
Y-88	1836.1	1.066E+02	4.472E+05	7.494E+03	0.5	1.9	3.9	HPGe

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

Calibration Methods: 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1964

Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

0017

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404•352•8677
Fax 404•352•2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

GAW-10

81336-416

500 mL Solid in 590G GA-MA Beaker

Customer: Eberline Services / Eberline Analytical Corp. / Oak Ridge
P.O. No.: 5964, Item 1
Reference Date: 01-Jan-2010 12:00 PM EST **Grams of Master Source:** 0.017424

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solutions. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 1, February, 1979, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101. Density of solid matrix 1.15 g/cc.

Nuclide	Gamma-Ray Energy (keV)	Half-Life, Days	Master Source* γps/gram	This Source γps	Uncertainty, % Type u_A	u_B	U	Calibration Method
Am-241	59.5	1.580E+05	———	2.017E+03	0.1	1.7	3.5	4π LS
Cd-109	88.0	4.626E+02	1.606E+05	2.798E+03	0.4	2.3	4.7	HPGe
Co-57	122.1	2.718E+02	8.471E+04	1.476E+03	0.5	2.0	4.1	HPGe
Ce-139	165.9	1.376E+02	1.209E+05	2.107E+03	0.4	1.9	3.9	HPGe
Hg-203	279.2	4.661E+01	2.726E+05	4.750E+03	0.4	1.9	3.9	HPGe
Sn-113	391.7	1.151E+02	1.672E+05	2.913E+03	0.5	1.9	3.9	HPGe
Cs-137	661.7	1.098E+04	1.096E+05	1.910E+03	0.6	1.9	4.0	HPGe
Y-88	898.0	1.066E+02	4.077E+05	7.104E+03	0.4	1.9	3.9	HPGe
Co-60	1173.2	1.925E+03	2.055E+05	3.581E+03	0.5	1.9	3.9	HPGe
Co-60	1332.5	1.925E+03	2.056E+05	3.582E+03	0.7	1.9	4.0	HPGe
Y-88	1836.1	1.066E+02	4.308E+05	7.506E+03	0.5	1.9	3.9	HPGe

* Master Source refers to Analytics' 8-isotope mixture which is calibrated quarterly.

Calibration Methods: 4π LS - 4 pi Liquid Scintillation Counting, HPGe - High Purity Germanium Gamma-Ray Spectrometer, IC - Ionization Chamber. **Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

(Certificate continued on reverse side)

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1960

Corporate Office

Laboratory
1380 Seaboard Industrial Blvd., Atlanta, Georgia 30318

Comments:
Diameter of active area: 47 mm. Tall loose petri.
This standard will expire one year after the reference date.

Source Prepared by: MITaskaeva
M. I. Taskaeva, Radiochemist

QA Approved: [signature]
J. D. McCorvey, QA Manager Alternate

Date: 1/29/10

SECTION VI

QUALITY CONTROL SAMPLE RESULTS SUMMARY

WO	Analysis	Run	Activity Units	Aliquot Units	Client Name
11-11066	Gamma	1	pCi	I	Weston Solutions, Inc.

Laboratory Control Sample

Analyte	Normalized Difference	LCS Measured	CSU Measured	LCS Expected	Uncert. Expected	Known	Known Error	Result	CSU	Standard ID	Standard ACT (dpm)	Standard Error	Standard Added (g)
CO-60	0.62	102.90%	8.54%	100.00%	3.95%	1.94E+05	7.65E+03	1.99E+05	1.70E+04	GAW-10	1.94E+05	7.65E+03	5.00E-01
CS-137	0.74	104.46%	11.04%	100.00%	4.00%	1.21E+05	4.85E+03	1.27E+05	1.40E+04	GAW-10	1.21E+05	4.85E+03	5.00E-01

Matrix Spike

Analyte	Normalized Difference	MS Actual % Rec	Expected MS Result	Expected MS Uncert	Actual MS Result	Actual MS CSU	Sample Result	Sample CSU	Sample Aliquot	Standard ID	Standard ACT (dpm)	Standard Error %	Standard Added (g)

Replicate Sample

Analyte	Normalized Difference	RPD	Original Result	Original CSU	Replicate Result	Replicate CSU
AC-228	0.48	205.21	3.29E-02	8.06E+00	-2.55E+00	7.00E+00
BI-214	2.09	108.94	1.11E+01	6.05E+00	3.26E+00	4.13E+00
K-40	0.21	11.23	3.88E+01	2.73E+01	4.34E+01	3.35E+01

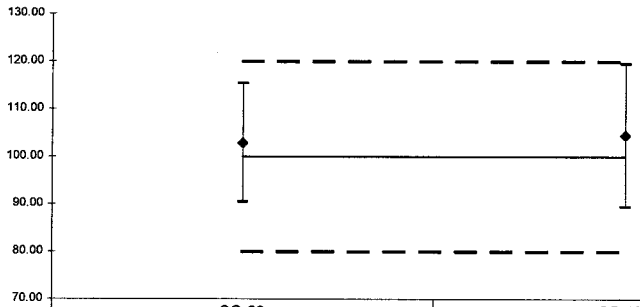
QC Summary

Analyte	LCS Relative Bias	LCS % R	LCS ND	MS % R	MS ND	Rep RPD	Rep ND
AC-228	1.03	OK	OK	<CS-137	AC-228>	NA	
BI-214	1.04	OK	OK	<CO-60	BI-214>	NA	OK
K-40					K-40>	NA	OK

Version

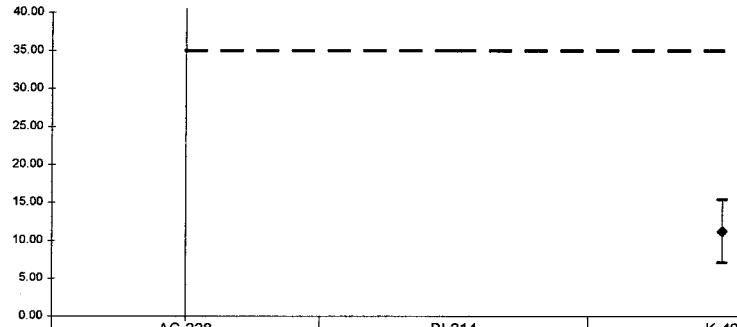
WO	Analysis	Run	Activity Units	Aliquot Units	Client Name
11-11066	Gamma	1	pCi	I	Weston Solutions, Inc.

LCS % Recovery



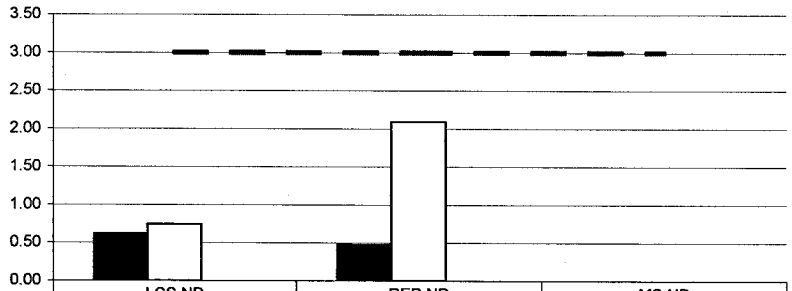
	CO-60	CS-137
Lower Error	90.41	89.42
Upper Error	115.38	119.50
%R	102.90	104.46
LCL	80	80
Mean	100	100
UCL	120	120

Replicate Sample RPD



	AC-228	BI-214	K-40
Lower Error	-407.55	147.64	15.39
Upper Error	817.97	70.24	7.07
RPD	205.21	108.94	11.23
CL	35	35	35

Normalized Difference



	LCS ND	REP ND	MS ND
CO-60	0.62	0.48	0.00
CS-137	0.74	2.09	0.00
	0.00	0.00	0.00
UCL	3	3	3

No Matrix Spike

Version

SECTION VII

LABORATORY TECHNICIAN'S NOTES
&
RUN LOGS

EBERLINE SERVICES

Work Order Analysis Notes

Oak Ridge Laboratory
601 Scarboro Rd.
Oak Ridge, TN 37830
Voice: 865.481.0683
www.eberlineservices.com

Internal Work Order	11-11066
Analysis Code	Gamma
Run Number	1

#	Date	Dept	User	Notes
1	11/22/11 10:26	PREP	MHIGHTOWER	Samples were aliquoted, concentrated, and submitted to count room

GE1

DATE	SAMPLE #	Client	Lost Time	CT Time	Analysis	Tech
11/25/11	GAW 11	Lab	0507	15 min	γ	ICB
11/25/11	1110134-19	USA	0602	1 hr	γ	ICB
11/25/11	1110141-05	MPA	0703	1 hr	γ	ICB
11/25/11	1110141-08	MPA	0803	1 hr	γ	ICB
11/25/11	1110141-12	MPA	0904	1 hr	γ	ICB
11/25/11	1110145-03	CT. Dept.	1004	1 hr	γ	ICB
11/25/11	1110145-04	CT. Dept.	1105	1 hr	γ	ICB
11/25/11	1110145-09	CT. Dept.	1205	1 hr	γ	ICB
11/25/11	1110145-12	CT. Dept.	1306	1 hr	γ	ICB
11/25/11	1111066-03	Weston	1406	2 hrs	γ	ICB
11/26/11	GAS 1102	Lab	0425	15 min	γ	ICB
11/26/11	GAS 1102	Lab	0443	15 min	γ	ICB
11/26/11	GAW 11	Lab	0503	15 min	γ	ICB
11/26/11	Daily Bkgd	Lab	0520	15 min	γ	ICB
11/26/11	1110146-05	CT. Dept.	0540	1 hr	γ	ICB
11/26/11	1110146-09	CT. Dept.	0641	1 hr	γ	ICB
11/26/11	1110135-03	USA	0741	1 hr	γ	ICB
11/26/11	1110135-04	USA	0842	1 hr	γ	ICB
11/26/11	1110135-09	USA	0942	1 hr	γ	ICB
11/26/11	1111066-01	Weston	1043	30 mins	γ	ICB
11/26/11	1110135-15	USA	1114	1 hr	γ	ICB
11/26/11	1111066-04	Weston	1216	2 hrs	γ	ICB

GE2

DATE	Sample #	Client	Load Time	CT Time	Analysis	Tech
11/20/11	GAS 1101	Lab	0429	15 mins	γ	ICB
11/20/11	GAS 1102	Lab	0447	15 mins	γ	ICB
11/20/11	Daily Blank	Lab	0507	15 min	γ	ICB
11/20/11	GAW 11	Lab	0524	15 min	γ	ICB
11/20/11	1110134-20	USA	0603	1 hr	γ	ICB
11/20/11	1110141-04	MPA	0704	1 hr	γ	ICB
11/20/11	1110141-09	MPA	0805	1 hr	γ	ICB
11/20/11	1110141-13	MPA	0905	1 hr	γ	ICB
11/20/11	1110145-05	CT. Dept	1006	1 hr	γ	ICB
11/20/11	1110145-07	CT. Dept	1106	1 hr	γ	ICB
11/20/11	1110145-10	CT. Dept.	1206	1 hr	γ	ICB
11/20/11	1110145-13	CT. Dept.	1307	1 hr	γ	ICB
11/20/11	1111066-02	Westm	1409	2 hrs	γ	ICB

SECTION VIII

ANALYTICAL DATA (GAMMA SPECTROSCOPY)

Eberline Services
Oak Ridge Laboratory
Analysis Sheet

11-11066
Gamma
Run 1

Work Order	11-11066
Analysis Code	Gamma
Run	1
Date Received	11/11/2011
Lab Deadline	12/5/2011
Client	Weston Solutions, Inc.
Project	0070138 U Mines
Report Level	4
Activity Units	pCi
Aliquot Units	l
Matrix	WA
Method	EPA 901.1 Modified
Instrument Type	Gamma Spectroscopy
Radiometric Tracer	
Radiometric Sol#	
Tracer Act (dpm/g)	
Carrier	
Carrier Conc (mg/ml)	

Internal Fraction	Sample Desc	Client ID	Login CPM	Sample Date	Sample Aliquot
01	LCS	LCS		11/11/11 00:00	1.0000E+00
02	MBL	BLANK		11/11/11 00:00	2.0000E+00
03	DUP	ST1-01-111108	26	11/08/11 10:40	2.0000E+00
04	DO	ST1-01-111108	26	11/08/11 10:40	2.0000E+00

* SAF1 is used for Gross Alpha and all other radionuclides. SAF2 is used for Gross Beta only. ** Actual mass exceeded the calibration curve range. Results should be qualified as appropriate.

0320

11-11066
Gamma
Run 1

Internal Fraction	Sample Desc	Tracer Aliquot (g)	Tracer Total ACT (dpm)	Radiometric Tracer (pCi)	Radiometric % Rec	Grav Carrier Added (ml)	Grav Filter Tare (g)	Grav Filter Final (g)	Grav Filter Net (g)	Grav % Rec	Mean % Rec	SAF 1*	SAF 2*
01	LCS				0.00								
02	MBL				0.00								
03	DUP				0.00								
04	DO				0.00								

* SAF1 is used for Gross Alpha and all other radionuclides. SAF2 is used for Gross Beta only. ** Actual mass exceeded the calibration curve range. Results should be qualified as appropriate.

11-11066
Gamma
Run 1

Internal Fraction	Sample Desc	Rough Prep Date	Rough Prep By	Prep Date	Prep By	Sep t0 Date/Time	Sep t0 By	Sep t1 Date/Time	Sep t1 By
01	LCS								
02	MBL								
03	DUP								
04	DO								

* SAF1 is used for Gross Alpha and all other radionuclides. SAF2 is used for Gross Beta only. ** Actual mass exceeded the calibration curve range. Results should be qualified as appropriate.

Eberline Services
Oak Ridge Laboratory

Preliminary Data Report & Analytical Calculations

Work Order: 11-11066-Gamma-1

Printed: 11/28/2011 9:42 AM

Lab Fraction	Nuclide	Sample Desc	Client Identification	Activity Units	Results	Error Estimate	MDA	LSC Known	LCS %R	LCS Flag	RPD Flag	Sample Date	Sample Aliquot	Counting Date/Time	Identified
01	CO-60	LCS	LCS	pCi/l	1.99E+05	1.36E+04	6.63E+02	1.94E+05	102.90	OK		11/11/11 00:00	1.00E+00	11/26/11 10:43	YES
01	CS-137	LCS	LCS	pCi/l	1.27E+05	1.24E+04	4.97E+02	1.21E+05	104.46	OK		11/11/11 00:00	1.00E+00	11/26/11 10:43	YES
02	AC-228	MBL	BLANK	pCi/l	-3.15E+00	8.27E+00	1.44E+01					11/11/11 00:00	2.00E+00	11/25/11 14:09	NO
02	BI-214	MBL	BLANK	pCi/l	6.40E+00	7.15E+00	1.00E+01					11/11/11 00:00	2.00E+00	11/25/11 14:09	NO
02	K-40	MBL	BLANK	pCi/l	-9.39E+00	2.49E+01	4.65E+01					11/11/11 00:00	2.00E+00	11/25/11 14:09	NO
02	PA-234M	MBL	BLANK	pCi/l	2.51E+01	2.24E+02	4.03E+02					11/11/11 00:00	2.00E+00	11/25/11 14:09	NO
02	PB-212	MBL	BLANK	pCi/l	-1.69E+00	3.50E+00	6.09E+00					11/11/11 00:00	2.00E+00	11/25/11 14:09	NO
02	PB-214	MBL	BLANK	pCi/l	7.77E+00	7.48E+00	8.32E+00					11/11/11 00:00	2.00E+00	11/25/11 14:09	NO
02	RA-226	MBL	BLANK	pCi/l	6.40E+00	7.15E+00	1.00E+01					11/11/11 00:00	2.00E+00	11/25/11 14:09	NO
02	TH-234	MBL	BLANK	pCi/l	-5.31E+01	3.45E+01	5.92E+01					11/11/11 00:00	2.00E+00	11/25/11 14:09	NO
02	TL-208	MBL	BLANK	pCi/l	-3.94E+00	6.21E+00	1.07E+01					11/11/11 00:00	2.00E+00	11/25/11 14:09	NO
03	AC-228	DUP	ST1-01-111108	pCi/l	-2.55E+00	7.00E+00	1.27E+01				NA	11/08/11 10:40	2.00E+00	11/25/11 14:06	NO
03	BI-214	DUP	ST1-01-111108	pCi/l	3.26E+00	4.12E+00	7.74E+00				NA	11/08/11 10:40	2.00E+00	11/25/11 14:06	NO
03	K-40	DUP	ST1-01-111108	pCi/l	4.34E+01	3.35E+01	3.02E+01				NA	11/08/11 10:40	2.00E+00	11/25/11 14:06	YES
03	PA-234M	DUP	ST1-01-111108	pCi/l	3.30E+02	2.58E+02	3.50E+02					11/08/11 10:40	2.00E+00	11/25/11 14:06	YES
03	PB-212	DUP	ST1-01-111108	pCi/l	-3.86E-01	3.26E+00	5.51E+00					11/08/11 10:40	2.00E+00	11/25/11 14:06	NO
03	PB-214	DUP	ST1-01-111108	pCi/l	-2.15E-01	3.80E+00	6.87E+00					11/08/11 10:40	2.00E+00	11/25/11 14:06	NO
03	RA-226	DUP	ST1-01-111108	pCi/l	3.26E+00	4.12E+00	7.74E+00					11/08/11 10:40	2.00E+00	11/25/11 14:06	NO
03	TH-234	DUP	ST1-01-111108	pCi/l	-1.28E+01	3.99E+01	7.09E+01					11/08/11 10:40	2.00E+00	11/25/11 14:06	NO
03	TL-208	DUP	ST1-01-111108	pCi/l	-2.54E+00	5.75E+00	1.00E+01					11/08/11 10:40	2.00E+00	11/25/11 14:06	NO
04	AC-228	DO	ST1-01-111108	pCi/l	3.29E-02	8.06E+00	1.40E+01					11/08/11 10:40	2.00E+00	11/26/11 12:15	NO
04	BI-214	DO	ST1-01-111108	pCi/l	1.11E+01	6.02E+00	8.93E+00					11/08/11 10:40	2.00E+00	11/26/11 12:15	NO
04	K-40	DO	ST1-01-111108	pCi/l	3.88E+01	2.73E+01	2.69E+01					11/08/11 10:40	2.00E+00	11/26/11 12:15	YES
04	PA-234M	DO	ST1-01-111108	pCi/l	4.10E+01	2.45E+02	4.61E+02					11/08/11 10:40	2.00E+00	11/26/11 12:15	NO
04	PB-212	DO	ST1-01-111108	pCi/l	1.65E+00	3.20E+00	5.64E+00					11/08/11 10:40	2.00E+00	11/26/11 12:15	NO
04	PB-214	DO	ST1-01-111108	pCi/l	6.30E-01	3.69E+00	6.78E+00					11/08/11 10:40	2.00E+00	11/26/11 12:15	NO
04	RA-226	DO	ST1-01-111108	pCi/l	1.11E+01	6.02E+00	8.93E+00					11/08/11 10:40	2.00E+00	11/26/11 12:15	NO
04	TH-234	DO	ST1-01-111108	pCi/l	-2.42E+01	3.91E+01	6.90E+01					11/08/11 10:40	2.00E+00	11/26/11 12:15	NO
04	TL-208	DO	ST1-01-111108	pCi/l	-3.99E+00	6.02E+00	1.02E+01					11/08/11 10:40	2.00E+00	11/26/11 12:15	NO

Count Room Report
Client: Weston Solutions, Inc.

11-11066-Gamma-1 (pCi/l) in WA
Tracer ID:

2hrs

Internal Fraction	Sample Desc	Client ID	Sample Date	Sample Aliquot	Tracer Aliquot (g)	Tracer ACT (dpm)	Radiometric Tracer (pCi)	Radiometric % Rec	SAF 1*	SAF 2*
01	LCS	LCS	11/11/11 00:00	1.0000				0.00		
02	MBL	BLANK	11/11/11 00:00	2.0000				0.00		
03	DUP	ST1-01-111108	11/08/11 10:40	2.0000				0.00		
04	DO	ST1-01-111108	11/08/11 10:40	2.0000				0.00		

GE1
GE1

Eberline Analytical
Oak Ridge Laboratory

Aliquot Worksheet

Work Order	Run	Analysis Code	Rpt Units	Lab Deadline	Technician
11-11066	1	Gamma	liters	12/5/2011	MHIGHTOWER

Lab Fraction	Weston Solutions, Inc. Client ID	Sample Type	Muffle Data Ratio Post/Pre	Dilution Data No of Dils	Dil Factor	Ratio	Aliquot Data Aliquot	Net Equiv	MS Aliquot Data Aliquot	Net Equiv	H-3 Solids Only Water Added (ml)	H3 Dist Aliq
01	LCS	LCS					1.0000E+00	1.0000E+00				
02	BLANK	MBL					2.0000E+00	2.0000E+00				
03	ST1-01-111108	DUP					2.0000E+00	2.0000E+00				
04	ST1-01-111108	DO					2.0000E+00	2.0000E+00				

Comments	

Technician: MR Date: 11/22/11

KB 11/26/11

Sample ID : 1111066-01 Acquisition date : 26-NOV-2011 10:43:12

VAX/VMS Peak Search Report Generated 26-NOV-2011 11:14:39.86

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106601_GE1_GAW11_171356.CN
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : GAW 10
Deposition Date :
Sample Date : 1-JAN-2010 00:00:00. Acquisition date : 26-NOV-2011 10:43:12
Sample ID : 1111066-01 Sample Quantity : 5.00000E-01 liter
Sample type : WATER Sample Geometry : 0
Detector name : GE1 Detector Geometry: GAW-11
Elapsed live time: 0 00:30:00.00 Elapsed real time: 0 00:31:10.30 3.8%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	22.14	457683	444745	1.13	21.76	21	4	0.5		
0	32.52	6182	19760	1.49	32.14	31	5	7.4		
2	44.66	4148	18406	1.65	44.29	40	23	11.6	4.07E+03	
2	49.66	18225	19579	1.66	49.29	40	23	3.2		TH-230
2	59.66	192404	25890	1.68	59.29	40	23	0.6		AM-241
0	70.16	987	25073	3.05	69.79	68	5	48.7		
0	88.36	117692	32068	1.30	88.00	84	8	0.8		SN-126
										CD-109
0	122.45	28658	12241	1.34	122.09	118	7	1.7		CO-57
0	136.87	3747	11152	1.94	136.51	133	8	10.3		CO-57
0	166.29	5960	10279	1.35	165.94	162	8	6.4		CE-139
0	310.75	187	4877	1.16	310.43	309	5	112.8		
0	391.94	2506	6288	1.60	391.64	388	7	11.2		SN-113
5	662.04*	65194	2602	1.75	661.80	656	15	0.8	1.61E+01	CS-137
5	665.65	2678	4256	2.72	665.41	656	15	20.9		
0	725.47	142	2745	2.33	725.24	723	6	118.1		
0	898.62	2288	6430	1.97	898.42	894	10	13.8		Y-88
0	1051.86	201	3377	2.07	1051.70	1049	7	97.1		
0	1065.05	121	2408	2.59	1064.89	1063	5	122.9		
0	1101.53	171	2954	2.64	1101.38	1099	6	101.3		
0	1112.26	217	3824	6.51	1112.10	1109	8	100.0		
0	1139.17	119	1815	1.09	1139.02	1136	6	114.6		
3	1173.64	59225	1732	2.02	1173.50	1167	16	0.9	9.69E+00	CO-60
3	1177.45	2287	2351	2.76	1177.31	1167	16	21.8		
3	1332.90	53636	638	2.11	1332.79	1326	16	0.9	9.76E+00	CO-60
3	1336.66	2281	1023	2.88	1336.56	1326	16	20.7		
0	1352.81	113	550	2.97	1352.71	1350	7	71.9		
0	1635.05	45	180	2.28	1635.01	1632	7	104.9		
0	1743.79	34	142	2.84	1743.76	1740	8	125.6		
0	1809.74	34	89	3.50	1809.73	1807	6	96.4		AL-26
0	1836.51	1306	283	2.59	1836.50	1831	13	7.7		Y-88
0	2156.70	40	100	3.75	2156.77	2153	9	96.3		
0	2505.90	1082	42	2.42	2506.03	2499	14	6.6		
0	2734.26	43	0	2.61	2734.44	2729	12	30.5		
0	3042.35	5	0	1.70	3042.60	3039	7	89.4		

AG
11/28/11

Sample ID : 1111066-01 Acquisition date : 26-NOV-2011 10:43:12

Total number of lines in spectrum	34	
Number of unidentified lines	15	
Number of lines tentatively identified by NID	19	55.88%

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AL-26	7.20E+05Y	1.00	1.247E+02	1.247E+02	1.207E+02	96.81	
CO-60	5.27Y	1.28	1.552E+05	1.992E+05	0.136E+05	6.82	
TH-230	7.70E+04Y	1.00	5.440E+04	5.440E+04	0.513E+04	9.43	
			---	---			
	Total Activity :		2.097E+05	2.538E+05			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CO-57	270.90D	5.91	1.692E+04	1.000E+05	0.088E+05	8.85	
Y-88	106.60D	91.4	4.939E+03	4.516E+05	0.438E+05	9.70	
CD-109	464.00D	2.82	1.449E+06	4.088E+06	0.502E+06	12.29	
SN-113	115.10D	65.5	3.886E+03	2.545E+05	0.391E+05	15.35	
SN-126	1.00E+05Y	1.00	1.456E+05	1.456E+05	0.156E+05	10.72	
CS-137	30.17Y	1.04	1.213E+05	1.267E+05	0.124E+05	9.77	
CE-139	137.66D	33.0	4.132E+03	1.364E+05	0.160E+05	11.71	
			---	---			
	Total Activity :		1.745E+06	5.303E+06			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AM-241	432.20Y	1.00	2.522E+05	2.530E+05	0.207E+05	8.17	
			---	---			
	Total Activity :		2.522E+05	2.530E+05			

Grand Total Activity : 2.207E+06 5.809E+06

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111066-01
Acquisition date : 26-NOV-2011 10:43:12

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/liter	Decay Corr pCi/liter	2-Sigma %Error	Status
AL-26	1808.65	99.76*	8.189E-01	1.247E+02	1.247E+02	96.81	OK
Final Mean for 1 Valid Peaks = 1.247E+02+/- 1.207E+02 (96.81%)							
CO-60	1173.22	100.00*	1.150E+00	1.547E+05	1.986E+05	10.29	OK
	1332.49	100.00	1.035E+00	1.556E+05	1.998E+05	9.11	OK
Final Mean for 2 Valid Peaks = 1.992E+05+/- 1.359E+04 (6.82%)							
TH-230	48.44	16.90	5.953E+00	5.440E+04	5.440E+04	9.43	OK
	62.85	4.60	6.457E+00	-----	Line Not Found	-----	Absent
	67.67	0.37*	6.532E+00	-----	Line Not Found	-----	Absent
Final Mean for 1 Valid Peaks = 5.440E+04+/- 5.130E+03 (9.43%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/liter	Decay Corr pCi/liter	2-Sigma %Error	Status
CO-57	122.06	85.51*	6.124E+00	1.643E+04	9.715E+04	10.91	OK
	136.48	10.60	5.884E+00	1.804E+04	1.066E+05	15.06	OK
Final Mean for 2 Valid Peaks = 1.000E+05+/- 8.848E+03 (8.85%)							
Y-88	898.02	93.40	1.447E+00	5.085E+03	4.649E+05	16.70	OK
	1836.01	99.38*	8.101E-01	4.870E+03	4.453E+05	11.92	OK
Final Mean for 2 Valid Peaks = 4.516E+05+/- 4.382E+04 (9.70%)							
CD-109	88.03	3.72*	6.559E+00	1.449E+06	4.088E+06	12.29	OK
Final Mean for 1 Valid Peaks = 4.088E+06+/- 5.025E+05 (12.29%)							
SN-113	255.12	1.93	4.150E+00	-----	Line Not Found	-----	Absent
	391.69	64.90*	2.985E+00	3.886E+03	2.545E+05	15.35	OK
Final Mean for 1 Valid Peaks = 2.545E+05+/- 3.907E+04 (15.35%)							
SN-126	87.57	37.00*	6.562E+00	1.456E+05	1.456E+05	10.72	OK
Final Mean for 1 Valid Peaks = 1.456E+05+/- 1.560E+04 (10.72%)							
CS-137	661.65	85.12*	1.896E+00	1.213E+05	1.267E+05	9.77	OK
Final Mean for 1 Valid Peaks = 1.267E+05+/- 1.238E+04 (9.77%)							
CE-139	165.85	80.35*	5.391E+00	4.132E+03	1.364E+05	11.71	OK
Final Mean for 1 Valid Peaks = 1.364E+05+/- 1.597E+04 (11.71%)							

Sample ID : 1111066-01 Acquisition date : 26-NOV-2011 10:43:12

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/liter	Decay Corr pCi/liter	2-Sigma %Error	Status
AM-241	59.54	35.90*	6.382E+00	2.522E+05	2.530E+05	8.17	OK

Final Mean for 1 Valid Peaks = 2.530E+05+/- 2.067E+04 (8.17%)

Flag: "*" = Keyline

Sample ID : 1111066-01 Acquisition date : 26-NOV-2011 10:43:12

---- Identified Nuclides ----

Nuclide	Activity (pCi/liter)	Act error	MDA (pCi/liter)	MDA error	Act/MDA
AL-26	1.247E+02	1.207E+02	2.120E+02	1.744E+01	0.588
CO-57	1.000E+05	8.848E+03	1.410E+03	1.410E+02	70.946
CO-60	1.992E+05	1.359E+04	6.627E+02	6.257E+01	300.646
Y-88	4.516E+05	4.382E+04	1.970E+04	1.616E+03	22.922
CD-109	4.088E+06	5.025E+05	2.114E+04	2.451E+03	193.412
SN-113	2.545E+05	3.907E+04	3.221E+04	3.117E+03	7.902
SN-126	1.456E+05	1.560E+04	7.525E+02	7.458E+01	193.456
CS-137	1.267E+05	1.238E+04	4.966E+02	4.409E+01	255.184
CE-139	1.364E+05	1.597E+04	8.300E+03	7.409E+02	16.432
TH-230	5.440E+04	5.130E+03	8.519E+04	6.658E+03	0.639
AM-241	2.530E+05	2.067E+04	8.795E+02	6.249E+01	287.597

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
NA-22	2.340E+02		3.027E+02	5.125E+02	4.446E+01	0.457
K-40	-5.303E+02		1.369E+03	2.238E+03	1.912E+02	-0.237
TI-44	-1.575E+03		2.743E+02	3.422E+02	2.681E+01	-4.604
MN-54	-1.635E+03		1.449E+03	2.372E+03	2.082E+02	-0.689
ZN-65	1.362E+04		6.127E+03	9.126E+03	8.508E+02	1.492
SE-75	1.638E+03		1.553E+04	2.448E+04	2.268E+03	0.067
KR-85	-2.945E+03		5.507E+04	9.383E+04	8.952E+03	-0.031
NB-93M	-1.358E+06		3.206E+05	1.112E+03	2.586E+02	-1221.261
NB-94	3.083E+02		3.387E+02	5.678E+02	4.910E+01	0.543
RU-106	4.322E+03		8.308E+03	1.412E+04	1.941E+03	0.306
AG-108M	5.791E+01		3.092E+02	4.678E+02	4.176E+01	0.124
AG-110M	2.131E+04		3.023E+03	3.768E+03	3.352E+02	5.656
TE123M	4.098E+02		8.784E+03	1.297E+04	1.182E+03	0.032
SB-125	-3.920E+02		1.126E+03	1.923E+03	1.851E+02	-0.204
I-129	-2.910E+05		3.319E+04	8.812E+02	9.400E+01	-330.242
BA-133	4.454E+01		3.244E+02	5.606E+02	7.656E+01	0.079
CS-134	-1.755E+02		4.141E+02	6.978E+02	6.487E+01	-0.252
CS-135	2.193E+02		1.051E+03	1.657E+03	1.522E+02	0.132
LA-138	-1.490E+02		2.149E+02	3.449E+02	2.851E+01	-0.432
CE-144	3.088E+02		6.415E+03	9.522E+03	9.241E+02	0.032
PM-144	-7.624E+02		9.113E+02	1.508E+03	2.046E+02	-0.505
PM-145	-7.546E+02		1.337E+03	1.663E+03	1.084E+03	-0.454
PM-146	-8.956E+01		7.066E+02	1.207E+03	1.144E+02	-0.074
EU-152	-2.799E+02		1.035E+03	1.702E+03	1.808E+02	-0.164
GD-153	2.324E+03		4.080E+03	6.620E+03	6.556E+02	0.351
EU-154	4.801E+02		5.972E+02	1.012E+03	8.778E+01	0.474
EU-155	1.572E+05		1.668E+04	2.821E+03	2.760E+02	55.744
HO-166M	-2.970E+02		4.479E+02	7.460E+02	6.656E+01	-0.398
HF-172	2.303E+04		3.509E+03	4.064E+03	4.015E+02	5.668
LU-173	3.520E+02		2.071E+03	3.263E+03	2.995E+02	0.108
LU-176	-7.803E+01		2.034E+02	2.908E+02	2.694E+01	-0.268
TA-182	4.577E+04		7.701E+04	1.142E+05	1.065E+04	0.401

Sample ID : 1111066-01 Acquisition date : 26-NOV-2011 10:43:12

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
BI-207	1.024E+02		2.207E+02	3.767E+02	3.553E+01	0.272
TL-208	-1.817E+01		6.965E+02	1.183E+03	1.109E+02	-0.015
BI-210M	-1.737E+02		3.708E+02	5.804E+02	5.341E+01	-0.299
PB-210	1.033E+05		1.079E+04	1.049E+04	8.137E+02	9.845
PB-211	-3.606E+03		6.662E+03	1.137E+04	1.053E+03	-0.317
BI-212	1.455E+03		2.372E+03	3.609E+03	3.222E+02	0.403
PB-212	-5.119E+01		3.687E+02	5.818E+02	5.361E+01	-0.088
BI-214	2.981E+02		4.632E+02	7.901E+02	7.304E+01	0.377
PB-214	-2.460E+02		4.585E+02	7.870E+02	7.322E+01	-0.313
RN-219	9.140E+01		2.946E+03	5.065E+03	4.680E+02	0.018
RA-223	-7.036E+02		4.590E+03	7.162E+03	6.661E+02	-0.098
RA-224	-3.952E+01		4.167E+03	6.581E+03	6.064E+02	-0.006
RA-226	1.585E+03		5.060E+03	6.635E+03	1.215E+04	0.239
TH-227	-8.053E+01		1.424E+03	2.248E+03	2.071E+02	-0.036
AC-228	-2.393E+02		1.362E+03	2.256E+03	1.938E+02	-0.106
PA-231	-6.736E+03		7.635E+03	1.180E+04	1.091E+03	-0.571
TH-231	5.105E+05		6.749E+04	1.431E+04	1.787E+03	35.673
PA-234	-1.173E+03		6.458E+02	9.205E+02	8.982E+01	-1.274
PA-234M	-8.967E+03		4.106E+04	6.771E+04	6.063E+03	-0.132
TH-234	4.397E+04		6.940E+03	9.228E+03	6.848E+02	4.765
U-235	1.053E+03		1.251E+03	1.849E+03	3.317E+02	0.569
NP-237	2.965E+05		3.144E+04	5.309E+03	5.196E+02	55.840
AM-243	-3.981E+01		3.008E+02	4.516E+02	3.838E+01	-0.088
CM-243	-5.253E+02		1.264E+03	1.976E+03	1.809E+02	-0.266

Sample ID : 1111066-01 Acquisition date : 26-NOV-2011 10:43:12

Total number of lines in spectrum	34	
Number of unidentified lines	15	
Number of lines tentatively identified by NID	19	55.88%

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AL-26	7.20E+05Y	1.00	1.247E+02	1.247E+02	1.207E+02	96.81	
CO-60	5.27Y	1.28	1.552E+05	1.992E+05	0.136E+05	6.82	
TH-230	7.70E+04Y	1.00	5.440E+04	5.440E+04	0.513E+04	9.43	
			---	---			
	Total Activity :		2.097E+05	2.538E+05			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CO-57	270.90D	5.91	1.692E+04	1.000E+05	0.088E+05	8.85	
Y-88	106.60D	91.4	4.939E+03	4.516E+05	0.438E+05	9.70	
CD-109	464.00D	2.82	1.449E+06	4.088E+06	0.502E+06	12.29	
SN-113	115.10D	65.5	3.886E+03	2.545E+05	0.391E+05	15.35	
SN-126	1.00E+05Y	1.00	1.456E+05	1.456E+05	0.156E+05	10.72	
CS-137	30.17Y	1.04	1.213E+05	1.267E+05	0.124E+05	9.77	
CE-139	137.66D	33.0	4.132E+03	1.364E+05	0.160E+05	11.71	
			---	---			
	Total Activity :		1.745E+06	5.303E+06			

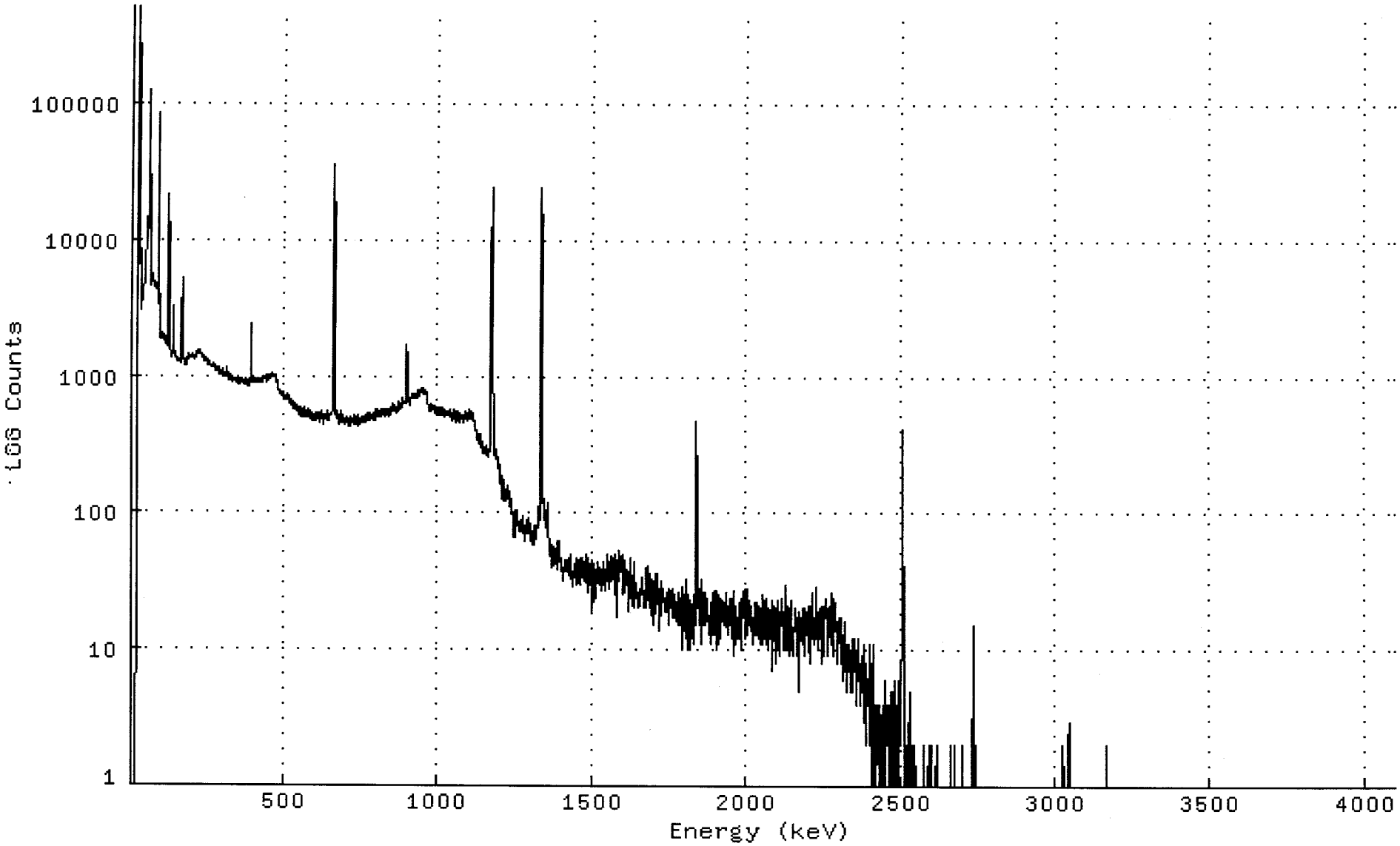
Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AM-241	432.20Y	1.00	2.522E+05	2.530E+05	0.207E+05	8.17	
			---	---			
	Total Activity :		2.522E+05	2.530E+05			

Grand Total Activity : 2.207E+06 5.809E+06

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106601_GE1_GAW11_171356.CNF;1
Title :
Sample Title: GAW 10
Start Time: 26-NOV-2011 10:43 Sample Time: 1-JAN-2010 00:00: Energy Offset: 3.84457E-01
Real Time : 0 00:31:10.30 Sample ID : 1111066-01 Energy Slope : 9.99792E-01
Live Time : 0 00:30:00.00 Sample Type: WATER Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106601_GE1_GAW11_171356

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	0	0	1
17:	41	195	17514	61168	180164	515571	136666	70027
25:	145091	44227	13404	6337	6372	4980	4816	8378
33:	5943	3791	3014	3929	3963	3699	3504	3591
41:	4172	4995	5580	5980	5784	6197	7037	9427
49:	13130	14265	13169	12552	12035	11851	11897	11980
57:	13119	18599	121293	102381	8528	5590	6150	6362
65:	4536	4747	5246	5262	5463	5222	5233	4880
73:	4840	4614	4449	4484	4430	4626	4215	4337
81:	4377	4365	4425	4456	4748	5330	20693	83739
89:	24070	3406	3318	3898	3098	2082	1917	1847
97:	1894	1819	1939	1862	1925	1882	2007	1891
105:	1800	1899	1810	1852	1818	1909	1769	1790
113:	1675	1766	1694	1738	1689	1730	1650	1862
121:	5076	20833	7970	1778	1811	1883	1675	1562
129:	1432	1477	1467	1350	1366	1441	1515	2985
137:	3154	1545	1447	1446	1399	1360	1422	1457
145:	1372	1364	1341	1272	1264	1283	1275	1341
153:	1291	1308	1310	1253	1275	1258	1241	1342
161:	1324	1222	1259	1381	2519	5184	2058	1304
169:	1312	1278	1286	1285	1195	1235	1229	1202
177:	1189	1223	1198	1169	1199	1208	1169	1326
185:	1296	1322	1334	1329	1385	1421	1397	1376
193:	1364	1396	1334	1337	1372	1341	1393	1381
201:	1417	1324	1357	1368	1344	1300	1346	1326
209:	1295	1352	1407	1446	1461	1463	1426	1500
217:	1489	1540	1527	1489	1432	1502	1477	1461
225:	1501	1418	1482	1448	1403	1428	1410	1370
233:	1320	1326	1384	1380	1303	1400	1371	1272
241:	1307	1320	1353	1347	1273	1359	1307	1279
249:	1275	1226	1181	1228	1235	1207	1260	1229
257:	1197	1245	1140	1187	1187	1157	1192	1175
265:	1124	1233	1169	1137	1179	1124	1144	1129
273:	1127	1161	1085	1126	1077	1128	1077	1083
281:	1122	1060	1074	1098	1081	1107	1148	1061
289:	1001	1048	1024	1014	1074	1057	1037	1007
297:	1015	1068	1093	1034	987	1017	1035	969
305:	1010	1008	1010	1000	967	1126	1020	976
313:	975	965	1051	1012	1000	923	947	1003
321:	969	908	1003	922	927	934	904	939
329:	963	907	894	911	941	918	913	923
337:	957	909	920	894	926	940	923	934
345:	946	930	958	870	881	899	916	936
353:	898	864	944	904	928	926	881	907
361:	900	892	942	943	889	896	889	861
369:	865	870	934	878	888	863	865	848
377:	884	861	885	892	823	904	895	907
385:	861	835	880	872	947	961	1647	2360
393:	1127	880	954	934	871	905	887	912
401:	940	894	891	883	887	909	910	938
409:	881	928	890	897	912	909	913	896
417:	883	886	900	949	886	932	906	880
425:	921	884	935	933	896	913	981	925

433:	930	946	985	945	947	935	977	942
441:	932	944	882	1019	935	985	990	942
449:	947	911	946	969	949	962	956	988
457:	994	967	1038	986	997	1036	1014	1003
465:	1003	991	982	1008	996	970	981	988
473:	954	992	888	934	904	883	861	886
481:	816	789	766	749	750	721	776	733
489:	752	703	764	735	706	724	724	744
497:	697	688	698	679	673	688	657	665
505:	676	683	712	674	688	720	729	696
513:	675	616	680	718	637	689	687	617
521:	633	659	636	624	599	638	633	613
529:	579	632	570	596	603	591	591	612
537:	562	627	595	555	556	591	559	565
545:	559	550	574	568	534	513	575	527
553:	544	518	563	497	543	504	556	570
561:	540	531	563	557	550	504	533	587
569:	532	509	539	522	531	496	513	517
577:	543	522	501	567	520	527	519	526
585:	520	475	533	541	505	469	514	502
593:	510	493	467	498	486	512	478	518
601:	508	463	477	510	479	532	499	476
609:	527	524	483	510	500	485	465	536
617:	498	453	493	541	497	508	508	493
625:	487	476	514	479	505	437	473	478
633:	493	518	496	519	503	517	482	509
641:	541	472	531	472	520	466	498	490
649:	491	479	528	534	522	538	508	510
657:	569	563	760	2436	19719	35166	9737	1439
665:	1308	1410	890	590	517	531	541	540
673:	504	535	515	443	504	521	508	483
681:	517	506	539	522	453	518	450	453
689:	464	509	457	470	447	434	450	463
697:	467	483	468	457	497	499	479	499
705:	466	452	456	467	445	426	438	480
713:	489	424	446	493	494	442	488	471
721:	467	447	464	470	516	507	482	448
729:	470	478	436	460	497	489	439	474
737:	472	510	422	468	505	426	460	450
745:	461	479	438	463	445	451	475	480
753:	483	468	491	456	476	480	469	502
761:	476	493	510	489	454	484	505	476
769:	522	478	472	481	499	496	482	523
777:	495	472	471	478	512	479	520	492
785:	500	499	519	526	467	492	494	515
793:	494	472	560	521	496	517	500	497
801:	556	508	496	520	526	517	520	526
809:	491	511	541	498	506	495	558	509
817:	530	535	512	541	553	557	545	528
825:	541	553	500	521	553	557	557	507
833:	571	513	554	510	497	540	560	550
841:	563	558	536	525	576	520	590	532
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857:	548	551	587	565	541	572	539	577
865:	552	533	556	625	624	598	539	632
873:	609	619	590	608	630	590	608	570
881:	586	627	677	639	595	633	625	642
889:	652	614	615	638	631	628	631	692
897:	939	1661	1313	768	722	706	658	650
905:	677	656	602	654	645	651	687	695

913:	677	698	677	701	741	676	737	696
921:	680	689	686	711	690	701	738	703
929:	733	700	724	784	681	745	767	723
937:	756	745	710	771	782	739	808	749
945:	772	746	801	790	801	775	788	771
953:	759	738	721	753	781	790	764	762
961:	730	752	690	645	689	633	614	600
969:	593	566	609	558	541	566	568	595
977:	630	612	552	605	588	582	567	597
985:	585	556	575	534	603	573	527	594
993:	546	553	564	583	569	531	589	574
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1169:	285	345	878	6135	23566	24006	6094	1214
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1185:	281	286	250	280	264	244	239	237
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2009:	18	16	16	14	16	21	20	16
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2049:	25	18	16	16	11	13	18	23
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2073:	20	19	15	13	13	12	15	23
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2089:	15	18	12	11	20	8	16	11
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2137:	13	20	9	11	17	23	14	10
2145:	17	14	20	9	12	14	10	9
2153:	9	12	18	20	20	17	14	17
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2185:	12	20	16	9	15	18	17	17
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2209:	18	12	21	16	16	26	12	13
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2257:	18	22	17	20	15	19	20	15
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2297:	10	12	14	13	12	17	15	10
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2313:	13	13	9	7	16	14	12	11
2321:	13	5	11	11	11	11	7	7
2329:	7	7	10	11	7	11	9	6
2337:	9	5	8	8	8	6	5	8
2345:	10	12	12	7	9	11	7	11

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2361:	6	12	6	7	7	5	7	8
2369:	5	4	7	9	6	6	6	6
2377:	5	5	11	3	3	5	4	7
2385:	5	5	8	2	8	8	5	4
2393:	5	4	5	5	3	3	2	2
2401:	4	11	6	5	0	5	1	6
2409:	3	11	2	1	5	1	4	4
2417:	2	4	4	0	3	3	2	2
2425:	3	4	2	0	4	4	1	3
2433:	4	3	1	0	2	0	2	1
2441:	3	0	1	4	2	0	2	3
2449:	6	6	3	1	4	2	2	2
2457:	2	2	3	4	3	2	3	1
2465:	1	4	5	1	3	0	3	2
2473:	2	2	1	5	2	2	5	0
2481:	2	4	6	1	4	1	4	2
2489:	1	5	6	3	2	1	2	4
2497:	4	3	2	4	3	3	24	71
2505:	248	411	238	72	24	14	6	4
2513:	3	1	2	1	2	1	1	2
2521:	1	2	3	2	2	0	5	2
2529:	1	1	0	2	1	0	0	0
2537:	2	1	2	1	2	1	2	0
2545:	2	0	1	1	0	1	1	1
2553:	1	0	1	1	1	0	0	0
2561:	1	0	0	1	1	0	0	0
2569:	0	1	0	2	1	0	1	0
2577:	1	0	0	1	0	0	0	0
2585:	0	0	0	1	1	2	0	1
2593:	0	0	1	0	1	0	0	2
2601:	1	0	0	1	1	1	0	1
2609:	0	0	1	0	0	2	1	0
2617:	0	1	0	0	1	0	1	1
2625:	0	0	0	0	0	1	0	0
2633:	0	1	0	0	0	1	1	1
2641:	0	0	0	0	0	1	0	1
2649:	0	0	0	0	1	1	1	1
2657:	1	0	0	0	0	2	0	0
2665:	0	0	1	0	0	0	1	0
2673:	2	2	0	0	0	0	0	0
2681:	0	0	0	1	0	1	0	1
2689:	1	0	0	0	0	0	0	2
2697:	0	0	0	1	0	0	0	1
2705:	0	0	0	0	1	1	0	0
2713:	0	0	0	0	0	0	0	0
2721:	1	1	0	0	0	0	1	0
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2737:	1	1	2	0	0	1	0	0
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2753:	0	0	0	0	0	0	0	0
2761:	0	0	0	0	0	0	1	0
2769:	1	1	1	0	0	0	0	0
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2785:	0	0	1	0	1	0	0	1
2793:	0	0	0	0	0	1	0	0
2801:	0	0	0	0	0	0	0	0
2809:	0	0	0	0	0	0	0	1
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2865:	1	0	0	0	0	0	1	0
2873:	0	1	0	0	0	0	1	0
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2961:	0	0	0	1	0	0	1	0
2969:	0	0	0	1	0	0	0	0
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3001:	1	0	1	0	0	1	0	0
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3025:	0	0	0	1	0	0	0	0
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3041:	0	2	3	0	0	0	0	0
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3057:	0	0	0	0	0	0	0	0
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3217:	0	0	0	0	0	0	0	0
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3233:	0	0	0	0	0	0	1	0
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3281:	0	0	0	0	0	0	0	0
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3377:	0	0	0	0	0	0	0	0
3385:	0	1	0	0	0	0	1	0
3393:	0	0	1	0	0	0	0	0
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3569:	0	0	0	1	0	0	0	0
3577:	0	1	0	0	0	0	0	0
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3681:	0	0	0	0	0	0	0	0
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3929:	0	0	0	0	0	0	0	0
3937:	0	0	0	0	0	0	0	0
3945:	0	0	0	0	0	0	0	0
3953:	1	0	0	0	0	0	0	0
3961:	0	0	0	0	0	0	0	0
3969:	0	0	0	0	0	0	0	0
3977:	0	0	0	0	0	0	0	0
3985:	0	0	0	0	0	0	0	0
3993:	0	0	0	0	0	0	0	0
4001:	0	1	0	0	0	0	0	0
4009:	0	0	0	0	0	0	0	0
4017:	0	0	0	0	0	0	0	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	0	0	0	0	0
4041:	0	0	0	0	0	0	0	0
4049:	0	0	0	0	0	0	0	0
4057:	0	1	0	0	0	0	0	0
4065:	0	0	0	1	0	0	0	0
4073:	0	0	0	0	0	0	0	0
4081:	0	0	0	0	0	0	0	0
4089:	0	0	0	0	0	0	0	0

Sample ID : 1111066-02 Acquisition date : 25-NOV-2011 14:09:56

VAX/VMS Peak Search Report Generated 28-NOV-2011 09:36:19.25

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106602_GE2_GAW11_171331.CN
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : BLANK
Deposition Date :
Sample Date : 25-NOV-2011 00:00:00 Acquisition date : 25-NOV-2011 14:09:56
Sample ID : 1111066-02 Sample Quantity : 2.00000E+00 liter
Sample type : WATER Sample Geometry : 0
Detector name : GE2 Detector Geometry: GAW-11
Elapsed live time: 0 02:00:00.00 Elapsed real time: 0 02:00:01.06 0.0%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	15.60	2663	3209	1.11	15.54	13	6	8.5		NB-93M
0	36.53	116	1154	2.81	36.48	33	7	98.8		I-125
										PM-145
										PM-145
0	76.15*	85	307	4.13	76.11	72	8	77.3		AM-243
1	90.17	25	104	1.48	90.13	89	9	103.2	1.20E+00	
0	172.42	42	136	3.62	172.42	170	6	93.7		
0	319.56	70	124	2.49	319.61	314	12	68.4		CR-51
0	352.90*	52	138	1.85	352.96	348	11	95.8		
0	366.30	29	83	4.59	366.37	363	8	113.3		
0	610.49*	33	76	1.85	610.65	605	9	111.4		
0	627.67	42	73	14.56	627.83	620	18	100.9		
2	744.53	16	22	2.35	744.74	742	18	101.9	1.01E+00	
2	752.94	16	22	2.35	753.16	742	18	117.6		
0	973.31	21	22	7.01	973.61	968	10	94.5		
0	1082.30	23	8	5.07	1082.64	1079	8	61.6		
0	1156.11	24	22	10.37	1156.48	1150	16	99.7		
0	1238.88*	18	14	1.94	1239.28	1234	11	99.4		
0	1363.98	13	10	3.15	1364.42	1361	7	99.3		
0	1376.47*	12	3	3.68	1376.92	1374	7	90.7		
0	1383.66	6	5	1.71	1384.11	1381	6	138.3		
0	1424.61	15	4	3.76	1425.07	1421	12	69.6		
0	1452.61	7	6	1.44	1453.09	1450	5	125.5		
0	1628.54	6	4	1.62	1629.09	1626	6	141.1		
0	1692.48	10	1	2.91	1693.04	1690	7	78.2		
0	2078.43	5	2	1.10	2079.14	2074	8	130.8		
0	2088.21	6	3	1.32	2088.92	2086	6	129.7		
0	2205.63*	8	0	1.32	2206.38	2202	8	101.1		
0	2275.09	8	0	3.40	2275.88	2272	8	70.7		
0	2337.01	9	2	3.00	2337.81	2334	7	80.9		
0	2425.41	8	0	3.70	2426.25	2423	7	70.7		
0	2450.15	8	0	3.87	2451.00	2446	9	70.7		

AG
11/28/11

Sample ID : 1111066-02 Acquisition date : 25-NOV-2011 14:09:56

Total number of lines in spectrum	30	
Number of unidentified lines	19	
Number of lines tentatively identified by NID	11	36.67%

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CR-51	27.70D	1.02	3.650E+01	3.708E+01	2.560E+01	69.02	
AM-243	7380.00Y	1.00	3.676E+00	3.676E+00	2.864E+00	77.92	
			---	---			
	Total Activity :		4.018E+01	4.076E+01			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NB-93M	14.60Y	1.00	4.225E+03	4.225E+03	1.559E+03	36.89	
I-125	60.14D	1.01	7.910E+01	7.968E+01	7.925E+01	99.46	
PM-145	17.70Y	1.00	2.277E+01	2.277E+01	2.699E+01	118.52	
			---	---			
	Total Activity :		4.327E+03	4.328E+03			

Grand Total Activity : 4.367E+03 4.369E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111066-02
Acquisition date : 25-NOV-2011 14:09:56

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/liter	Decay Corr pCi/liter	2-Sigma %Error	Status
CR-51	320.08	9.83*	3.660E+00	3.650E+01	3.708E+01	69.02	OK
Final Mean for 1 Valid Peaks = 3.708E+01+/- 2.560E+01 (69.02%)							
AM-243	74.67	66.00*	6.572E+00	3.676E+00	3.676E+00	77.92	OK
Final Mean for 1 Valid Peaks = 3.676E+00+/- 2.864E+00 (77.92%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/liter	Decay Corr pCi/liter	2-Sigma %Error	Status
NB-93M	16.57	9.43*	1.254E+00	4.225E+03	4.225E+03	36.89	OK
Final Mean for 1 Valid Peaks = 4.225E+03+/- 1.559E+03 (36.89%)							
I-125	35.49	6.49*	4.259E+00	7.910E+01	7.968E+01	99.46	OK
Final Mean for 1 Valid Peaks = 7.968E+01+/- 7.925E+01 (99.46%)							
PM-145	36.85	21.70*	4.425E+00	2.277E+01	2.277E+01	118.52	OK
	37.36	39.70	4.485E+00	1.228E+01	1.228E+01	116.34	<<WM Interf
	42.30	15.10	5.012E+00	-----	Line Not Found	-----	Absent
	72.40	2.31	6.535E+00	-----	Line Not Found	-----	Absent
Final Mean for 1 Valid Peaks = 2.277E+01+/- 2.699E+01 (118.52%)							

Flag: "*" = Keyline

Sample ID : 1111066-02 Acquisition date : 25-NOV-2011 14:09:56

---- Identified Nuclides ----

Nuclide	Activity (pCi/liter)	Act error	MDA (pCi/liter)	MDA error	Act/MDA
CR-51	3.708E+01	2.560E+01	2.126E+01	1.847E+00	1.745
NB-93M	4.225E+03	1.559E+03	4.600E+02	1.641E+02	9.186
I-125	7.968E+01	7.925E+01	8.002E+01	8.407E+00	0.996
PM-145	2.277E+01	2.699E+01	2.290E+01	1.496E+01	0.994
AM-243	3.676E+00	2.864E+00	2.818E+00	2.492E-01	1.304

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
BE-7	9.660E-02		1.405E+01	2.574E+01	2.296E+00	0.004
NA-22	-2.348E+00		2.151E+00	3.133E+00	2.788E-01	-0.750
NA-24	4.168E+00		4.758E+00	8.310E+00	7.568E-01	0.502
AL-26	3.547E-01		1.784E+00	3.742E+00	3.177E-01	0.095
K-40	-9.386E+00		2.486E+01	4.654E+01	4.342E+00	-0.202
AR-41	-3.091E+02		5.943E+02	9.897E+02	8.872E+01	-0.312
TI-44	-7.643E-01		1.297E+00	1.991E+00	1.612E-01	-0.384
SC-46	7.653E-01		1.967E+00	3.730E+00	3.029E-01	0.205
V-48	-4.133E-01		1.748E+00	3.118E+00	2.587E-01	-0.133
MN-54	1.037E-01		1.906E+00	3.485E+00	2.940E-01	0.030
CO-56	1.289E+00		2.037E+00	3.729E+00	3.123E-01	0.346
CO-57	-2.299E-01		1.277E+00	2.145E+00	2.290E-01	-0.107
CO-58	-6.336E-01		1.802E+00	3.151E+00	2.700E-01	-0.201
FE-59	2.469E+00		3.565E+00	7.116E+00	6.538E-01	0.347
CO-60	-1.360E+00		2.463E+00	4.508E+00	3.839E-01	-0.302
ZN-65	4.084E-01		4.528E+00	8.241E+00	7.006E-01	0.050
GA-67	-3.793E+00		6.087E+00	7.758E+00	8.754E+00	-0.489
SE-75	-6.399E-01		2.207E+00	3.595E+00	2.936E-01	-0.178
RB-82	-4.294E+00		1.484E+01	2.606E+01	2.259E+00	-0.165
RB-83	-2.637E-01		3.084E+00	5.625E+00	8.927E-01	-0.047
KR-85	8.739E+02		5.017E+02	9.735E+02	8.787E+01	0.898
SR-85	3.846E+00		2.208E+00	4.284E+00	3.867E-01	0.898
Y-88	-6.164E-01		1.979E+00	3.712E+00	3.121E-01	-0.166
NB-94	-4.482E-01		1.855E+00	3.281E+00	2.702E-01	-0.137
NB-95	1.759E+00		1.756E+00	3.543E+00	3.082E-01	0.496
NB-95M	-9.961E+00		6.697E+00	9.957E+00	8.300E-01	-1.000
ZR-95	8.414E-01		2.959E+00	5.168E+00	4.954E-01	0.163
MO-99	1.019E+00		1.798E+01	2.962E+01	2.593E+00	0.034
RU-103	-1.814E-01		1.644E+00	2.985E+00	4.294E-01	-0.061
RU-106	2.480E+00		1.745E+01	2.930E+01	3.979E+00	0.085
AG-108M	-1.140E-01		1.937E+00	3.509E+00	3.081E-01	-0.032
CD-109	-3.340E+01		3.578E+01	5.375E+01	6.473E+00	-0.621
AG-110M	6.226E-01		1.721E+00	3.267E+00	2.879E-01	0.191
SN-113	8.285E-01		1.916E+00	3.646E+00	3.171E-01	0.227
TE123M	3.591E-02		1.356E+00	2.290E+00	2.027E-01	0.016
SB-124	-2.836E-01		2.143E+00	3.424E+00	3.087E-01	-0.083
SB-125	-2.088E+00		4.875E+00	8.623E+00	7.622E-01	-0.242
SB-126	-4.762E-01		3.376E+00	6.061E+00	5.324E-01	-0.079

Sample ID : 1111066-02 Acquisition date : 25-NOV-2011 14:09:56

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
SN-126	-4.375E+00		3.557E+00	5.233E+00	5.458E-01	-0.836
SB-127	-2.908E+00		5.094E+00	8.730E+00	7.685E-01	-0.333
I-129	3.520E+00		7.136E+00	1.156E+01	1.490E+00	0.305
I-131	4.186E-01		1.813E+00	3.077E+00	2.580E-01	0.136
TE-132	1.527E+00		1.597E+00	2.837E+00	2.377E-01	0.538
BA-133	1.906E+00		2.602E+00	4.255E+00	5.547E-01	0.448
I-133	2.562E-01		2.872E+00	5.301E+00	4.798E-01	0.048
CS-134	-5.612E-01		2.066E+00	3.250E+00	2.936E-01	-0.173
CS-135	2.677E-01		8.300E+00	1.385E+01	1.117E+00	0.019
I-135	1.437E+01		3.492E+01	6.802E+01	6.018E+00	0.211
CS-136	-1.333E+00		2.914E+00	4.931E+00	4.267E-01	-0.270
CS-137	-9.928E-01		2.288E+00	3.935E+00	3.466E-01	-0.252
LA-138	3.550E-01		1.878E+00	3.682E+00	3.354E-01	0.096
CE-139	9.426E-01		1.502E+00	2.445E+00	2.074E-01	0.386
BA-140	1.322E+00		6.198E+00	1.154E+01	3.838E+00	0.115
LA-140	-1.483E+00		1.537E+00	2.436E+00	2.183E-01	-0.609
CE-141	6.430E-01		2.523E+00	4.162E+00	7.946E-01	0.154
CE-143	5.268E+00		4.517E+00	8.124E+00	6.535E-01	0.648
CE-144	5.949E-01		1.042E+01	1.768E+01	1.790E+00	0.034
PM-144	1.335E+00		1.800E+00	3.497E+00	3.078E-01	0.382
PM-146	-1.777E-01		3.513E+00	6.415E+00	5.656E-01	-0.028
ND-147	-2.886E+00		1.282E+01	2.265E+01	2.051E+00	-0.127
PM-149	1.697E+01		5.060E+01	8.664E+01	6.923E+00	0.196
EU-152	-9.850E-01		1.451E+01	2.616E+01	2.957E+00	-0.038
GD-153	-9.832E-01		4.593E+00	7.752E+00	8.117E-01	-0.127
EU-154	-6.564E+00		6.060E+00	8.848E+00	7.872E-01	-0.742
EU-155	-2.777E-01		4.039E+00	6.437E+00	6.624E-01	-0.043
EU-156	-2.920E+00		1.778E+01	3.180E+01	7.255E+00	-0.092
HO-166M	-8.908E-01		2.916E+00	5.171E+00	4.547E-01	-0.172
HF-172	3.096E+00		9.568E+00	1.651E+01	1.732E+00	0.188
LU-172	1.913E+00		3.132E+00	6.288E+00	5.328E-01	0.304
LU-173	1.222E+00		6.527E+00	1.099E+01	8.818E-01	0.111
HF-175	-1.722E-01		1.852E+00	2.793E+00	2.324E-01	-0.062
LU-176	-1.655E-02		1.358E+00	2.263E+00	1.841E-01	-0.007
TA-182	2.338E+00		6.655E+00	1.223E+01	1.039E+00	0.191
IR-192	-2.334E+00		3.015E+00	5.151E+00	4.575E-01	-0.453
HG-203	-4.887E-01		1.749E+00	2.846E+00	2.335E-01	-0.172
BI-207	5.065E-01		1.781E+00	3.065E+00	2.778E-01	0.165
TL-208	-3.937E+00		6.210E+00	1.066E+01	9.650E-01	-0.369
BI-210M	-2.637E+00		3.067E+00	4.759E+00	3.869E-01	-0.554
PB-210	-6.127E+01		4.417E+01	7.309E+01	6.077E+00	-0.838
PB-211	1.051E+01		4.427E+01	8.296E+01	7.070E+00	0.127
BI-212	-5.263E+00		1.548E+01	2.689E+01	2.360E+00	-0.196
PB-212	-1.685E+00		3.498E+00	6.089E+00	5.065E-01	-0.277
BI-214	6.398E+00	+	7.154E+00	1.002E+01	9.015E-01	0.639
PB-214	7.769E+00	+	7.475E+00	8.316E+00	6.943E-01	0.934
RN-219	-7.635E-01		1.994E+01	3.658E+01	3.109E+00	-0.021
RA-223	-6.495E+00		3.446E+01	5.182E+01	4.265E+00	-0.125

Sample ID : 1111066-02 Acquisition date : 25-NOV-2011 14:09:56

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
RA-224	3.273E+01		3.919E+01	6.617E+01	5.494E+00	0.495
RA-225	1.491E+01		8.719E+00	1.453E+01	1.360E+00	1.026
RA-226	-2.028E+01		6.202E+01	9.209E+01	1.686E+02	-0.220
TH-227	-1.792E+01		1.301E+01	1.955E+01	1.629E+00	-0.917
AC-228	-3.148E+00		8.270E+00	1.437E+01	1.165E+00	-0.219
TH-230	-1.951E+02		3.310E+02	5.084E+02	4.104E+01	-0.384
PA-231	2.230E+01		5.485E+01	9.476E+01	7.683E+00	0.235
TH-231	-1.863E+01		3.237E+01	5.476E+01	8.701E+00	-0.340
PA-233	-1.397E+00		3.769E+00	5.520E+00	1.230E+00	-0.253
PA-234	-1.558E+00		5.574E+00	9.282E+00	9.501E-01	-0.168
PA-234M	2.513E+01		2.244E+02	4.034E+02	3.362E+01	0.062
TH-234	-5.310E+01		3.449E+01	5.919E+01	4.512E+00	-0.897
U-235	1.772E-01		1.203E+01	1.963E+01	3.538E+00	0.009
NP-237	-6.741E-01		9.902E+00	1.578E+01	1.624E+00	-0.043
NP-239	-2.505E+00		5.509E+00	9.151E+00	9.597E-01	-0.274
AM-241	-5.247E+00		3.461E+00	5.570E+00	4.044E-01	-0.942
CM-243	2.577E+00		9.350E+00	1.591E+01	1.266E+00	0.162

Sample ID : 1111066-02 Acquisition date : 25-NOV-2011 14:09:56

Total number of lines in spectrum	30	
Number of unidentified lines	19	
Number of lines tentatively identified by NID	11	36.67%

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CR-51	27.70D	1.02	3.650E+01	3.708E+01	2.560E+01	69.02	
AM-243	7380.00Y	1.00	3.676E+00	3.676E+00	2.864E+00	77.92	
			---	---			
	Total Activity :		4.018E+01	4.076E+01			

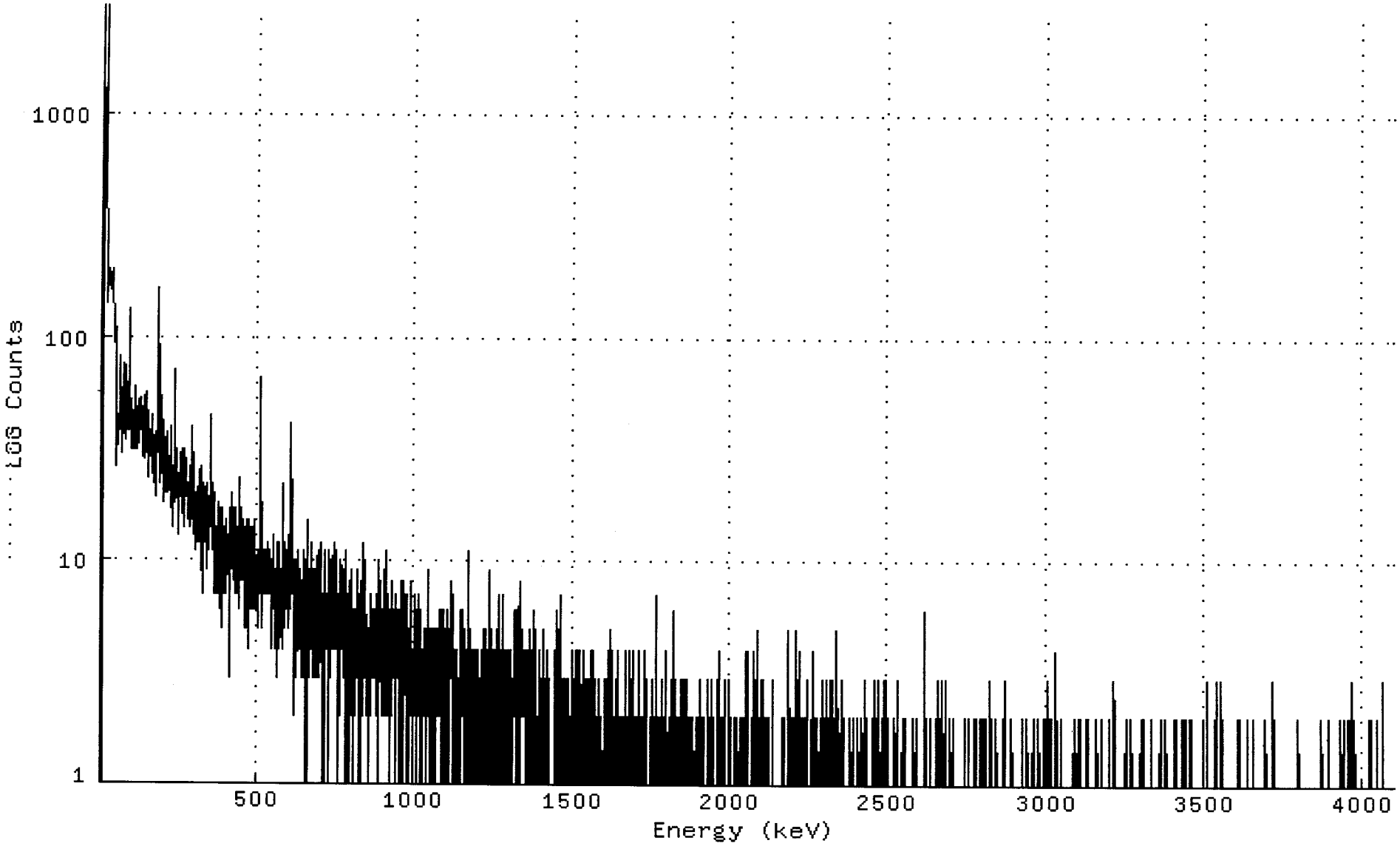
Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NB-93M	14.60Y	1.00	4.225E+03	4.225E+03	1.559E+03	36.89	
I-125	60.14D	1.01	7.910E+01	7.968E+01	7.925E+01	99.46	
PM-145	17.70Y	1.00	2.277E+01	2.277E+01	2.699E+01	118.52	
			---	---			
	Total Activity :		4.327E+03	4.328E+03			

Grand Total Activity : 4.367E+03 4.369E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106602_GE2_GAW11_171331.CNF;1
Title :
Sample Title: BLANK
Start Time: 25-NOV-2011 14:09 Sample Time: 25-NOV-2011 00:00 Energy Offset: 6.87229E-02
Real Time : 0 02:00:01.06 Sample ID : 1111066-02 Energy Slope : 9.99625E-01
Live Time : 0 02:00:00.00 Sample Type: WATER Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106602_GE2_GAW11_171331

Channel

1:	0	0	0	0	0	0	0	1
9:	208	787	2065	1925	837	844	3052	837
17:	161	141	180	181	173	190	187	176
25:	195	177	165	197	187	159	184	191
33:	168	190	185	199	195	174	159	149
41:	130	112	101	97	93	94	109	26
49:	50	30	38	35	42	38	41	32
57:	36	34	57	59	38	57	79	81
65:	30	44	41	58	37	44	43	36
73:	50	49	75	48	68	73	34	41
81:	54	41	49	49	62	38	53	59
89:	49	67	56	71	132	72	38	40
97:	36	44	52	31	35	46	31	35
105:	39	38	36	37	57	31	59	36
113:	46	31	42	37	45	48	35	34
121:	52	37	33	35	41	38	38	53
129:	38	39	39	36	46	29	48	33
137:	42	37	28	54	33	32	49	56
145:	41	30	31	31	31	30	23	46
153:	34	32	36	35	38	33	36	29
161:	34	24	39	44	26	32	34	33
169:	22	24	33	31	34	37	19	26
177:	29	29	34	31	30	30	39	45
185:	59	164	52	22	25	23	33	30
193:	35	28	26	31	24	54	32	18
201:	26	35	36	29	27	29	23	20
209:	30	33	37	31	33	20	36	24
217:	23	24	27	23	29	21	19	27
225:	17	20	39	24	25	25	14	25
233:	15	22	31	18	31	35	71	34
241:	24	31	26	24	19	26	13	24
249:	14	17	23	18	26	19	25	28
257:	22	29	31	19	25	21	22	16
265:	23	23	16	14	31	23	28	26
273:	20	19	22	20	23	19	22	15
281:	19	17	19	23	16	14	17	26
289:	15	17	15	18	22	19	39	23
297:	20	13	20	22	26	15	14	11
305:	16	11	14	17	21	21	12	16
313:	12	12	14	16	17	19	24	26
321:	12	17	14	12	11	7	18	15
329:	22	16	17	18	21	14	20	14
337:	12	17	12	22	11	9	20	16
345:	19	12	13	11	13	18	17	44
353:	32	20	14	22	17	13	13	15
361:	11	12	7	16	12	18	20	20
369:	10	9	13	11	13	7	16	18
377:	9	7	8	11	15	7	14	17
385:	6	7	16	5	14	11	17	9
393:	14	7	8	14	11	11	9	15
401:	7	12	12	12	13	12	9	10
409:	11	12	6	16	10	3	17	11
417:	9	13	18	14	12	20	12	11
425:	8	17	10	11	12	8	11	13

433:	17	7	12	11	9	14	7	7
441:	15	23	6	9	9	10	8	9
449:	17	10	9	10	13	8	10	11
457:	15	9	11	8	5	5	13	14
465:	10	5	8	10	14	6	15	8
473:	15	12	4	12	10	14	11	6
481:	9	8	9	6	8	9	7	14
489:	6	10	13	14	6	15	12	9
497:	8	7	10	8	6	6	10	7
505:	7	5	11	7	15	39	61	65
513:	27	12	10	5	7	7	6	11
521:	8	7	8	9	9	9	11	7
529:	11	9	9	7	12	7	8	9
537:	7	8	10	11	7	7	8	8
545:	4	7	10	6	9	10	6	13
553:	9	10	8	8	7	4	6	4
561:	6	9	6	12	7	3	11	8
569:	10	7	12	7	9	4	5	8
577:	5	6	6	9	6	7	22	10
585:	8	4	6	7	12	9	7	11
593:	7	9	6	9	8	11	10	5
601:	12	11	10	13	6	8	7	6
609:	41	31	17	12	7	8	10	8
617:	8	7	2	3	10	5	8	8
625:	10	5	3	3	5	7	7	4
633:	11	8	9	5	4	7	8	5
641:	9	6	3	8	7	7	6	5
649:	6	4	11	3	7	3	8	4
657:	10	7	0	10	15	15	1	5
665:	3	5	9	6	5	3	6	12
673:	4	6	6	4	7	4	9	8
681:	3	6	4	3	5	5	9	4
689:	8	9	6	3	8	6	10	11
697:	8	3	9	8	5	6	6	5
705:	7	6	12	1	7	5	5	4
713:	7	1	6	7	6	1	11	4
721:	5	7	6	6	7	5	7	11
729:	1	4	4	8	5	4	3	10
737:	6	3	9	7	6	4	9	9
745:	12	6	7	7	5	4	5	6
753:	11	6	4	6	7	1	3	2
761:	2	5	5	2	6	8	6	10
769:	9	6	4	4	6	4	6	3
777:	7	5	9	3	6	8	11	9
785:	1	7	2	7	5	7	7	1
793:	5	8	2	4	4	1	6	2
801:	4	9	9	6	4	5	4	1
809:	5	6	2	5	6	4	6	4
817:	9	8	4	3	7	5	7	4
825:	7	2	7	1	3	3	6	6
833:	7	1	8	2	9	4	3	12
841:	4	3	6	10	6	5	8	4
849:	5	5	2	2	4	4	1	1
857:	4	5	2	5	2	7	3	3
865:	5	3	5	6	5	3	5	5
873:	4	3	5	5	6	5	5	4
881:	7	2	4	5	5	4	10	6
889:	1	8	4	3	4	4	6	2
897:	2	2	6	6	3	5	2	7
905:	9	5	3	7	2	3	11	8

913:	6	5	2	7	6	5	3	4
921:	5	1	6	1	6	3	6	8
929:	4	2	5	7	4	3	6	4
937:	6	4	4	1	7	5	4	4
945:	4	5	3	6	5	4	5	6
953:	1	2	4	3	3	2	4	1
961:	4	8	6	4	8	6	6	0
969:	6	6	3	4	7	5	7	4
977:	1	2	3	1	5	3	3	0
985:	3	3	2	2	8	3	3	3
993:	3	2	1	2	4	3	3	2
1001:	6	5	2	7	4	1	6	5
1009:	2	5	2	3	7	7	3	2
1017:	4	6	1	1	6	2	3	3
1025:	3	4	2	1	0	4	2	4
1033:	5	4	2	5	5	2	3	1
1041:	2	4	9	3	2	5	4	4
1049:	5	1	5	2	4	5	5	4
1057:	0	3	1	1	5	1	1	2
1065:	5	4	0	2	3	5	3	2
1073:	2	4	3	3	5	2	3	5
1081:	4	4	6	6	3	0	0	1
1089:	0	2	1	4	1	3	6	3
1097:	5	5	4	1	5	3	6	1
1105:	1	3	2	4	5	3	4	1
1113:	4	3	3	3	4	6	8	7
1121:	7	2	1	1	4	1	3	4
1129:	2	0	4	1	0	2	3	1
1137:	1	4	2	2	2	1	3	0
1145:	5	6	4	2	4	0	4	6
1153:	5	5	2	2	5	5	3	1
1161:	4	2	1	1	0	2	4	0
1169:	5	1	2	4	11	3	5	4
1177:	0	5	1	2	0	4	2	1
1185:	3	3	4	4	3	0	0	2
1193:	4	1	1	3	3	4	3	4
1201:	1	4	2	1	2	3	3	3
1209:	1	1	2	2	1	2	4	0
1217:	2	3	1	3	5	2	2	0
1225:	2	5	3	2	4	3	4	3
1233:	1	1	3	4	1	2	9	7
1241:	3	2	4	1	2	5	1	1
1249:	2	4	3	3	1	2	4	1
1257:	0	2	4	2	4	1	5	2
1265:	2	2	2	3	2	7	1	1
1273:	1	1	2	4	2	0	2	7
1281:	3	0	4	2	2	1	3	4
1289:	0	3	4	1	3	1	2	0
1297:	1	1	3	4	2	1	3	0
1305:	4	2	1	3	0	3	1	1
1313:	2	2	2	2	2	3	6	4
1321:	2	3	6	2	0	2	3	2
1329:	0	2	2	5	8	7	1	0
1337:	2	4	4	2	2	5	2	3
1345:	3	3	2	3	4	2	2	2
1353:	0	4	0	2	2	3	4	1
1361:	3	2	3	5	4	5	1	1
1369:	3	3	2	4	1	1	4	3
1377:	3	6	1	0	0	0	5	4
1385:	2	0	3	0	1	1	1	0

1393:	2	2	4	0	2	1	1	2
1401:	0	3	2	1	1	1	3	3
1409:	5	0	2	2	2	3	3	3
1417:	0	2	4	0	0	2	4	2
1425:	3	2	2	1	1	1	1	0
1433:	1	1	0	1	0	1	1	0
1441:	0	1	1	0	0	4	3	0
1449:	3	1	2	4	6	0	1	3
1457:	5	0	3	2	5	7	5	2
1465:	2	0	3	1	3	0	2	1
1473:	1	3	0	0	1	0	2	3
1481:	0	2	0	0	1	3	2	2
1489:	1	1	1	1	1	2	0	0
1497:	0	1	4	3	0	4	1	2
1505:	2	0	3	2	3	4	3	0
1513:	3	2	1	0	4	0	0	0
1521:	4	1	0	4	2	4	2	1
1529:	1	2	2	2	1	0	4	3
1537:	1	0	2	3	0	1	3	1
1545:	2	3	3	0	1	2	1	1
1553:	1	2	1	3	2	1	0	4
1561:	1	1	3	1	2	0	2	4
1569:	0	1	2	0	1	0	3	1
1577:	1	2	0	2	1	3	1	0
1585:	0	1	2	2	1	2	0	2
1593:	2	1	0	0	0	1	1	0
1601:	1	1	1	3	1	1	3	2
1609:	0	1	1	3	1	1	0	4
1617:	0	0	1	4	5	1	0	0
1625:	2	0	2	4	2	2	0	1
1633:	1	1	0	2	3	0	3	1
1641:	3	0	0	0	0	4	1	1
1649:	0	2	0	1	1	0	0	2
1657:	1	1	1	2	0	1	2	2
1665:	2	0	1	1	1	4	1	1
1673:	0	2	0	2	0	2	1	2
1681:	0	4	1	1	1	0	3	1
1689:	0	1	1	2	4	1	2	0
1697:	0	2	0	0	0	1	1	2
1705:	1	2	1	1	2	1	1	4
1713:	0	1	0	1	1	2	2	1
1721:	0	2	0	1	2	1	1	2
1729:	4	1	3	2	2	0	3	0
1737:	0	3	0	1	1	1	1	0
1745:	0	1	0	2	2	0	2	1
1753:	1	0	1	3	1	1	1	0
1761:	2	2	1	1	7	3	2	1
1769:	1	1	2	2	0	1	1	2
1777:	1	1	1	1	0	0	3	2
1785:	1	1	0	2	0	1	0	1
1793:	0	4	0	2	0	0	3	0
1801:	0	1	0	0	1	1	2	1
1809:	1	1	1	2	0	2	1	3
1817:	0	0	3	6	1	0	3	0
1825:	2	1	3	0	2	1	1	0
1833:	1	0	1	2	2	1	1	1
1841:	1	2	2	3	1	2	0	2
1849:	3	2	2	0	1	2	0	2
1857:	1	2	2	3	0	0	1	3
1865:	1	1	2	2	1	0	1	1

1873:	2	0	2	0	0	2	1	0
1881:	0	1	2	1	1	1	0	0
1889:	0	0	2	0	0	2	1	2
1897:	0	1	2	0	1	2	1	0
1905:	3	0	1	0	1	0	2	0
1913:	0	0	0	0	2	0	2	1
1921:	0	1	1	1	1	1	0	1
1929:	2	1	2	1	3	1	0	1
1937:	0	2	1	3	1	1	0	2
1945:	0	0	1	0	0	2	1	0
1953:	0	1	0	0	1	0	0	2
1961:	3	0	0	2	4	1	1	1
1969:	0	1	1	1	0	0	2	0
1977:	2	1	1	0	1	0	0	3
1985:	1	1	1	1	0	0	1	0
1993:	1	0	1	1	0	1	3	0
2001:	1	0	1	0	2	0	0	0
2009:	1	1	1	0	0	1	0	0
2017:	2	1	1	0	1	2	1	2
2025:	1	0	0	0	0	0	2	0
2033:	2	0	1	1	0	1	0	1
2041:	2	1	0	1	2	0	0	1
2049:	1	0	0	0	1	4	0	1
2057:	4	0	0	1	0	1	0	0
2065:	1	0	1	1	0	0	0	2
2073:	0	1	0	0	0	4	1	1
2081:	0	0	0	3	0	0	1	2
2089:	5	1	0	2	0	1	0	0
2097:	0	1	0	0	0	2	3	0
2105:	1	1	2	1	3	1	2	0
2113:	1	1	0	1	1	2	1	1
2121:	2	2	1	0	0	1	0	0
2129:	0	0	1	0	0	1	3	2
2137:	0	2	0	0	1	1	0	1
2145:	0	0	0	1	0	1	1	0
2153:	1	0	0	0	1	0	0	0
2161:	1	0	1	1	0	2	0	1
2169:	1	1	1	2	0	1	0	0
2177:	0	0	1	0	0	1	3	0
2185:	1	1	1	5	0	1	1	0
2193:	2	0	2	1	1	1	1	0
2201:	0	0	1	1	2	2	2	5
2209:	0	0	2	1	1	1	1	3
2217:	2	2	1	2	2	0	4	1
2225:	2	0	0	1	1	0	2	0
2233:	0	1	0	0	1	2	1	0
2241:	2	1	1	3	1	0	1	0
2249:	1	1	0	0	1	0	0	0
2257:	1	1	1	1	4	0	0	2
2265:	0	0	2	1	0	1	0	0
2273:	1	0	2	2	2	1	0	0
2281:	0	0	0	0	0	2	0	1
2289:	1	0	0	1	0	0	3	0
2297:	2	0	1	1	2	1	0	1
2305:	3	1	2	0	1	2	1	1
2313:	1	2	1	2	0	1	3	2
2321:	1	0	3	2	1	1	1	2
2329:	1	1	1	0	0	0	1	2
2337:	3	0	5	0	1	1	1	1
2345:	0	1	0	1	1	0	0	3

2353:	0	0	3	0	1	1	0	1
2361:	1	2	0	0	0	0	0	0
2369:	1	0	0	0	1	1	0	1
2377:	1	1	1	1	0	2	0	1
2385:	0	0	0	0	2	1	1	0
2393:	0	0	1	0	1	0	0	0
2401:	0	1	0	0	2	1	1	0
2409:	0	0	1	0	2	1	1	0
2417:	1	0	0	0	1	0	0	0
2425:	3	2	1	2	0	0	0	2
2433:	1	1	2	1	1	0	0	0
2441:	1	1	0	0	0	0	0	0
2449:	1	2	2	2	1	0	0	0
2457:	0	3	0	1	0	0	1	0
2465:	0	0	2	0	1	0	1	3
2473:	1	1	0	0	0	1	0	2
2481:	0	0	0	1	0	1	1	3
2489:	0	0	0	0	0	0	3	0
2497:	0	0	1	1	2	0	1	1
2505:	1	0	0	1	1	1	0	1
2513:	0	0	0	0	0	1	2	1
2521:	0	1	0	1	1	1	0	3
2529:	1	0	1	0	0	1	0	1
2537:	0	0	0	0	1	0	1	1
2545:	1	2	0	1	0	0	1	1
2553:	0	0	2	2	0	0	0	0
2561:	0	0	0	0	0	0	1	0
2569:	1	1	1	0	0	0	0	1
2577:	1	0	0	1	2	0	0	0
2585:	1	1	1	0	2	1	0	1
2593:	1	0	1	0	0	0	0	0
2601:	1	1	1	0	1	1	0	0
2609:	1	0	1	1	1	3	6	6
2617:	3	1	0	0	2	1	0	0
2625:	0	0	0	1	1	0	1	0
2633:	2	1	1	1	0	0	0	1
2641:	0	1	1	1	0	0	0	1
2649:	0	0	0	2	0	0	2	0
2657:	1	0	3	0	0	0	2	1
2665:	0	1	0	0	0	1	0	2
2673:	3	1	1	0	1	0	0	1
2681:	3	0	0	1	0	0	0	1
2689:	0	1	1	1	0	0	0	1
2697:	2	0	0	1	0	0	0	0
2705:	0	0	1	2	1	0	0	0
2713:	1	0	1	1	0	0	0	1
2721:	0	0	0	0	0	1	1	0
2729:	0	1	0	0	0	1	0	1
2737:	0	0	1	1	1	0	0	2
2745:	1	0	0	0	0	0	0	0
2753:	0	2	0	0	1	1	0	0
2761:	0	0	0	0	0	0	0	1
2769:	1	1	0	1	2	0	0	2
2777:	0	2	0	0	0	0	0	0
2785:	0	0	0	1	0	2	0	0
2793:	0	0	1	1	1	2	0	0
2801:	0	2	0	0	1	0	0	0
2809:	2	0	0	0	1	1	0	1
2817:	0	1	0	0	3	2	1	1
2825:	1	0	2	0	1	0	0	1

2833:	0	1	0	0	0	1	0	0
2841:	1	0	2	0	0	0	0	1
2849:	1	0	1	1	1	0	0	0
2857:	0	0	0	1	1	1	0	2
2865:	0	1	1	3	0	2	0	0
2873:	1	1	0	0	0	0	1	1
2881:	1	0	1	0	0	0	0	0
2889:	0	1	2	1	0	0	1	0
2897:	0	1	1	0	1	0	0	0
2905:	1	0	1	0	0	1	0	0
2913:	0	0	0	0	1	1	0	0
2921:	1	0	1	2	1	1	0	0
2929:	0	1	0	0	0	0	0	0
2937:	0	0	1	2	0	1	0	1
2945:	0	0	0	0	0	1	0	0
2953:	1	0	0	1	0	0	2	0
2961:	1	1	0	0	1	1	0	0
2969:	0	1	1	1	0	0	0	2
2977:	1	0	0	0	1	0	0	0
2985:	0	0	1	1	0	2	1	0
2993:	1	1	0	0	2	0	0	0
3001:	2	3	1	0	2	0	0	0
3009:	2	1	2	0	0	1	2	1
3017:	0	0	0	0	1	0	0	1
3025:	1	0	0	0	0	0	4	0
3033:	0	0	1	1	1	0	0	0
3041:	0	1	1	1	2	0	0	1
3049:	0	0	0	0	0	0	0	0
3057:	1	0	0	0	0	0	0	0
3065:	0	1	0	1	0	1	1	0
3073:	0	0	1	0	0	0	0	0
3081:	0	0	0	0	0	2	0	0
3089:	0	0	0	0	0	1	0	0
3097:	1	0	2	0	1	0	1	0
3105:	0	0	0	2	0	0	0	1
3113:	0	1	0	1	1	1	0	0
3121:	0	0	0	1	0	0	2	0
3129:	2	0	0	0	2	0	0	0
3137:	0	1	0	0	0	1	0	0
3145:	0	0	0	1	0	0	1	0
3153:	0	0	0	0	1	2	0	0
3161:	0	0	0	0	0	0	1	0
3169:	1	1	0	0	1	2	0	1
3177:	0	0	1	0	0	0	0	0
3185:	0	1	0	1	0	1	0	1
3193:	0	0	0	0	0	0	1	2
3201:	0	0	0	0	0	0	0	0
3209:	0	3	0	0	3	2	1	0
3217:	0	1	1	0	0	1	1	0
3225:	0	0	0	0	0	0	0	0
3233:	1	0	0	0	1	0	1	0
3241:	0	1	0	0	0	0	0	1
3249:	1	2	0	2	1	0	0	0
3257:	1	0	0	0	0	0	0	0
3265:	0	0	2	0	0	1	0	0
3273:	0	0	0	0	1	0	0	0
3281:	0	0	1	0	0	0	0	1
3289:	1	0	0	0	1	1	0	0
3297:	1	0	2	0	0	1	1	1
3305:	1	0	0	1	2	0	0	0

3313:	0	0	1	0	0	0	1	0
3321:	0	0	0	0	0	0	0	0
3329:	1	2	0	0	0	1	0	0
3337:	0	0	0	0	0	0	0	0
3345:	1	1	0	0	0	0	0	1
3353:	1	0	0	1	0	0	2	2
3361:	0	1	0	1	0	0	1	0
3369:	0	0	0	0	2	2	0	0
3377:	2	1	1	0	0	0	0	0
3385:	0	0	0	0	0	0	0	0
3393:	0	0	0	0	0	0	1	0
3401:	0	1	0	2	0	1	1	0
3409:	0	0	2	0	1	0	1	0
3417:	1	1	0	0	1	0	0	0
3425:	0	1	0	0	2	1	0	0
3433:	1	1	2	2	0	1	0	0
3441:	2	0	0	0	0	0	0	1
3449:	0	0	0	2	0	1	0	0
3457:	0	1	1	2	0	1	1	1
3465:	0	1	0	0	0	0	0	1
3473:	0	0	0	1	0	0	1	0
3481:	0	0	0	0	0	1	1	1
3489:	0	1	0	1	1	1	2	0
3497:	0	1	0	0	0	0	0	1
3505:	1	0	3	0	0	1	0	0
3513:	0	0	1	0	0	0	1	0
3521:	0	0	1	1	0	1	1	0
3529:	0	0	2	1	1	0	0	3
3537:	0	0	0	1	0	0	1	0
3545:	0	0	0	0	0	3	1	0
3553:	0	2	0	0	0	1	0	1
3561:	0	0	0	0	0	0	0	0
3569:	0	0	0	0	0	1	0	0
3577:	0	1	0	1	0	0	0	1
3585:	1	1	0	0	1	1	0	0
3593:	0	1	0	1	1	1	0	0
3601:	0	0	2	0	0	0	1	0
3609:	0	0	0	2	0	1	1	0
3617:	0	1	1	0	1	0	0	0
3625:	0	1	1	0	1	0	0	0
3633:	2	0	0	0	1	0	0	0
3641:	1	0	1	0	1	1	0	0
3649:	0	1	0	2	0	0	0	0
3657:	0	0	0	1	0	0	0	0
3665:	0	1	1	0	0	0	0	0
3673:	0	0	0	0	1	1	1	0
3681:	0	0	0	0	0	0	0	0
3689:	0	0	0	2	0	0	0	0
3697:	0	0	1	0	0	1	0	0
3705:	0	0	0	0	0	0	1	2
3713:	0	3	0	1	2	0	0	0
3721:	0	0	0	1	0	0	0	0
3729:	0	0	0	0	1	1	0	1
3737:	0	1	0	0	0	1	1	1
3745:	0	0	0	0	1	0	0	1
3753:	1	0	0	0	1	0	0	0
3761:	0	0	0	0	0	0	0	1
3769:	0	1	0	0	1	0	0	0
3777:	0	1	0	0	1	0	0	0
3785:	1	0	0	1	0	0	0	1

3793:	0	0	2	0	0	0	0	0
3801:	1	0	0	0	0	0	1	0
3809:	0	0	1	1	0	1	0	0
3817:	0	0	0	0	1	1	0	0
3825:	1	0	0	0	1	0	0	0
3833:	0	0	0	1	0	1	0	1
3841:	0	0	0	0	0	0	0	0
3849:	0	0	0	0	0	0	0	0
3857:	1	0	0	0	0	0	0	0
3865:	0	0	0	2	0	0	0	0
3873:	0	1	0	1	0	0	0	0
3881:	0	1	0	1	0	0	1	0
3889:	0	1	2	1	0	0	0	0
3897:	0	0	0	0	1	0	0	0
3905:	0	0	0	0	0	0	1	1
3913:	1	0	0	1	0	0	0	0
3921:	0	0	0	0	0	0	1	2
3929:	0	0	0	1	1	0	0	2
3937:	0	0	0	0	0	1	1	1
3945:	1	0	0	0	0	0	2	2
3953:	0	0	0	0	2	1	1	1
3961:	3	1	0	0	0	1	0	0
3969:	0	1	2	0	0	0	0	0
3977:	0	0	1	0	0	0	0	1
3985:	0	0	0	1	0	0	1	1
3993:	0	0	0	1	0	1	0	0
4001:	0	0	0	1	0	0	0	0
4009:	0	0	0	0	0	0	0	0
4017:	1	1	0	2	0	1	0	0
4025:	2	0	0	0	1	0	0	0
4033:	0	0	1	0	0	0	0	0
4041:	0	2	0	0	0	0	0	1
4049:	0	0	0	0	0	0	0	0
4057:	1	0	0	0	3	1	0	0
4065:	0	0	0	0	0	1	0	0
4073:	0	0	0	0	0	0	0	0
4081:	1	0	0	0	0	0	0	0
4089:	1	0	0	1	0	0	0	0

ICD 11/26/11

Sample ID : 1111066-03 Acquisition date : 25-NOV-2011 14:06:42

VAX/VMS Peak Search Report Generated 25-NOV-2011 16:06:57.57

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106603_GE1_GAW11_171330.CN
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : ST1-01-111108
Deposition Date :
Sample Date : 8-NOV-2011 00:00:00. Acquisition date : 25-NOV-2011 14:06:42
Sample ID : 1111066-03 Sample Quantity : 2.00000E+00 liter
Sample type : WATER Sample Geometry : 0
Detector name : GE1 Detector Geometry: GAW-11
Elapsed live time: 0 02:00:00.00 Elapsed real time: 0 02:00:00.83 0.0%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw %Err	Fit	Nuclides
0	41.30	41	184	4.46	40.92	38	6108.5		RA-225
0	112.40	41	204	3.72	112.04	110	7119.0		
0	164.86*	38	123	2.68	164.51	162	6104.8		CE-139
0	221.04	45	163	3.96	220.70	216	9107.2		
0	248.88	31	71	3.48	248.55	246	6 95.5		
0	286.82	32	83	4.58	286.49	284	8102.5		PM-149
4	604.48	28	32	2.70	604.22	600	14 82.1	6.96E-01	
0	653.44	29	56	6.87	653.19	647	13110.6		
0	702.44	19	28	1.33	702.20	699	7105.5		
0	728.52	31	20	4.66	728.29	724	9 63.5		BI-212
0	802.52*	31	23	5.73	802.31	797	12 77.2		
0	1000.42*	21	7	3.34	1000.25	996	9 77.6		PA-234M
0	1362.41	8	7	2.39	1362.31	1358	7123.8		
0	1369.76	18	15	5.59	1369.66	1365	13 94.4		
0	1460.29	24	18	1.45	1460.20	1456	9 76.6		K-40
0	1586.21	8	6	1.14	1586.16	1581	8126.9		
0	1765.24	14	2	2.91	1765.23	1761	8 63.6		
0	1837.64	6	2	1.28	1837.64	1834	7103.3		
0	1887.99	4	2	1.88	1888.00	1884	6130.1		
0	1960.39	5	2	1.26	1960.42	1957	7123.4		
0	2006.63	9	0	3.70	2006.67	2004	6 66.7		
0	2074.40	6	4	2.28	2074.45	2069	8136.9		
0	2526.61	8	0	2.98	2526.75	2523	8 70.7		
0	2681.20	8	0	1.32	2681.38	2678	6 70.7		
0	3092.74	12	0	6.65	3093.00	3088	10 57.7		

AG
11/28/11

Sample ID : 1111066-03 Acquisition date : 25-NOV-2011 14:06:42

Total number of lines in spectrum	25	
Number of unidentified lines	14	
Number of lines tentatively identified by NID	11	44.00%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	4.336E+01	4.336E+01	3.346E+01	77.18	
BI-212	1.41E+10Y	1.00	2.824E+01	2.824E+01	1.814E+01	64.25	
RA-225	14.80D	2.28	4.641E+00	1.060E+01	1.154E+01	108.87	
PA-234M	4.47E+09Y	1.00	3.297E+02	3.297E+02	2.579E+02	78.23	
		Total Activity :	4.059E+02	4.119E+02			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CE-139	137.66D	1.09	1.629E+00	1.780E+00	1.873E+00	105.26	
		Total Activity :	1.629E+00	1.780E+00			

Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
PM-149	53.08H	251.	5.123E+01	1.286E+04	1.324E+04	103.02	
		Total Activity :	5.123E+01	1.286E+04			

Grand Total Activity : 4.588E+02 1.327E+04

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111066-03 Acquisition date : 25-NOV-2011 14:06:42

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/liter	Decay Corr pCi/liter	2-Sigma %Error	Status
K-40	1460.81	10.67*	9.621E-01	4.336E+01	4.336E+01	77.18	OK
Final Mean for 1 Valid Peaks = 4.336E+01+/- 3.346E+01 (77.18%)							
BI-212	727.17	11.80*	1.744E+00	2.824E+01	2.824E+01	64.25	OK
	1620.62	2.75	8.880E-01	----- Line Not Found		-----	Absent
Final Mean for 1 Valid Peaks = 2.824E+01+/- 1.814E+01 (64.25%)							
RA-225	40.00	31.00*	5.375E+00	4.641E+00	1.060E+01	108.87	OK
Final Mean for 1 Valid Peaks = 1.060E+01+/- 1.154E+01 (108.87%)							
PA-234M	1001.03	0.92*	1.316E+00	3.297E+02	3.297E+02	78.23	OK
Final Mean for 1 Valid Peaks = 3.297E+02+/- 2.579E+02 (78.23%)							

Nuclide Type: FISSION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/liter	Decay Corr pCi/liter	2-Sigma %Error	Status
CE-139	165.85	80.35*	5.391E+00	1.629E+00	1.780E+00	105.26	OK
Final Mean for 1 Valid Peaks = 1.780E+00+/- 1.873E+00 (105.26%)							

Nuclide Type: ACTIVATION

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/liter	Decay Corr pCi/liter	2-Sigma %Error	Status
PM-149	285.90	3.10*	3.823E+00	5.123E+01	1.286E+04	103.02	OK
Final Mean for 1 Valid Peaks = 1.286E+04+/- 1.324E+04 (103.02%)							

Flag: "*" = Keyline

Sample ID : 1111066-03
Acquisition date : 25-NOV-2011 14:06:42

---- Identified Nuclides ----

Nuclide	Activity (pCi/liter)	Act error	MDA (pCi/liter)	MDA error	Act/MDA
K-40	4.336E+01	3.346E+01	3.024E+01	2.583E+00	1.434
CE-139	1.780E+00	1.873E+00	2.563E+00	2.281E-01	0.695
PM-149	1.286E+04	1.324E+04	1.403E+04	1.288E+03	0.917
BI-212	2.824E+01	1.814E+01	2.005E+01	1.790E+00	1.408
RA-225	1.060E+01	1.154E+01	1.268E+01	1.069E+00	0.836
PA-234M	3.297E+02	2.579E+02	3.503E+02	3.137E+01	0.941

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
BE-7	2.072E+00		1.786E+01	3.298E+01	3.139E+00	0.063
NA-22	7.609E-01		1.972E+00	3.893E+00	3.377E-01	0.195
AL-26	8.775E-01		2.129E+00	4.318E+00	3.553E-01	0.203
TI-44	-4.846E+00		1.513E+00	2.061E+00	1.615E-01	-2.352
SC-46	9.546E-01		1.790E+00	3.597E+00	3.083E-01	0.265
V-48	2.197E+00		4.010E+00	7.909E+00	7.030E-01	0.278
CR-51	-1.124E+01		1.971E+01	3.087E+01	3.001E+00	-0.364
MN-54	-1.586E+00		1.717E+00	2.759E+00	2.421E-01	-0.575
CO-56	-5.293E-01		2.014E+00	3.589E+00	3.136E-01	-0.147
CO-57	1.185E-01		1.319E+00	2.226E+00	2.219E-01	0.053
CO-58	-1.082E-01		1.846E+00	3.083E+00	2.731E-01	-0.035
FE-59	1.179E+00		4.125E+00	8.028E+00	7.964E-01	0.147
CO-60	-1.115E+00		1.735E+00	2.866E+00	2.706E-01	-0.389
ZN-65	-1.137E+00		4.466E+00	7.859E+00	7.322E-01	-0.145
GA-67	-8.016E+01		2.739E+02	3.341E+02	8.548E+02	-0.240
SE-75	-8.538E-01		2.315E+00	3.724E+00	3.446E-01	-0.229
RB-82	-1.028E+01		1.922E+01	3.313E+01	2.948E+00	-0.310
RB-83	6.302E-01		3.138E+00	5.958E+00	9.627E-01	0.106
KR-85	6.316E+02		5.146E+02	9.775E+02	9.326E+01	0.646
SR-85	3.324E+00		2.708E+00	5.144E+00	4.908E-01	0.646
Y-88	7.171E-01		1.858E+00	4.147E+00	3.399E-01	0.173
NB-93M	-1.841E+02		5.116E+01	2.773E+00	6.447E-01	-66.416
NB-94	4.378E-02		1.510E+00	2.843E+00	2.459E-01	0.015
NB-95	2.828E+00		2.770E+00	5.300E+00	4.723E-01	0.534
NB-95M	-1.141E+02		1.630E+02	2.552E+02	2.351E+01	-0.447
ZR-95	4.554E+00		3.509E+00	7.376E+00	7.203E-01	0.617
MO-99	-1.926E+02		9.437E+02	1.717E+03	1.533E+02	-0.112
RU-103	4.358E-01		2.214E+00	4.130E+00	6.087E-01	0.106
RU-106	1.439E+01		1.707E+01	3.355E+01	4.602E+00	0.429
AG-108M	-1.327E+00		1.757E+00	2.519E+00	2.248E-01	-0.527
CD-109	-1.013E+02		3.642E+01	4.857E+01	5.629E+00	-2.086
AG-110M	6.423E-01		2.110E+00	3.602E+00	3.204E-01	0.178
SN-113	6.421E-02		2.005E+00	3.723E+00	3.510E-01	0.017
TE123M	-1.339E-01		1.565E+00	2.396E+00	2.178E-01	-0.056
SB-124	2.397E+00		2.092E+00	4.180E+00	3.881E-01	0.573
I-125	1.640E+00		2.498E+01	4.009E+01	3.676E+00	0.041
SB-125	1.022E+00		4.284E+00	8.079E+00	7.694E-01	0.127

Sample ID : 1111066-03 Acquisition date : 25-NOV-2011 14:06:42

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
SB-126	-3.782E+00		7.918E+00	1.210E+01	1.080E+00	-0.312
SN-126	1.102E-01		2.871E+00	4.854E+00	4.811E-01	0.023
SB-127	1.389E+01		8.094E+01	1.571E+02	1.398E+01	0.088
I-129	-1.041E+01		3.354E+00	4.449E+00	4.746E-01	-2.339
I-131	-4.321E-01		6.535E+00	1.202E+01	1.115E+00	-0.036
TE-132	3.719E+01		5.907E+01	9.637E+01	8.865E+00	0.386
BA-133	7.773E-01		2.333E+00	4.346E+00	5.935E-01	0.179
CS-134	2.695E+00	+	2.229E+00	3.608E+00	3.352E-01	0.747
CS-135	2.353E+00		7.877E+00	1.342E+01	1.233E+00	0.175
CS-136	-8.270E-01		5.298E+00	9.679E+00	9.043E-01	-0.085
CS-137	5.781E-01		2.103E+00	3.563E+00	3.163E-01	0.162
LA-138	-6.162E-01		2.362E+00	4.299E+00	3.554E-01	-0.143
BA-140	-6.352E-01		1.358E+01	2.509E+01	8.376E+00	-0.025
LA-140	1.823E-01		4.712E+00	9.129E+00	7.614E-01	0.020
CE-141	-2.288E+00		3.582E+00	5.477E+00	1.159E+00	-0.418
CE-144	-1.918E+00		9.849E+00	1.634E+01	1.586E+00	-0.117
PM-144	6.740E-01		1.733E+00	3.052E+00	2.721E-01	0.221
PM-145	2.533E-01		5.976E+00	9.563E+00	6.228E+00	0.026
PM-146	3.209E+00		3.267E+00	6.505E+00	6.157E-01	0.493
ND-147	-1.263E+01		2.898E+01	5.137E+01	4.893E+00	-0.246
EU-152	-2.883E+00		1.203E+01	2.235E+01	2.373E+00	-0.129
GD-153	2.274E-01		4.740E+00	8.021E+00	7.943E-01	0.028
EU-154	2.167E+00		5.511E+00	1.088E+01	9.443E-01	0.199
EU-155	2.493E+00		3.502E+00	6.117E+00	5.986E-01	0.408
EU-156	7.848E+00		3.194E+01	5.681E+01	1.302E+01	0.138
HO-166M	1.386E+00		3.094E+00	5.946E+00	5.305E-01	0.233
HF-172	2.223E+00		9.878E+00	1.677E+01	1.657E+00	0.132
LU-172	7.549E+00		1.737E+01	3.456E+01	3.197E+00	0.218
LU-173	-7.267E-02		5.971E+00	9.928E+00	9.111E-01	-0.007
HF-175	1.191E+00		1.725E+00	3.323E+00	3.094E-01	0.359
LU-176	5.684E-01		1.256E+00	2.192E+00	2.031E-01	0.259
TA-182	4.359E+00		6.882E+00	1.356E+01	1.264E+00	0.321
IR-192	-1.202E+00		3.299E+00	5.874E+00	5.580E-01	-0.205
HG-203	1.080E+00		2.004E+00	3.502E+00	3.286E-01	0.308
BI-207	-2.837E-01		1.667E+00	2.891E+00	2.726E-01	-0.098
TL-208	-2.537E+00		5.750E+00	1.000E+01	9.380E-01	-0.254
BI-210M	-5.098E-01		2.709E+00	4.437E+00	4.083E-01	-0.115
PB-210	-3.981E+01		3.499E+01	5.547E+01	4.304E+00	-0.718
PB-211	2.129E+01		4.555E+01	8.657E+01	8.014E+00	0.246
PB-212	-3.862E-01		3.256E+00	5.512E+00	5.079E-01	-0.070
BI-214	3.260E+00		4.123E+00	7.737E+00	7.152E-01	0.421
PB-214	-2.151E-01		3.798E+00	6.869E+00	6.391E-01	-0.031
RN-219	-2.547E+00		2.053E+01	3.731E+01	3.447E+00	-0.068
RA-223	-2.337E+01		3.207E+01	4.925E+01	4.581E+00	-0.474
RA-224	2.900E+01		3.576E+01	6.190E+01	5.704E+00	0.469
RA-226	1.287E+01		5.046E+01	8.157E+01	1.494E+02	0.158
TH-227	-8.295E+00		1.203E+01	1.884E+01	1.735E+00	-0.440
AC-228	-2.554E+00		6.995E+00	1.268E+01	1.090E+00	-0.201

Sample ID : 1111066-03 Acquisition date : 25-NOV-2011 14:06:42

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
TH-230	-1.411E+03		3.973E+02	5.251E+02	4.104E+01	-2.687
PA-231	7.773E+00		5.256E+01	8.899E+01	8.233E+00	0.087
TH-231	2.192E+02		4.087E+01	5.685E+01	7.100E+00	3.855
PA-233	-9.394E-01		5.168E+00	8.444E+00	1.918E+00	-0.111
PA-234	-1.768E+00		5.350E+00	8.445E+00	8.241E-01	-0.209
TH-234	-1.279E+01		3.986E+01	7.094E+01	5.264E+00	-0.180
U-235	-3.617E+00		1.134E+01	1.789E+01	3.209E+00	-0.202
NP-237	6.061E+00		8.530E+00	1.490E+01	1.458E+00	0.407
NP-239	1.252E+02		8.573E+02	1.349E+03	1.336E+02	0.093
AM-241	-1.302E+01		3.800E+00	5.068E+00	3.600E-01	-2.570
AM-243	-2.655E+00		1.831E+00	2.789E+00	2.370E-01	-0.952
CM-243	7.822E+00		8.389E+00	1.513E+01	1.386E+00	0.517

Sample ID : 1111066-03 Acquisition date : 25-NOV-2011 14:06:42

Total number of lines in spectrum	25	
Number of unidentified lines	14	
Number of lines tentatively identified by NID	11	44.00%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	4.336E+01	4.336E+01	3.346E+01	77.18	
BI-212	1.41E+10Y	1.00	2.824E+01	2.824E+01	1.814E+01	64.25	
RA-225	14.80D	2.28	4.641E+00	1.060E+01	1.154E+01	108.87	
PA-234M	4.47E+09Y	1.00	3.297E+02	3.297E+02	2.579E+02	78.23	
		Total Activity :	4.059E+02	4.119E+02			

Nuclide Type : FISSION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CE-139	137.66D	1.09	1.629E+00	1.780E+00	1.873E+00	105.26	
		Total Activity :	1.629E+00	1.780E+00			

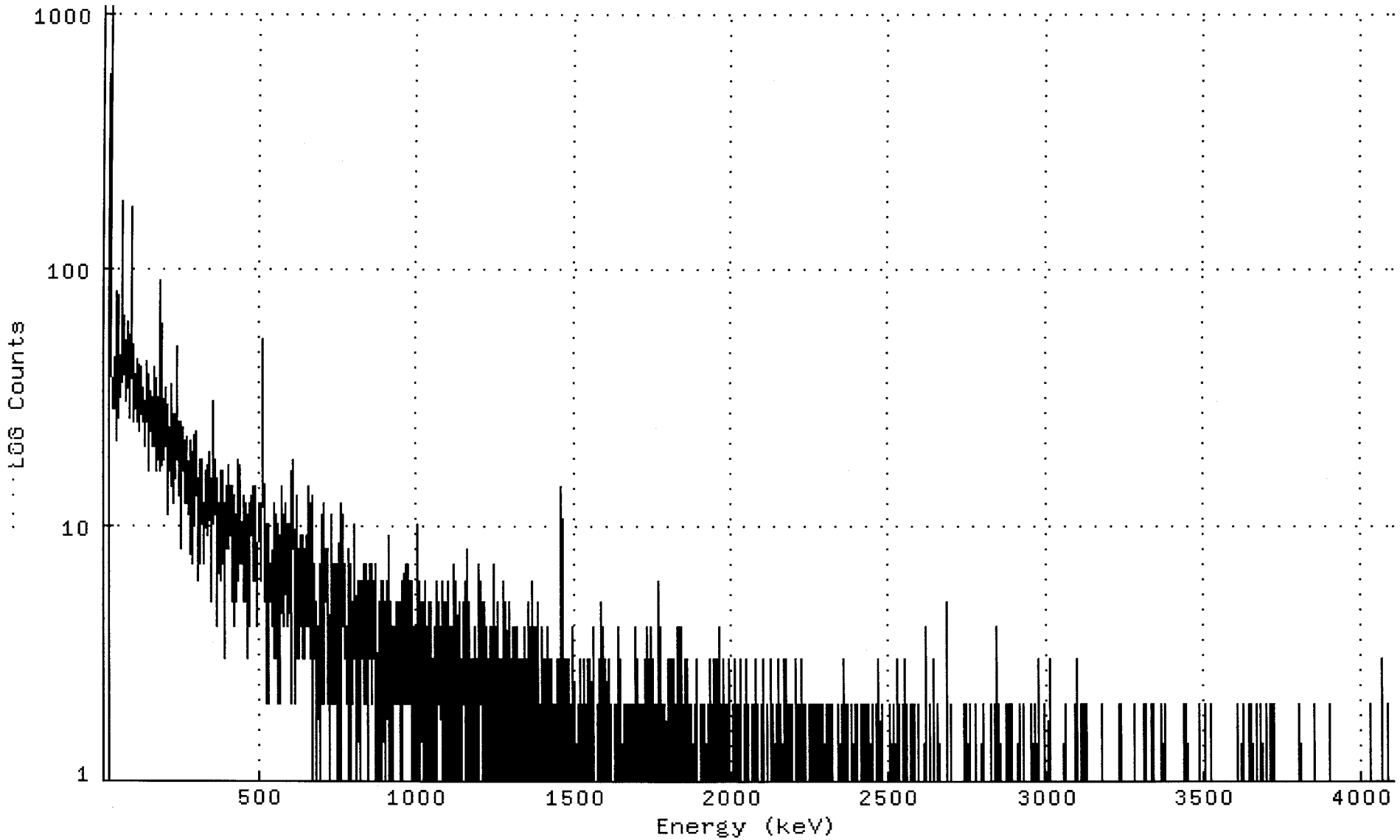
Nuclide Type : ACTIVATION

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
PM-149	53.08H	251.	5.123E+01	1.286E+04	1.324E+04	103.02	
		Total Activity :	5.123E+01	1.286E+04			

Grand Total Activity : 4.588E+02 1.327E+04

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106603_GE1_GAW11_171330.CNF;1
Title :
Sample Title: ST1-01-111108
Start Time: 25-NOV-2011 14:06 Sample Time: 8-NOV-2011 00:00: Energy Offset: 3.84457E-01
Real Time : 0 02:00:00.83 Sample ID : 1111066-03 Energy Slope : 9.99792E-01
Live Time : 0 02:00:00.00 Sample Type: WATER Energy Quad : 0.00000E+00



Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106603_GE1_GAW11_171330

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	0	0	0
17:	0	0	45	141	177	301	1063	705
25:	142	63	41	38	36	34	30	35
33:	34	28	44	28	28	31	33	43
41:	46	31	41	22	21	81	77	30
49:	32	38	26	31	38	45	31	38
57:	38	35	43	41	36	56	183	88
65:	48	45	53	38	49	51	36	30
73:	40	39	48	44	62	48	35	34
81:	37	43	26	51	55	31	44	35
89:	38	39	38	124	172	68	42	50
97:	30	29	40	25	28	38	30	34
105:	28	31	31	44	25	35	37	38
113:	40	42	30	23	34	29	29	30
121:	27	41	34	38	34	34	32	30
129:	34	28	25	25	30	29	23	30
137:	20	35	26	43	25	32	25	38
145:	31	30	16	32	29	23	33	25
153:	23	29	31	20	20	26	31	30
161:	21	20	33	32	41	22	25	16
169:	37	27	27	20	28	27	26	23
177:	29	18	31	16	18	18	25	28
185:	53	89	41	20	23	17	17	21
193:	18	27	22	22	18	28	34	23
201:	28	23	23	20	29	23	25	20
209:	17	11	23	21	24	18	21	18
217:	14	23	29	35	23	31	23	12
225:	22	22	16	22	19	18	20	15
233:	27	20	22	24	18	28	49	23
241:	18	25	19	20	17	13	25	19
249:	20	17	8	12	24	21	20	19
257:	16	18	21	16	18	12	13	20
265:	15	18	12	17	20	22	14	17
273:	11	13	17	17	13	17	16	21
281:	9	13	8	7	17	16	19	18
289:	17	11	10	15	16	17	22	23
297:	18	13	16	18	15	11	10	12
305:	15	14	6	18	10	15	7	16
313:	15	10	12	18	15	11	15	7
321:	11	7	12	11	9	10	15	16
329:	15	10	10	17	10	9	12	17
337:	10	11	18	11	17	19	13	8
345:	12	15	5	10	10	10	10	30
353:	15	17	12	18	17	17	11	12
361:	14	13	8	7	8	15	9	4
369:	10	11	9	10	12	11	7	16
377:	6	10	11	11	11	9	11	16
385:	10	7	9	10	8	3	12	11
393:	9	14	8	10	10	11	13	8
401:	10	17	9	9	14	11	13	9
409:	9	10	14	9	12	11	5	7
417:	13	4	7	11	6	6	8	8
425:	11	11	9	5	10	9	9	12

433:	6	18	16	7	11	10	8	9
441:	7	7	9	8	8	8	13	5
449:	9	6	8	11	11	12	8	8
457:	8	5	6	11	6	6	8	10
465:	3	11	12	10	4	4	9	13
473:	9	9	10	9	10	12	10	9
481:	6	7	14	14	6	10	9	8
489:	12	5	5	6	8	4	8	9
497:	11	10	9	12	11	8	6	6
505:	9	12	11	12	18	44	53	52
513:	23	9	5	5	6	8	6	10
521:	5	3	4	2	3	10	4	4
529:	2	6	7	6	5	7	7	7
537:	7	4	5	6	6	6	7	9
545:	12	4	4	3	4	4	5	3
553:	3	11	3	4	5	8	2	10
561:	7	9	8	5	9	9	4	2
569:	10	14	8	6	7	7	5	11
577:	4	7	6	5	8	7	9	12
585:	7	7	4	7	10	7	4	6
593:	6	5	8	8	9	10	2	7
601:	7	6	10	16	12	8	9	10
609:	18	13	7	6	4	2	4	8
617:	6	5	3	9	11	13	4	7
625:	5	6	3	8	4	7	5	7
633:	6	9	5	9	3	7	4	5
641:	5	5	8	5	5	3	4	5
649:	5	9	9	7	4	4	6	14
657:	8	5	5	5	3	12	5	9
665:	4	7	0	6	6	13	6	5
673:	6	7	6	6	3	5	4	0
681:	3	5	2	3	3	4	4	4
689:	3	1	7	3	5	4	4	11
697:	2	6	5	8	6	12	6	6
705:	4	2	7	5	8	6	5	5
713:	6	8	4	4	8	6	2	4
721:	3	1	3	2	4	5	9	11
729:	7	4	7	2	2	3	6	7
737:	2	5	2	2	7	3	5	4
745:	4	5	5	0	6	7	2	5
753:	4	1	4	6	12	6	7	3
761:	1	2	11	8	7	4	8	7
769:	3	6	4	6	7	3	4	4
777:	3	3	3	2	8	2	2	3
785:	1	3	7	1	4	1	1	4
793:	3	2	5	3	2	3	8	10
801:	3	10	5	7	4	4	4	1
809:	2	4	5	2	3	2	6	2
817:	1	3	3	4	6	4	4	6
825:	6	4	3	5	4	7	5	3
833:	2	4	3	2	3	7	3	6
841:	5	4	2	1	1	6	6	3
849:	6	6	7	3	5	5	3	2
857:	3	4	7	5	3	4	6	4
865:	4	4	4	6	7	1	1	3
873:	2	2	3	1	2	5	5	1
881:	5	3	4	0	2	5	2	6
889:	1	4	3	6	2	5	2	1
897:	2	3	5	5	4	4	3	3
905:	6	3	3	1	3	7	3	9

913:	3	3	5	2	1	4	2	4
921:	4	1	2	2	1	3	3	2
929:	3	3	3	4	3	2	5	3
937:	5	2	3	2	4	5	3	3
945:	2	3	0	3	4	5	2	6
953:	3	4	2	1	4	2	3	5
961:	6	6	7	6	2	4	4	6
969:	6	6	3	2	7	3	6	3
977:	2	3	2	5	1	6	4	6
985:	4	4	4	4	3	3	4	1
993:	4	3	1	0	4	3	5	9
1001:	10	8	2	1	1	5	4	5
1009:	3	6	1	2	4	5	5	2
1017:	3	5	2	1	3	5	3	6
1025:	3	3	1	4	1	0	4	0
1033:	1	1	4	2	1	3	3	1
1041:	5	1	5	5	4	3	2	3
1049:	1	2	2	1	3	1	1	2
1057:	3	1	4	2	3	2	6	1
1065:	4	2	5	2	3	5	3	3
1073:	3	2	4	3	3	0	6	2
1081:	1	1	2	5	2	1	2	1
1089:	0	4	3	2	3	4	1	5
1097:	0	2	2	6	1	6	1	3
1105:	2	3	4	2	3	2	2	2
1113:	4	1	5	1	6	4	7	4
1121:	6	3	4	2	1	2	3	2
1129:	2	1	3	4	5	1	3	4
1137:	0	1	3	1	3	3	1	2
1145:	2	2	5	2	3	2	2	0
1153:	0	3	6	1	8	3	1	3
1161:	0	2	5	2	1	0	4	2
1169:	3	1	0	1	3	2	2	2
1177:	3	3	1	3	3	1	2	4
1185:	2	4	2	2	2	0	3	2
1193:	2	2	3	1	5	3	7	5
1201:	4	6	3	3	2	3	2	5
1209:	4	4	1	1	3	5	3	1
1217:	2	2	1	2	3	4	1	3
1225:	2	0	3	3	2	1	4	3
1233:	0	2	1	3	0	4	3	2
1241:	3	1	3	7	2	1	1	1
1249:	4	2	1	3	2	5	1	1
1257:	3	2	2	1	0	2	3	3
1265:	1	1	2	1	1	1	3	1
1273:	2	3	6	3	1	2	5	4
1281:	0	1	2	1	1	1	0	3
1289:	2	3	5	1	1	1	2	2
1297:	2	1	3	2	3	2	1	1
1305:	1	2	4	1	1	2	2	4
1313:	2	2	4	2	3	1	4	2
1321:	1	0	3	2	3	1	2	3
1329:	0	2	1	3	1	1	1	0
1337:	2	3	1	1	2	2	4	2
1345:	2	2	1	1	3	2	2	1
1353:	5	2	2	2	0	3	1	0
1361:	3	4	4	0	1	2	5	6
1369:	2	4	2	4	3	2	1	1
1377:	0	3	4	1	3	1	1	5
1385:	0	1	1	1	2	0	1	1

1393:	0	3	0	2	0	4	2	1
1401:	3	2	0	0	1	1	1	1
1409:	3	2	2	2	1	3	4	4
1417:	1	2	0	1	3	1	3	1
1425:	3	1	2	2	1	1	1	2
1433:	2	2	0	0	1	1	1	2
1441:	1	2	3	3	3	0	2	2
1449:	3	0	2	2	2	0	1	2
1457:	4	2	2	14	8	5	3	2
1465:	3	1	1	1	2	1	3	2
1473:	1	3	2	1	1	1	0	1
1481:	2	1	3	0	1	2	0	2
1489:	0	0	1	1	4	0	2	3
1497:	2	1	0	2	1	0	0	0
1505:	0	0	1	0	2	0	0	1
1513:	2	2	0	1	0	3	1	0
1521:	2	0	0	1	1	0	3	1
1529:	1	1	1	2	1	0	1	2
1537:	2	2	1	3	3	1	0	1
1545:	3	1	1	1	1	1	3	2
1553:	0	1	2	1	0	4	2	1
1561:	2	4	1	0	1	1	1	0
1569:	1	1	2	0	1	1	1	1
1577:	0	0	3	0	2	0	1	3
1585:	1	2	5	0	1	1	4	1
1593:	2	0	2	1	3	0	1	1
1601:	0	1	0	1	2	3	2	1
1609:	2	2	0	0	2	0	0	0
1617:	0	1	1	0	0	1	1	0
1625:	1	0	1	0	2	1	2	0
1633:	1	2	1	4	0	1	0	1
1641:	1	1	0	0	1	1	3	0
1649:	1	0	0	1	1	0	2	1
1657:	1	1	1	0	0	2	0	0
1665:	1	1	0	0	0	1	2	2
1673:	2	2	2	2	0	0	0	0
1681:	1	2	0	1	0	2	2	1
1689:	1	1	0	4	1	0	3	2
1697:	1	3	2	2	1	0	0	2
1705:	0	0	1	0	2	1	1	2
1713:	0	0	0	0	2	1	0	0
1721:	1	1	0	1	1	3	3	0
1729:	0	3	4	0	1	3	2	2
1737:	2	1	0	3	1	4	1	1
1745:	1	0	0	0	3	1	0	1
1753:	0	1	2	2	2	2	1	0
1761:	0	2	0	2	6	2	4	0
1769:	1	2	4	0	1	0	1	2
1777:	2	0	0	1	2	1	0	0
1785:	0	2	1	0	0	0	0	0
1793:	0	3	2	0	1	2	1	3
1801:	1	0	2	1	2	1	2	3
1809:	1	2	1	2	1	3	0	2
1817:	0	0	1	1	2	2	0	2
1825:	2	4	2	1	0	1	0	4
1833:	0	1	1	0	1	4	1	0
1841:	0	0	1	0	0	0	2	1
1849:	0	0	0	0	1	3	1	0
1857:	1	3	0	1	0	2	0	1
1865:	0	1	0	1	2	1	0	0

1873:	0	1	1	0	0	0	2	2
1881:	0	0	1	0	0	1	3	2
1889:	0	0	0	1	1	1	0	0
1897:	0	2	0	1	0	2	0	2
1905:	1	0	0	0	0	1	0	2
1913:	2	0	0	0	0	1	0	0
1921:	1	2	0	0	2	1	0	3
1929:	1	0	1	0	0	2	1	0
1937:	1	1	0	0	1	1	3	1
1945:	1	1	0	2	3	0	1	0
1953:	1	3	0	0	0	0	1	4
1961:	1	1	0	1	1	0	2	0
1969:	2	0	1	1	0	3	1	1
1977:	2	2	0	1	1	2	0	2
1985:	2	1	1	1	3	1	0	2
1993:	0	0	1	1	0	0	0	0
2001:	2	1	0	0	2	2	2	3
2009:	0	0	1	0	0	0	1	2
2017:	1	1	0	0	0	2	1	0
2025:	3	2	1	1	1	1	0	1
2033:	1	1	0	0	0	1	1	1
2041:	2	1	0	1	0	3	1	1
2049:	2	0	2	1	0	1	0	1
2057:	0	1	0	1	1	1	1	2
2065:	0	2	0	1	1	2	0	0
2073:	2	2	3	0	0	2	0	2
2081:	2	1	0	1	1	1	1	0
2089:	0	0	0	2	1	1	0	1
2097:	0	0	3	0	1	0	0	0
2105:	0	0	1	1	0	0	2	2
2113:	0	1	0	1	0	1	0	0
2121:	0	0	2	3	1	1	2	1
2129:	0	0	2	1	2	1	0	1
2137:	0	0	0	1	2	2	1	1
2145:	1	0	0	0	3	0	1	0
2153:	0	1	0	1	2	0	0	1
2161:	1	0	1	0	1	3	3	3
2169:	0	3	0	2	0	0	0	1
2177:	2	1	0	0	1	1	2	0
2185:	0	1	1	1	2	0	0	0
2193:	2	1	0	0	0	0	1	1
2201:	1	2	3	3	1	1	2	0
2209:	1	2	0	0	0	1	1	1
2217:	1	2	1	0	1	3	1	2
2225:	0	0	1	2	1	0	0	1
2233:	1	0	2	1	1	0	0	1
2241:	0	0	0	2	1	0	0	2
2249:	0	1	1	2	1	0	1	0
2257:	1	0	2	0	0	0	0	2
2265:	0	0	0	0	1	0	1	2
2273:	1	0	0	0	0	2	2	1
2281:	0	0	1	0	2	1	1	0
2289:	2	0	1	0	0	1	0	1
2297:	0	2	0	2	1	1	0	0
2305:	0	1	1	0	2	0	0	0
2313:	2	1	0	2	1	2	2	0
2321:	1	0	0	0	1	1	1	0
2329:	1	1	0	0	0	0	1	1
2337:	0	2	2	0	0	1	0	0
2345:	1	2	0	1	2	0	0	1

2353:	0	0	1	0	3	0	2	0
2361:	1	0	1	0	0	2	1	0
2369:	0	0	0	0	1	0	1	1
2377:	1	0	0	0	1	2	1	1
2385:	0	1	1	0	0	1	2	2
2393:	0	0	0	0	0	0	2	1
2401:	0	0	1	0	0	0	0	1
2409:	2	2	2	2	1	1	1	0
2417:	2	1	1	1	1	1	2	1
2425:	1	2	0	0	0	0	1	1
2433:	2	0	0	0	1	1	0	0
2441:	0	1	2	2	0	1	0	1
2449:	1	0	1	0	0	0	0	2
2457:	1	2	0	1	1	3	1	1
2465:	0	0	3	0	1	1	0	1
2473:	1	2	1	0	0	0	0	0
2481:	0	1	1	0	1	1	0	0
2489:	0	0	1	0	0	1	1	0
2497:	0	1	2	0	2	0	0	1
2505:	0	0	1	0	1	2	0	0
2513:	0	0	2	1	0	1	0	1
2521:	1	0	0	1	0	3	1	2
2529:	1	0	0	1	0	0	0	0
2537:	1	1	0	0	2	0	1	0
2545:	1	2	0	1	1	0	3	0
2553:	2	1	0	0	0	0	0	0
2561:	0	0	0	0	0	2	1	0
2569:	0	0	0	0	1	0	1	2
2577:	1	0	2	1	1	1	1	1
2585:	1	1	0	1	0	0	0	0
2593:	2	1	0	0	0	0	0	0
2601:	1	1	0	0	0	1	0	0
2609:	0	0	0	1	2	2	2	4
2617:	1	1	1	0	0	1	1	0
2625:	0	1	2	0	0	1	0	0
2633:	0	0	0	0	0	0	0	3
2641:	0	0	1	0	0	0	0	0
2649:	0	0	0	1	0	0	2	0
2657:	0	0	0	0	0	0	0	0
2665:	0	0	0	1	0	0	0	0
2673:	1	1	0	0	0	0	1	0
2681:	2	5	0	0	0	0	0	0
2689:	1	0	0	0	0	0	0	2
2697:	0	1	1	0	0	1	0	0
2705:	1	0	0	0	0	0	0	0
2713:	1	0	0	0	0	1	0	1
2721:	0	0	1	1	0	0	0	0
2729:	0	0	0	0	0	0	0	1
2737:	2	0	0	1	0	0	0	0
2745:	0	2	0	1	0	1	0	0
2753:	0	0	1	0	2	0	0	0
2761:	0	1	0	0	0	1	0	1
2769:	0	0	0	0	0	2	0	1
2777:	0	0	0	0	0	1	0	0
2785:	1	0	0	0	1	0	0	1
2793:	0	0	2	1	0	0	0	1
2801:	0	0	0	0	1	1	1	0
2809:	0	0	0	1	1	0	0	1
2817:	1	1	0	0	2	0	1	0
2825:	0	0	0	0	1	0	1	0

2833:	0	2	0	0	0	0	0	0
2841:	4	0	0	0	0	0	0	0
2849:	2	0	1	0	1	0	1	0
2857:	1	0	0	0	0	0	0	0
2865:	0	1	0	0	2	0	1	0
2873:	0	0	0	0	0	2	0	1
2881:	1	0	2	0	0	0	0	2
2889:	1	0	1	0	1	1	0	0
2897:	0	0	0	0	0	1	0	1
2905:	1	0	0	1	0	2	1	1
2913:	1	0	0	0	0	0	0	0
2921:	0	0	1	0	0	2	1	0
2929:	0	0	0	0	0	1	0	0
2937:	0	0	0	0	0	0	0	0
2945:	0	0	0	1	0	1	0	2
2953:	0	0	0	1	1	0	1	0
2961:	0	0	1	2	1	1	0	0
2969:	0	1	0	3	1	2	2	0
2977:	0	0	0	0	0	1	0	1
2985:	0	0	0	0	0	2	1	0
2993:	1	0	1	0	0	0	0	0
3001:	0	0	0	0	0	1	1	3
3009:	1	0	1	0	0	0	0	1
3017:	0	0	0	0	0	0	1	0
3025:	0	0	1	0	0	0	0	0
3033:	0	0	0	0	1	1	1	0
3041:	1	0	0	0	1	0	0	0
3049:	0	0	1	0	1	0	0	2
3057:	0	0	0	1	0	0	0	1
3065:	0	0	0	0	1	1	1	1
3073:	0	0	1	1	0	0	1	0
3081:	0	0	1	0	1	0	0	0
3089:	2	0	1	0	3	3	2	1
3097:	0	0	0	1	1	1	0	0
3105:	0	0	1	1	2	0	1	0
3113:	0	0	2	2	0	1	1	2
3121:	0	2	1	0	0	1	2	0
3129:	0	1	1	0	0	0	0	0
3137:	1	0	1	1	0	1	0	0
3145:	0	0	1	0	0	1	0	1
3153:	0	0	0	0	0	0	0	1
3161:	0	0	1	0	0	0	0	0
3169:	1	0	1	0	2	0	0	1
3177:	0	0	0	0	0	0	0	0
3185:	0	0	0	0	0	0	0	0
3193:	0	1	0	0	0	1	1	1
3201:	1	1	0	0	1	0	0	0
3209:	0	0	0	1	1	0	0	1
3217:	1	0	0	1	0	0	0	0
3225:	0	1	1	0	0	0	2	2
3233:	0	0	0	1	0	0	0	0
3241:	1	1	0	0	0	0	1	0
3249:	0	0	0	0	0	0	0	0
3257:	1	0	0	1	0	0	0	1
3265:	0	1	1	1	0	1	1	0
3273:	0	0	0	2	0	0	1	0
3281:	0	0	1	0	1	0	0	0
3289:	1	0	0	0	0	0	0	0
3297:	1	0	0	0	0	0	0	0
3305:	0	0	2	0	0	0	0	0

3313:	1	2	0	0	0	0	1	1
3321:	0	0	1	0	0	1	0	1
3329:	0	1	0	0	0	2	0	0
3337:	2	0	0	0	0	0	0	0
3345:	0	1	0	1	1	1	0	0
3353:	1	1	1	0	0	1	0	0
3361:	0	0	0	2	1	0	0	0
3369:	0	0	0	0	0	2	0	0
3377:	1	1	1	0	1	0	0	0
3385:	0	0	0	0	0	0	1	0
3393:	1	0	0	0	0	1	0	0
3401:	1	0	0	0	1	0	1	1
3409:	0	1	0	0	1	1	0	0
3417:	0	0	0	0	0	1	0	0
3425:	0	0	0	0	0	1	0	0
3433:	0	0	2	0	0	0	0	0
3441:	0	0	2	0	0	0	0	1
3449:	0	0	1	0	1	0	1	0
3457:	1	0	0	0	0	1	0	0
3465:	0	1	0	0	1	0	0	0
3473:	0	0	0	0	0	0	0	0
3481:	1	2	0	2	0	0	1	1
3489:	1	1	1	0	0	0	1	0
3497:	1	1	0	2	2	0	0	0
3505:	1	0	1	1	1	0	0	0
3513:	0	0	1	0	0	0	2	1
3521:	0	0	0	0	0	0	0	0
3529:	0	1	0	0	0	0	1	0
3537:	0	1	0	1	0	1	0	1
3545:	1	0	1	1	0	0	0	1
3553:	1	0	1	0	1	0	0	0
3561:	0	0	0	0	0	0	0	0
3569:	0	0	0	0	1	0	0	0
3577:	0	0	0	0	0	0	1	1
3585:	0	0	0	0	0	0	1	1
3593:	0	0	0	0	0	1	0	0
3601:	0	0	2	0	0	2	0	0
3609:	0	0	0	0	0	0	0	0
3617:	0	0	0	2	0	1	0	0
3625:	0	0	0	0	0	0	1	0
3633:	0	0	1	0	0	0	1	2
3641:	1	1	0	0	0	0	1	0
3649:	0	2	0	1	0	0	0	1
3657:	0	0	0	0	1	0	0	0
3665:	0	0	2	1	0	0	0	0
3673:	1	1	1	0	0	1	0	2
3681:	0	0	0	1	0	1	1	0
3689:	1	1	1	0	1	2	0	0
3697:	0	0	1	1	0	0	0	0
3705:	1	0	2	0	0	0	0	2
3713:	0	1	0	1	2	0	0	1
3721:	1	0	0	0	0	0	0	0
3729:	0	0	0	1	0	1	0	1
3737:	0	1	1	0	0	1	0	0
3745:	0	0	0	0	1	0	0	0
3753:	0	0	0	1	0	0	0	0
3761:	1	0	1	0	0	0	0	1
3769:	1	0	0	0	1	0	1	1
3777:	0	0	1	0	0	0	1	1
3785:	0	0	1	1	1	0	1	0

3793:	0	1	0	0	0	1	0	2
3801:	2	0	1	1	1	1	0	1
3809:	1	0	0	0	0	0	0	0
3817:	1	1	0	0	0	0	0	0
3825:	0	0	1	0	0	1	0	0
3833:	0	0	0	0	0	0	0	0
3841:	0	0	0	1	0	0	0	1
3849:	2	1	0	0	1	0	0	0
3857:	0	0	0	0	0	0	0	0
3865:	1	0	0	0	0	0	1	0
3873:	0	0	1	0	0	1	1	0
3881:	1	1	0	0	0	0	0	0
3889:	0	0	0	0	0	0	0	0
3897:	2	0	0	1	0	1	0	0
3905:	0	0	0	0	0	1	0	0
3913:	0	1	1	1	0	0	0	1
3921:	0	0	1	0	0	1	0	0
3929:	0	0	0	0	0	0	0	0
3937:	0	0	0	0	0	0	0	0
3945:	0	0	0	0	0	0	0	0
3953:	0	0	0	0	1	0	0	0
3961:	0	1	0	0	1	0	0	0
3969:	0	0	0	1	0	0	1	0
3977:	1	0	0	0	0	1	0	1
3985:	1	0	1	0	0	0	1	0
3993:	0	0	0	0	0	1	0	0
4001:	0	0	0	0	0	0	0	0
4009:	0	0	0	0	1	0	0	0
4017:	0	0	0	1	1	0	2	0
4025:	0	0	0	0	0	0	0	0
4033:	0	0	0	0	0	0	1	0
4041:	1	0	0	1	1	0	1	1
4049:	0	0	0	1	0	0	0	1
4057:	0	3	0	0	0	0	1	0
4065:	0	0	0	0	1	0	0	1
4073:	0	0	0	0	0	0	2	0
4081:	0	0	0	0	0	0	1	0
4089:	1	1	1	0	0	0	0	0

Sample ID : 1111066-04 Acquisition date : 26-NOV-2011 12:15:16

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VAX/VMS Peak Search Report Generated 26-NOV-2011 14:15:31.06

Configuration : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106604_GE1_GAW11_171364.CN
Analyses by : PEAK V16.9 ENBACK V1.6 PEAKEFF V2.2
Client ID : ST1-01-111108
Deposition Date :
Sample Date : 8-NOV-2011 00:00:00. Acquisition date : 26-NOV-2011 12:15:16
Sample ID : 1111066-04 Sample Quantity : 2.00000E+00 liter
Sample type : WATER Sample Geometry : 0
Detector name : GE1 Detector Geometry: GAW-11
Elapsed live time: 0 02:00:00.00 Elapsed real time: 0 02:00:00.79 0.0%
Start channel : 5 End channel : 4096
Sensitivity : 2.40000 Gaussian : 15.00000
Critical level : Yes

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	77.83	61	261	1.54	77.46	74	8	96.4		
0	369.07	21	51	2.84	368.76	365	7	121.6		
0	387.28	41	97	2.81	386.97	381	12	99.8		
0	447.18	46	57	3.75	446.89	442	11	71.0		
0	554.82	14	25	2.77	554.56	551	7	133.2		
0	610.47*	56	41	2.04	610.22	606	9	53.5		
0	653.98	12	18	1.10	653.73	651	5	124.6		
0	913.11	25	18	2.06	912.92	910	9	73.1		
0	952.94	12	7	2.97	952.75	950	7	93.2		
0	1087.54	12	10	2.66	1087.39	1084	7	103.5		
0	1174.84	10	7	1.53	1174.70	1171	7	109.5		
0	1282.99	8	7	2.11	1282.88	1280	7	130.5		
0	1308.65	9	8	2.55	1308.54	1305	9	130.1		
0	1331.51	18	6	4.03	1331.40	1326	11	70.6		
0	1383.54	6	4	2.41	1383.44	1381	5	127.7		
0	1461.00*	21	3	4.57	1460.92	1455	11	69.7		K-40
0	1539.28	8	7	3.42	1539.21	1534	9	130.3		
0	1593.35	8	6	1.84	1593.30	1590	7	113.8		
0	1648.93	7	4	2.59	1648.89	1644	8	119.9		
0	1672.63	9	2	4.01	1672.60	1669	7	80.1		
0	1855.05	4	2	2.56	1855.06	1852	6	130.1		
0	1880.88	9	0	3.22	1880.89	1878	7	66.7		
0	1886.99	6	0	2.87	1887.00	1885	5	81.6		
0	2205.06*	5	1	1.85	2205.13	2202	7	156.7		
0	2222.83	14	2	1.71	2222.91	2218	9	66.8		
0	2349.67	9	0	3.20	2349.78	2346	7	66.7		
0	2614.72*	6	0	2.00	2614.88	2611	9	149.1		
0	3235.71	10	0	1.25	3236.00	3232	8	63.2		

AG
11/28/11

Sample ID : 1111066-04 Acquisition date : 26-NOV-2011 12:15:16

Total number of lines in spectrum	28	
Number of unidentified lines	20	
Number of lines tentatively identified by NID	8	28.57%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	3.875E+01	3.875E+01	2.727E+01	70.37	
		Total Activity :	3.875E+01	3.875E+01			
		Grand Total Activity :	3.875E+01	3.875E+01			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : 1111066-04
Acquisition date : 26-NOV-2011 12:15:16

Nuclide Type: NATURAL

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/liter	Decay Corr pCi/liter	2-Sigma %Error	Status
K-40	1460.81	10.67*	9.621E-01	3.875E+01	3.875E+01	70.37	OK

Final Mean for 1 Valid Peaks = 3.875E+01+/- 2.727E+01 (70.37%)

Flag: "*" = Keyline

Sample ID : 1111066-04 Acquisition date : 26-NOV-2011 12:15:16

---- Identified Nuclides ----

Nuclide	Activity (pCi/liter)	Act error	MDA (pCi/liter)	MDA error	Act/MDA
K-40	3.875E+01	2.727E+01	2.685E+01	2.294E+00	1.443

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
BE-7	-6.227E+00		1.590E+01	2.827E+01	2.691E+00	-0.220
NA-22	-4.349E-01		1.978E+00	3.140E+00	2.724E-01	-0.138
AL-26	6.792E-01		2.209E+00	4.364E+00	3.591E-01	0.156
TI-44	-5.494E+00		1.498E+00	1.939E+00	1.519E-01	-2.834
SC-46	-7.593E-01		1.908E+00	3.345E+00	2.867E-01	-0.227
V-48	3.029E+00		3.682E+00	7.673E+00	6.821E-01	0.395
CR-51	3.254E-01		2.011E+01	3.358E+01	3.265E+00	0.010
MN-54	4.645E-01		1.727E+00	3.305E+00	2.899E-01	0.141
CO-56	-7.370E-01		2.121E+00	3.726E+00	3.255E-01	-0.198
CO-57	-7.275E-01		1.317E+00	2.131E+00	2.124E-01	-0.341
CO-58	-5.456E-01		1.731E+00	3.101E+00	2.746E-01	-0.176
FE-59	-1.766E+00		4.467E+00	7.752E+00	7.689E-01	-0.228
CO-60	-7.638E-02		2.285E+00	3.729E+00	3.521E-01	-0.020
ZN-65	6.762E-01		4.540E+00	8.430E+00	7.854E-01	0.080
GA-67	-1.658E+02		4.942E+02	4.022E+02	1.073E+03	-0.412
SE-75	8.735E-01		2.247E+00	3.868E+00	3.578E-01	0.226
RB-82	-3.423E+00		2.071E+01	3.748E+01	3.335E+00	-0.091
RB-83	-1.934E+00		3.451E+00	5.991E+00	9.680E-01	-0.323
KR-85	1.038E+03		5.197E+02	1.015E+03	9.681E+01	1.023
SR-85	5.518E+00		2.761E+00	5.392E+00	5.144E-01	1.023
Y-88	1.694E-01		1.566E+00	3.454E+00	2.831E-01	0.049
NB-93M	-1.010E+02		3.111E+01	2.773E+00	6.448E-01	-36.422
NB-94	-6.211E-01		1.891E+00	3.321E+00	2.872E-01	-0.187
NB-95	-2.466E+00		2.805E+00	4.330E+00	3.859E-01	-0.569
NB-95M	-7.031E+01		1.925E+02	3.097E+02	2.853E+01	-0.227
ZR-95	4.328E-01		3.578E+00	6.703E+00	6.545E-01	0.065
MO-99	6.493E+01		1.311E+03	2.441E+03	2.179E+02	0.027
RU-103	9.739E-01		1.994E+00	3.860E+00	5.689E-01	0.252
RU-106	-4.934E+00		1.720E+01	3.058E+01	4.194E+00	-0.161
AG-108M	-2.479E-01		1.674E+00	3.050E+00	2.723E-01	-0.081
CD-109	-9.882E+01		3.515E+01	4.642E+01	5.378E+00	-2.129
AG-110M	-1.123E-01		1.769E+00	2.924E+00	2.601E-01	-0.038
SN-113	-2.783E-01		2.353E+00	3.861E+00	3.641E-01	-0.072
TE123M	5.777E-01		1.414E+00	2.433E+00	2.211E-01	0.237
SB-124	8.584E-01		2.450E+00	4.166E+00	3.867E-01	0.206
I-125	-5.935E+00		2.328E+01	3.955E+01	3.627E+00	-0.150
SB-125	-6.007E-01		4.747E+00	8.617E+00	8.207E-01	-0.070
SB-126	5.257E+00		7.658E+00	1.540E+01	1.375E+00	0.341
SN-126	-1.289E+00		2.817E+00	4.626E+00	4.585E-01	-0.279
SB-127	1.174E+02		1.260E+02	2.537E+02	2.257E+01	0.463
I-129	-2.118E+00		2.670E+00	4.379E+00	4.672E-01	-0.484
I-131	-1.280E+00		6.817E+00	1.122E+01	1.042E+00	-0.114

Sample ID : 1111066-04 Acquisition date : 26-NOV-2011 12:15:16

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
TE-132	-1.397E+01		6.894E+01	1.131E+02	1.040E+01	-0.124
BA-133	3.637E-03		2.075E+00	3.817E+00	5.212E-01	0.001
CS-134	-1.247E+00		2.108E+00	3.183E+00	2.958E-01	-0.392
CS-135	-5.812E+00		7.817E+00	1.211E+01	1.112E+00	-0.480
CS-136	-2.784E+00		5.217E+00	8.909E+00	8.325E-01	-0.312
CS-137	-1.293E+00		1.970E+00	3.198E+00	2.839E-01	-0.404
LA-138	2.026E+00		3.079E+00	6.358E+00	5.256E-01	0.319
CE-139	4.559E-01		1.446E+00	2.478E+00	2.206E-01	0.184
BA-140	2.363E-01		1.551E+01	2.862E+01	9.555E+00	0.008
LA-140	5.214E+00		5.683E+00	1.195E+01	9.969E-01	0.436
CE-141	-9.122E-01		3.514E+00	5.552E+00	1.187E+00	-0.164
CE-144	-4.681E+00		1.007E+01	1.637E+01	1.589E+00	-0.286
PM-144	7.643E-01		1.730E+00	3.320E+00	2.960E-01	0.230
PM-145	-1.227E+00		5.555E+00	9.354E+00	6.092E+00	-0.131
PM-146	1.137E+00		3.076E+00	5.441E+00	5.150E-01	0.209
ND-147	-7.062E+00		3.363E+01	6.085E+01	5.796E+00	-0.116
EU-152	-1.274E+00		1.110E+01	2.148E+01	2.280E+00	-0.059
GD-153	-2.911E+00		4.911E+00	7.962E+00	7.885E-01	-0.366
EU-154	-1.346E+00		5.490E+00	8.660E+00	7.513E-01	-0.155
EU-155	-5.816E-01		3.429E+00	5.733E+00	5.611E-01	-0.101
EU-156	-1.268E+01		3.275E+01	5.773E+01	1.323E+01	-0.220
HO-166M	-2.033E+00		2.737E+00	4.587E+00	4.093E-01	-0.443
HF-172	6.067E+00		9.523E+00	1.658E+01	1.638E+00	0.366
LU-172	3.006E+00		2.162E+01	3.702E+01	3.425E+00	0.081
LU-173	9.189E-01		5.912E+00	9.982E+00	9.160E-01	0.092
HF-175	-1.219E+00		1.828E+00	3.185E+00	2.965E-01	-0.383
LU-176	9.997E-01		1.334E+00	2.370E+00	2.195E-01	0.422
TA-182	5.512E+00		7.389E+00	1.457E+01	1.358E+00	0.378
IR-192	-1.631E+00		3.149E+00	5.530E+00	5.254E-01	-0.295
HG-203	5.037E-01		2.089E+00	3.554E+00	3.335E-01	0.142
BI-207	1.152E-02		1.648E+00	2.910E+00	2.744E-01	0.004
TL-208	-3.988E+00		6.023E+00	1.024E+01	9.602E-01	-0.389
BI-210M	1.403E+00		2.711E+00	4.706E+00	4.331E-01	0.298
PB-210	3.332E+00		3.339E+01	5.964E+01	4.628E+00	0.056
PB-211	7.293E-01		4.118E+01	7.632E+01	7.065E+00	0.010
BI-212	-5.064E+00		1.296E+01	2.285E+01	2.040E+00	-0.222
PB-212	1.647E+00		3.198E+00	5.638E+00	5.195E-01	0.292
BI-214	1.106E+01	+	6.021E+00	8.930E+00	8.255E-01	1.239
PB-214	6.297E-01		3.688E+00	6.782E+00	6.310E-01	0.093
RN-219	4.343E+00		1.901E+01	3.572E+01	3.301E+00	0.122
RA-223	-1.272E+01		3.292E+01	5.264E+01	4.896E+00	-0.242
RA-224	1.084E+00		3.517E+01	5.799E+01	5.344E+00	0.019
RA-225	4.559E+00		8.530E+00	1.516E+01	1.278E+00	0.301
RA-226	1.323E+01		5.253E+01	8.443E+01	1.546E+02	0.157
TH-227	-1.914E+00		1.203E+01	1.966E+01	1.811E+00	-0.097
AC-228	3.285E-02		8.060E+00	1.399E+01	1.201E+00	0.002
TH-230	-1.316E+03		3.770E+02	4.965E+02	3.880E+01	-2.651
PA-231	-2.315E+01		5.614E+01	8.961E+01	8.291E+00	-0.258

Sample ID : 1111066-04 Acquisition date : 26-NOV-2011 12:15:16

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/liter)	K.L. Ided	Act error	MDA (pCi/liter)	MDA error	Act/MDA
TH-231	2.093E+02		3.730E+01	5.121E+01	6.396E+00	4.086
PA-233	2.886E-01		5.341E+00	8.929E+00	2.028E+00	0.032
PA-234	-3.984E+00		5.424E+00	8.305E+00	8.105E-01	-0.480
PA-234M	4.095E+01		2.448E+02	4.610E+02	4.128E+01	0.089
TH-234	-2.423E+01		3.907E+01	6.896E+01	5.117E+00	-0.351
U-235	1.131E+00		1.113E+01	1.806E+01	3.241E+00	0.063
NP-237	-1.422E+00		8.349E+00	1.396E+01	1.366E+00	-0.102
NP-239	-2.152E+02		1.054E+03	1.754E+03	1.738E+02	-0.123
AM-241	-1.165E+01		3.670E+00	4.991E+00	3.546E-01	-2.334
AM-243	-1.025E+00		1.858E+00	2.789E+00	2.370E-01	-0.367
CM-243	-1.827E+00		9.066E+00	1.480E+01	1.355E+00	-0.123

Sample ID : 1111066-04 Acquisition date : 26-NOV-2011 12:15:16

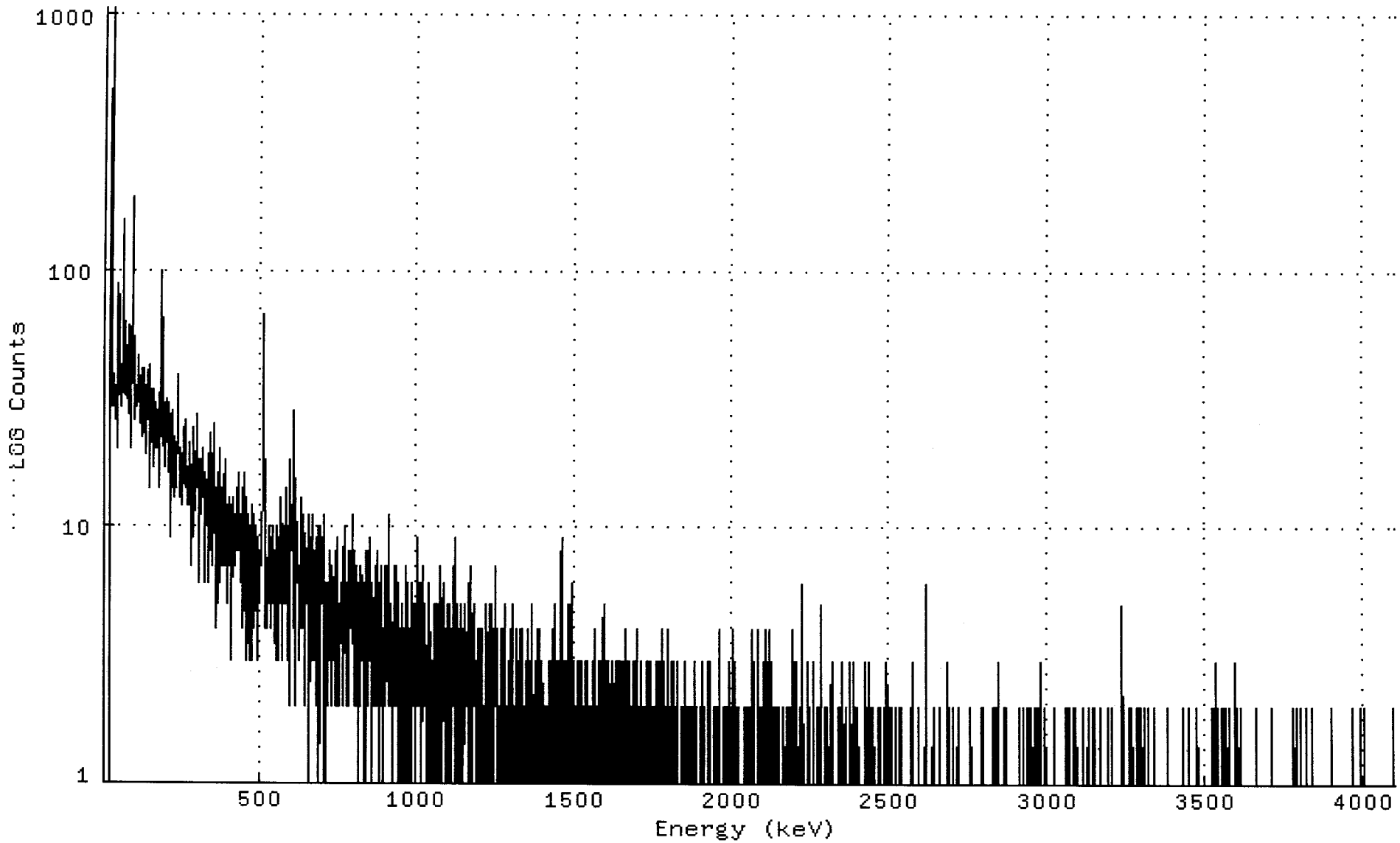
Total number of lines in spectrum	28	
Number of unidentified lines	20	
Number of lines tentatively identified by NID	8	28.57%

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/liter	Wtd Mean Decay Corr pCi/liter	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	3.875E+01	3.875E+01	2.727E+01	70.37	
		Total Activity :	3.875E+01	3.875E+01			
		Grand Total Activity :	3.875E+01	3.875E+01			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Spectrum : DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106604_GE1_GAW11_171364.CNF;1
Title :
Sample Title: ST1-01-111108
Start Time: 26-NOV-2011 12:15 Sample Time: 8-NOV-2011 00:00: Energy Offset: 3.84457E-01
Real Time : 0 02:00:00.79 Sample ID : 1111066-04 Energy Slope : 9.99792E-01
Live Time : 0 02:00:00.00 Sample Type: WATER Energy Quad : 0.00000E+00



0092

Channel Contents for DKA100:[GAMMA.SCUSR.ARCHIVE]SMP_111106604_GE1_GAW11_171364

Channel

1:	0	0	0	0	0	0	0	0
9:	0	0	0	0	0	0	0	0
17:	0	0	44	58	50	242	1054	608
25:	47	42	29	31	31	39	34	37
33:	36	29	35	30	26	34	27	32
41:	39	32	20	39	44	88	71	34
49:	32	44	33	36	34	29	34	38
57:	30	38	47	33	35	59	156	95
65:	41	43	53	36	32	36	39	45
73:	46	31	47	42	60	43	35	37
81:	27	30	37	38	59	20	39	29
89:	43	45	36	118	189	49	43	41
97:	35	29	26	54	31	34	32	29
105:	31	35	30	35	30	37	39	46
113:	36	30	25	33	25	38	36	27
121:	30	27	41	22	35	41	33	36
129:	25	32	23	29	26	19	35	32
137:	31	35	27	40	34	26	35	42
145:	25	16	25	14	30	23	21	28
153:	34	25	24	29	25	28	34	23
161:	17	23	23	30	21	27	21	24
169:	22	28	22	27	28	14	30	26
177:	27	27	33	26	23	24	22	32
185:	53	98	42	24	23	28	31	24
193:	17	24	29	21	22	30	30	25
201:	25	31	21	22	22	30	16	21
209:	24	26	20	25	9	27	21	25
217:	28	18	14	20	23	21	17	21
225:	21	22	19	13	16	21	19	20
233:	14	21	19	27	26	35	39	23
241:	17	20	14	18	15	13	19	19
249:	17	12	13	13	16	16	24	17
257:	18	16	17	18	14	14	26	17
265:	14	12	17	14	13	15	18	12
273:	15	21	16	13	21	14	14	12
281:	17	13	7	24	16	14	12	16
289:	9	14	15	16	12	13	14	27
297:	16	17	18	18	15	13	6	14
305:	18	15	11	16	18	13	14	13
313:	11	16	13	13	20	13	13	13
321:	12	6	10	12	16	14	14	13
329:	14	10	12	17	9	7	19	12
337:	6	23	14	11	8	13	12	13
345:	16	7	8	17	19	13	10	25
353:	13	14	17	5	14	10	9	4
361:	12	10	7	7	6	5	16	11
369:	17	7	10	6	13	20	10	13
377:	14	12	9	7	7	10	9	12
385:	10	14	18	18	10	12	11	7
393:	11	5	10	9	11	12	8	9
401:	10	11	13	7	7	8	8	11
409:	12	3	13	10	8	8	11	7
417:	11	10	10	9	7	10	12	10
425:	8	9	14	9	8	14	8	9

433:	16	13	8	6	7	11	11	9
441:	4	7	10	8	7	14	10	16
449:	12	7	5	7	3	3	13	9
457:	4	7	8	6	7	11	7	8
465:	4	3	8	10	7	7	8	5
473:	12	12	3	11	7	11	4	4
481:	5	8	8	7	5	8	10	9
489:	7	3	4	4	9	9	8	8
497:	7	8	6	5	6	8	7	8
505:	7	7	10	13	19	30	67	45
513:	26	13	8	5	4	10	4	4
521:	6	7	7	7	7	8	8	10
529:	9	5	6	4	7	5	6	9
537:	5	10	7	5	10	10	6	8
545:	5	5	7	8	5	4	3	3
553:	8	7	10	4	3	4	4	7
561:	9	5	10	5	6	8	6	13
569:	8	6	4	9	9	3	8	8
577:	10	7	6	6	5	10	10	14
585:	6	7	7	6	10	9	3	6
593:	6	5	2	18	8	8	12	11
601:	10	10	9	8	8	4	9	11
609:	28	18	13	8	13	5	2	12
617:	9	6	9	7	7	9	4	4
625:	6	5	7	3	6	13	4	6
633:	7	4	4	8	6	8	7	10
641:	11	8	9	5	9	2	5	7
649:	5	6	5	7	6	11	1	4
657:	5	10	1	6	4	6	5	9
665:	7	4	3	5	5	4	11	5
673:	8	8	8	3	5	3	2	7
681:	5	8	9	5	6	10	4	4
689:	1	2	8	3	10	6	4	8
697:	5	9	6	5	9	4	3	11
705:	1	9	8	3	6	3	4	1
713:	5	2	3	4	5	6	5	5
721:	4	3	8	3	3	5	3	7
729:	2	6	4	5	6	3	5	5
737:	3	5	8	5	4	2	7	4
745:	2	9	6	6	4	6	4	5
753:	2	5	4	4	4	6	6	6
761:	4	6	2	4	5	4	5	7
769:	10	4	6	6	6	5	2	4
777:	5	6	3	2	4	6	2	3
785:	4	8	8	6	4	4	7	4
793:	11	4	6	4	4	6	2	2
801:	3	8	4	4	4	2	7	3
809:	2	3	6	3	0	3	3	2
817:	5	7	2	5	6	6	7	6
825:	4	4	3	6	3	6	1	6
833:	6	2	1	7	4	5	8	1
841:	3	8	2	6	4	4	3	5
849:	3	4	9	4	5	6	6	3
857:	1	2	3	5	4	2	4	3
865:	4	7	5	4	5	5	2	8
873:	2	4	3	5	7	3	2	5
881:	1	2	6	6	2	4	2	3
889:	7	1	2	2	4	3	2	6
897:	2	2	7	3	2	3	7	4
905:	3	3	6	6	2	2	6	11

913:	7	4	4	5	2	2	2	3
921:	4	2	2	1	3	3	6	2
929:	5	4	5	7	2	7	4	3
937:	4	5	1	6	1	1	2	2
945:	3	4	3	2	0	2	3	4
953:	5	3	2	0	2	4	1	4
961:	1	4	2	5	1	1	5	7
969:	4	6	1	4	2	4	2	4
977:	1	0	2	2	3	2	6	0
985:	6	5	3	3	3	3	2	5
993:	3	3	2	5	1	4	2	5
1001:	8	9	5	5	5	2	2	4
1009:	6	4	2	5	4	2	3	6
1017:	1	3	3	5	7	3	7	3
1025:	5	3	2	3	4	3	3	1
1033:	3	2	1	1	3	6	5	3
1041:	5	3	3	3	2	2	0	1
1049:	2	3	3	2	1	4	3	2
1057:	1	5	2	3	5	3	0	4
1065:	4	5	1	4	1	2	2	5
1073:	5	3	1	1	7	4	1	1
1081:	2	4	2	2	3	4	6	4
1089:	3	0	2	3	3	4	4	1
1097:	3	5	1	2	3	2	3	5
1105:	1	1	3	3	2	1	1	4
1113:	4	4	4	5	3	4	7	2
1121:	9	5	3	5	2	1	5	4
1129:	3	1	2	2	4	2	4	0
1137:	2	0	2	0	4	5	1	0
1145:	3	2	1	2	4	1	2	4
1153:	2	4	3	5	3	3	2	3
1161:	2	2	2	5	1	2	6	2
1169:	1	3	2	1	3	7	3	1
1177:	0	0	3	3	2	2	3	4
1185:	5	3	4	1	0	3	0	0
1193:	1	1	0	4	0	2	1	1
1201:	4	4	1	4	1	2	0	1
1209:	3	4	2	2	2	0	1	2
1217:	1	0	5	2	3	3	3	2
1225:	1	2	1	1	3	5	3	0
1233:	3	1	2	0	3	4	5	0
1241:	2	1	4	4	3	0	1	7
1249:	5	4	5	2	2	3	4	3
1257:	4	2	0	0	1	2	1	0
1265:	1	2	3	4	2	1	0	1
1273:	4	1	0	2	2	3	1	1
1281:	2	4	5	2	1	0	2	1
1289:	1	1	1	0	3	1	1	1
1297:	0	0	3	4	1	2	1	2
1305:	1	5	2	3	1	1	2	2
1313:	0	1	3	2	4	0	2	2
1321:	1	2	3	2	0	1	2	2
1329:	1	2	3	4	4	3	1	0
1337:	1	4	1	0	2	2	0	0
1345:	1	2	1	3	2	2	4	3
1353:	4	1	2	2	2	3	0	2
1361:	1	2	1	1	2	1	1	0
1369:	5	1	0	2	2	1	2	2
1377:	3	1	2	1	0	3	4	3
1385:	0	2	3	0	0	3	2	1

1393:	4	1	3	0	0	3	3	2
1401:	1	2	2	0	0	2	1	2
1409:	2	1	2	1	0	1	1	0
1417:	2	2	1	0	2	3	3	1
1425:	0	3	1	2	0	1	3	3
1433:	0	3	4	4	3	0	5	2
1441:	1	2	3	2	1	1	3	2
1449:	3	1	1	3	0	0	0	2
1457:	1	2	2	8	7	9	2	5
1465:	0	1	2	0	3	0	0	0
1473:	3	1	0	2	0	1	0	2
1481:	5	0	0	3	0	2	5	1
1489:	2	3	0	2	6	0	2	1
1497:	1	1	2	2	3	2	2	2
1505:	2	1	2	2	0	3	1	2
1513:	3	2	1	1	3	2	2	3
1521:	0	0	3	1	1	0	1	2
1529:	1	1	0	1	2	0	2	1
1537:	2	3	3	3	1	0	1	1
1545:	0	1	1	1	1	2	0	0
1553:	1	1	1	0	2	1	0	1
1561:	0	0	3	0	1	4	1	1
1569:	1	2	0	2	0	1	1	1
1577:	2	3	0	1	2	1	1	3
1585:	3	2	0	2	0	1	2	1
1593:	4	5	1	0	2	1	3	0
1601:	0	0	1	2	3	0	3	1
1609:	0	0	1	1	1	0	1	1
1617:	2	3	0	0	1	1	3	2
1625:	1	1	1	1	2	2	1	2
1633:	3	3	1	2	2	0	0	1
1641:	1	3	1	1	0	1	2	3
1649:	3	1	0	0	1	0	3	1
1657:	0	2	0	2	0	1	1	1
1665:	4	0	0	1	0	1	3	2
1673:	2	3	0	0	0	2	2	1
1681:	0	0	1	1	1	2	0	3
1689:	0	2	3	0	1	0	1	1
1697:	1	4	1	0	2	0	1	0
1705:	1	2	2	1	2	3	0	0
1713:	1	1	1	2	2	1	0	1
1721:	1	1	1	2	1	1	3	0
1729:	2	1	2	0	2	0	2	3
1737:	1	1	0	1	0	1	2	3
1745:	1	2	2	0	1	1	0	1
1753:	0	2	0	2	0	0	1	1
1761:	1	3	0	3	1	2	2	0
1769:	0	0	1	2	2	3	0	3
1777:	1	2	1	4	0	2	2	3
1785:	0	2	0	2	0	2	0	2
1793:	0	0	3	1	0	4	1	0
1801:	0	2	0	1	0	1	2	2
1809:	3	2	1	2	1	3	1	1
1817:	0	1	1	1	0	2	2	2
1825:	0	2	0	3	1	0	0	1
1833:	0	0	1	1	1	2	0	2
1841:	1	0	1	1	0	0	1	2
1849:	1	0	0	0	0	3	1	2
1857:	0	1	1	1	1	1	0	1
1865:	2	2	2	1	0	1	1	0

1873:	2	1	1	1	0	0	1	3
1881:	2	2	1	0	0	2	2	2
1889:	0	0	1	1	0	0	1	1
1897:	0	2	1	1	1	0	0	1
1905:	1	3	1	2	0	1	2	1
1913:	1	1	1	0	0	1	0	1
1921:	1	1	0	0	2	3	1	3
1929:	1	3	1	1	1	0	1	1
1937:	0	0	1	0	2	1	0	0
1945:	0	1	0	0	0	2	2	0
1953:	1	2	2	1	1	4	1	1
1961:	1	0	1	0	1	0	1	1
1969:	0	1	0	1	0	0	2	1
1977:	0	2	0	1	0	2	0	1
1985:	2	0	1	1	3	1	1	0
1993:	2	0	0	1	2	2	1	2
2001:	4	0	1	2	2	0	2	1
2009:	0	0	3	1	0	0	1	0
2017:	2	0	2	0	0	2	0	0
2025:	1	0	1	1	0	0	0	1
2033:	0	1	1	1	0	2	2	0
2041:	1	0	2	0	1	1	1	1
2049:	1	2	1	0	0	1	0	2
2057:	0	2	1	0	2	2	4	1
2065:	2	1	2	0	0	2	3	1
2073:	1	1	1	1	0	0	0	4
2081:	1	1	1	1	0	1	2	0
2089:	0	0	0	0	0	1	2	1
2097:	0	0	0	3	1	0	1	0
2105:	4	1	1	1	1	2	0	0
2113:	1	3	1	0	0	0	1	4
2121:	1	0	3	1	1	2	1	1
2129:	2	1	1	0	2	2	1	1
2137:	0	0	1	2	0	0	1	1
2145:	1	1	0	0	2	1	1	0
2153:	0	0	1	0	0	1	2	2
2161:	0	0	0	1	1	1	0	1
2169:	0	2	1	1	1	1	0	1
2177:	2	0	0	0	1	0	0	2
2185:	0	2	0	1	0	1	0	0
2193:	4	1	0	0	0	0	3	0
2201:	0	1	0	2	3	1	1	0
2209:	0	0	0	0	2	1	0	1
2217:	1	0	1	1	2	2	6	3
2225:	1	0	0	0	0	1	0	1
2233:	0	0	0	1	1	1	0	0
2241:	3	1	0	2	1	1	0	0
2249:	1	1	0	1	0	0	0	3
2257:	0	0	1	0	1	1	0	0
2265:	0	1	0	1	1	2	0	0
2273:	1	1	0	2	0	1	0	1
2281:	1	0	5	0	0	0	1	0
2289:	0	0	1	1	1	1	2	0
2297:	0	2	0	1	2	0	2	0
2305:	0	0	0	0	1	0	2	1
2313:	1	2	2	3	0	2	0	0
2321:	1	1	1	0	1	0	1	0
2329:	0	1	1	0	0	0	0	0
2337:	2	0	1	1	1	1	1	2
2345:	0	0	0	1	3	2	3	0

2353:	0	0	1	1	0	0	0	0
2361:	2	1	1	0	0	1	1	0
2369:	1	0	0	0	0	1	3	1
2377:	0	1	0	1	0	1	3	2
2385:	1	0	1	1	2	0	1	0
2393:	0	0	0	0	0	0	1	2
2401:	0	0	0	0	0	0	0	0
2409:	1	1	0	0	0	0	0	1
2417:	0	1	0	0	0	1	1	3
2425:	1	0	0	2	0	0	1	1
2433:	0	1	0	3	0	0	0	1
2441:	2	0	0	0	0	1	0	2
2449:	0	0	0	0	0	0	0	0
2457:	1	0	1	1	1	0	0	0
2465:	0	0	2	2	0	1	0	1
2473:	0	0	0	1	1	0	0	0
2481:	1	0	2	0	1	0	1	1
2489:	1	1	3	2	1	0	0	0
2497:	1	2	1	1	0	0	0	2
2505:	0	0	0	0	1	1	0	0
2513:	1	0	1	0	1	2	0	1
2521:	0	1	0	0	0	0	0	1
2529:	1	1	2	1	0	1	2	0
2537:	0	0	0	0	0	1	0	0
2545:	1	0	0	1	0	1	0	1
2553:	0	0	0	0	0	1	1	0
2561:	1	0	1	1	0	0	0	0
2569:	0	2	1	1	1	3	2	0
2577:	0	0	1	0	0	0	0	1
2585:	0	1	0	0	0	2	1	0
2593:	0	1	0	1	1	1	1	0
2601:	0	1	1	1	0	1	0	0
2609:	0	0	0	1	2	3	6	3
2617:	1	1	0	0	0	1	0	1
2625:	0	0	0	1	1	1	0	1
2633:	0	1	0	1	2	0	0	0
2641:	0	0	1	0	0	1	0	0
2649:	0	0	1	1	0	0	1	1
2657:	0	0	0	2	1	1	0	1
2665:	1	0	0	0	0	0	0	0
2673:	1	0	0	0	0	0	1	0
2681:	0	0	1	0	3	0	1	0
2689:	0	2	1	0	0	0	1	0
2697:	0	1	0	1	2	0	1	0
2705:	0	1	1	0	0	0	0	1
2713:	0	1	1	2	2	0	0	1
2721:	0	1	0	0	1	1	0	0
2729:	0	1	0	1	1	0	0	0
2737:	1	0	0	1	0	1	1	0
2745:	1	0	1	0	0	1	1	0
2753:	0	0	1	0	0	2	0	0
2761:	1	0	0	0	1	0	0	0
2769:	0	1	0	0	0	1	1	0
2777:	1	0	0	0	1	0	1	0
2785:	0	1	1	0	0	0	2	0
2793:	0	1	1	2	0	0	1	0
2801:	0	0	0	0	0	0	0	0
2809:	0	0	0	0	1	0	1	0
2817:	0	0	0	0	1	1	0	1
2825:	0	0	0	2	0	1	0	2

2833:	0	0	1	0	2	1	1	1
2841:	0	0	2	0	2	3	0	0
2849:	0	1	0	1	0	1	1	0
2857:	0	0	0	1	1	0	2	1
2865:	0	0	1	0	2	1	1	1
2873:	1	0	0	1	0	1	0	1
2881:	0	0	0	0	0	0	0	0
2889:	0	0	0	0	0	1	0	0
2897:	0	0	0	1	0	1	1	1
2905:	0	1	0	0	0	0	0	0
2913:	2	0	0	0	1	0	0	1
2921:	0	1	1	2	0	1	2	0
2929:	0	0	0	1	0	0	0	0
2937:	0	1	2	0	0	0	0	1
2945:	2	1	0	0	0	0	1	2
2953:	1	0	0	0	1	0	2	0
2961:	0	0	0	0	0	0	0	1
2969:	1	2	0	1	2	0	1	1
2977:	0	1	0	3	0	1	0	1
2985:	0	0	0	0	0	0	1	0
2993:	0	2	0	0	0	0	0	0
3001:	0	0	0	1	0	1	0	0
3009:	0	0	0	0	0	1	0	1
3017:	0	0	0	0	2	0	1	0
3025:	0	0	1	1	1	0	0	0
3033:	0	0	1	0	1	0	1	0
3041:	1	0	1	1	0	0	1	0
3049:	0	0	1	0	1	0	0	1
3057:	0	0	2	1	0	1	1	1
3065:	0	2	1	0	2	1	1	2
3073:	1	0	1	0	1	1	0	1
3081:	0	1	0	1	2	1	0	0
3089:	0	0	2	0	1	0	0	1
3097:	1	0	0	1	0	0	0	0
3105:	1	0	0	1	1	0	0	0
3113:	0	0	2	0	0	0	0	0
3121:	0	1	0	1	1	0	0	0
3129:	2	2	0	0	0	0	0	1
3137:	0	1	0	0	0	1	2	0
3145:	0	1	1	0	0	2	0	0
3153:	1	0	1	1	0	1	0	0
3161:	0	1	0	1	0	0	1	0
3169:	2	0	1	0	0	0	1	0
3177:	0	0	1	0	0	0	0	0
3185:	1	0	0	0	1	0	0	0
3193:	0	2	0	1	1	0	1	0
3201:	0	0	0	0	0	2	1	0
3209:	1	0	1	0	1	0	0	0
3217:	0	0	1	1	0	0	0	0
3225:	0	0	0	0	0	0	0	0
3233:	1	2	0	1	5	1	0	0
3241:	1	0	0	0	0	0	0	0
3249:	0	0	0	1	0	1	0	0
3257:	2	0	0	2	0	2	0	0
3265:	0	0	2	1	0	1	1	0
3273:	0	0	0	0	0	0	0	0
3281:	0	1	0	0	0	2	1	2
3289:	0	1	0	0	1	0	0	0
3297:	0	2	0	1	0	1	0	0
3305:	1	0	2	1	0	0	0	0

3313:	1	0	0	0	1	2	0	0
3321:	0	0	1	0	0	0	0	0
3329:	0	0	0	1	1	0	0	0
3337:	2	0	1	0	0	0	0	0
3345:	0	0	0	1	0	0	0	0
3353:	1	0	0	0	0	1	0	1
3361:	1	0	0	0	0	1	0	1
3369:	0	0	0	1	0	0	0	0
3377:	0	0	1	0	1	2	0	0
3385:	0	0	0	0	0	1	0	0
3393:	0	0	0	1	0	0	0	0
3401:	0	1	0	0	1	1	0	0
3409:	0	0	0	0	1	0	0	1
3417:	0	1	0	0	0	0	0	0
3425:	0	0	1	0	0	2	1	0
3433:	0	0	0	0	1	0	0	0
3441:	0	1	0	0	1	1	2	1
3449:	0	0	0	1	1	0	1	0
3457:	0	0	0	0	0	1	1	1
3465:	0	0	0	1	0	2	0	0
3473:	1	2	0	0	1	0	0	0
3481:	0	0	0	0	0	0	0	0
3489:	1	0	0	0	0	0	0	0
3497:	0	1	1	0	1	0	0	0
3505:	0	0	0	1	1	0	0	0
3513:	0	0	1	0	0	1	0	0
3521:	2	1	2	0	0	0	0	0
3529:	0	0	2	1	3	1	2	0
3537:	0	0	0	0	1	0	0	0
3545:	0	0	1	0	0	0	0	1
3553:	2	1	0	1	0	1	2	2
3561:	1	1	0	0	1	0	0	1
3569:	0	1	0	2	1	0	1	0
3577:	0	0	0	0	0	0	0	0
3585:	0	0	0	0	0	0	0	3
3593:	0	0	1	0	1	1	0	0
3601:	2	0	0	0	1	0	1	0
3609:	0	2	1	0	0	0	0	0
3617:	0	0	0	0	0	0	0	1
3625:	1	0	1	0	1	0	0	0
3633:	0	0	1	0	0	0	1	1
3641:	1	0	1	0	0	0	0	1
3649:	0	0	1	0	0	0	0	1
3657:	0	0	0	0	2	0	1	0
3665:	0	0	0	0	0	0	1	0
3673:	0	0	1	1	0	1	0	0
3681:	0	0	1	0	0	0	1	0
3689:	1	1	0	0	0	0	1	1
3697:	0	1	0	0	0	0	0	0
3705:	0	2	0	0	0	1	1	0
3713:	0	0	1	1	0	0	0	0
3721:	0	0	0	0	0	0	1	0
3729:	0	0	0	1	0	0	0	0
3737:	0	0	0	0	1	0	0	0
3745:	0	1	0	0	0	1	0	0
3753:	0	0	0	0	0	0	0	0
3761:	0	0	0	1	0	0	0	0
3769:	0	0	1	0	0	2	0	0
3777:	1	1	0	0	0	0	0	2
3785:	2	0	0	1	1	0	1	0

3793:	0	1	0	1	0	0	2	1
3801:	0	0	0	0	0	0	0	0
3809:	0	0	0	0	0	1	0	0
3817:	1	2	0	0	0	0	0	0
3825:	0	1	0	0	1	0	0	0
3833:	0	1	1	0	2	0	0	1
3841:	0	0	0	0	0	0	0	0
3849:	1	0	0	0	1	0	1	0
3857:	1	1	1	1	0	0	0	0
3865:	0	0	1	0	1	0	0	0
3873:	1	0	0	1	1	1	0	0
3881:	0	0	0	1	1	0	0	0
3889:	0	0	0	1	0	0	0	2
3897:	1	0	0	0	0	0	0	0
3905:	0	0	0	1	0	0	1	0
3913:	0	1	0	0	0	0	0	1
3921:	0	0	0	0	0	0	0	0
3929:	0	0	0	0	0	0	0	1
3937:	0	0	0	0	0	0	0	0
3945:	0	0	0	1	0	1	1	1
3953:	1	1	0	0	1	0	1	0
3961:	2	0	0	0	0	0	1	1
3969:	1	0	0	0	1	0	0	0
3977:	0	0	0	1	0	0	0	0
3985:	0	0	0	2	0	0	0	0
3993:	1	0	0	0	0	0	1	2
4001:	0	0	1	1	0	0	0	0
4009:	0	0	0	0	0	0	0	1
4017:	1	0	0	0	1	0	0	0
4025:	0	0	0	0	0	0	0	1
4033:	0	0	0	0	0	0	0	0
4041:	0	0	0	1	0	1	0	0
4049:	1	0	1	0	1	0	0	0
4057:	1	0	0	0	0	1	0	1
4065:	0	0	0	0	0	1	0	1
4073:	0	0	0	0	0	0	0	0
4081:	0	0	0	0	0	0	0	2
4089:	0	1	1	0	0	1	0	0

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE1.QAF;1

Sample ID : Bkgrnd Check
Sample date : 22-NOV-2011 05:45:00
Elapsed live time: 0 00:15:00.00

Sample quantity : 1.00 EACH
Acquisition date : 22-NOV-2011 05:45:00
Elapsed real time: 0 00:15:00.09

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
Background Counts [1838+/-225]	1880	0.18	
Background Rate [2.05+/-0.24]	2.09	0.18	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 11 / 22 4

11/22/11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE2.QAF;1

Sample ID : Bkgrnd Check
Sample date : 25-NOV-2011 05:07:43
Elapsed live time: 0 00:15:00.00

Sample quantity : 1.00 EACH
Acquisition date : 25-NOV-2011 05:07:43
Elapsed real time: 0 00:15:00.14

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Counts [3039+/-3853]	2384	-0.17	
*Background Rate [33+/-558]	2.6	-0.05	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: CB Approval Date: 11 / 25 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE1_GAW11.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00

Sample quantity : 0.500 LITER
Acquisition date : 25-NOV-2011 05:07:17
Elapsed real time: 0 00:15:53.19

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	59	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1174	
*Peak Centroid 1332.49 kev	1331	1334	1333	
*Peak Centroid 1836.01 kev	1835	1838	1837	
*Peak FWHM Am-241 59.54 kev	0.5	3.0	1.7	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	1.7	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.0	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.1	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.6	
*DC Activity Am-241 59.54 kev	2.65E+05	3.58E+05	2.74E+05	
*DC Activity Cs-137 661.65 kev	1.00E+05	1.36E+05	1.19E+05	
*DC Activity Co-60 1173.22 kev	1.65E+05	2.23E+05	1.93E+05	
*DC Activity Co-60 1332.49 kev	1.65E+05	2.23E+05	1.97E+05	
*DC Activity Y-88 1836.01 kev	3.46E+05	4.69E+05	4.25E+05	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: ICB Approval Date: 11 / 25 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE2_GAW11.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00

Sample quantity : 0.500 LITER
Acquisition date : 25-NOV-2011 05:24:24
Elapsed real time: 0 00:15:52.89

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	60	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1173	
*Peak Centroid 1332.49 kev	1331	1334	1333	
*Peak Centroid 1836.01 kev	1835	1838	1836	
*Peak FWHM Am-241 59.54 kev	0.5	3.0	1.6	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	1.7	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.0	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.1	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.5	
*DC Activity Am-241 59.54 kev	2.65E+05	3.58E+05	3.09E+05	
*DC Activity Cs-137 661.65 kev	1.00E+05	1.36E+05	1.22E+05	
*DC Activity Co-60 1173.22 kev	1.65E+05	2.23E+05	1.99E+05	
*DC Activity Co-60 1332.49 kev	1.65E+05	2.23E+05	1.98E+05	
*DC Activity Y-88 1836.01 kev	3.46E+05	4.69E+05	4.03E+05	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: WB Approval Date: 11 / 25 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCB_GE1.QAF;1

Sample ID : Bkgrnd Check
Sample date : 26-NOV-2011 05:20:15
Elapsed live time: 0 00:15:00.00

Sample quantity : 1.00 EACH
Acquisition date : 26-NOV-2011 05:20:15
Elapsed real time: 0 00:15:00.10

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
Background Counts [1838+/-225]	1888	0.22	
Background Rate [2.05+/-0.24]	2.10	0.22	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: KB Approval Date: 11 / 26 / 11

QA filename : DKA100:[GAMMA.SCUSR.QA]QCC_GE1_GAW11.QAF;1

Sample ID : Calib Check
Sample date : 1-JAN-2011 00:00:00
Elapsed live time: 0 00:15:00.00
Sample quantity : 0.500 LITER
Acquisition date : 26-NOV-2011 05:03:11
Elapsed real time: 0 00:15:53.58

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*Peak Centroid 59.54 kev	58	61	59	
*Peak Centroid 661.65 kev	660	663	662	
*Peak Centroid 1173.22 kev	1172	1175	1174	
*Peak Centroid 1332.49 kev	1331	1334	1333	
*Peak Centroid 1836.01 kev	1835	1838	1837	
*Peak FWHM Am-241 59.54 kev	0.5	3.0	1.7	
*Peak FWHM Cs-137 661.65 kev	0.5	3.0	1.7	
*Peak FWHM Co-60 1173.22 kev	0.5	3.0	2.0	
*Peak FWHM Co-60 1332.49 kev	0.5	3.0	2.1	
*Peak FWHM Y-88 1836.01 kev	0.5	3.0	2.4	
*DC Activity Am-241 59.54 kev	2.65E+05	3.58E+05	3.05E+05	
*DC Activity Cs-137 661.65 kev	1.00E+05	1.36E+05	1.19E+05	
*DC Activity Co-60 1173.22 kev	1.65E+05	2.23E+05	1.97E+05	
*DC Activity Co-60 1332.49 kev	1.65E+05	2.23E+05	1.97E+05	
*DC Activity Y-88 1836.01 kev	3.46E+05	4.69E+05	4.13E+05	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: ICB Approval Date: 11 / 26 / 11

WESTON SOLUTIONS, INC.

Dysart #2 Uranium Mine
Section 12 Uranium Mine

STANDARD LEVEL IV
REPORT OF ANALYSIS

WORK ORDER #11-12141-OR

January 27, 2012

EBERLINE ANALYTICAL/OAK RIDGE LABORATORY
OAK RIDGE, TN

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Eberline Services – Oak Ridge Laboratory

LABORATORY DATA SUPPORT CHECKLIST

MP-001-3

Eberline Services Work Order # 11-12141

The checklist items listed below are to be initialed by appropriate staff upon completion/verification.

Date for Partial	Initials	Date	Initials	Checklist Items
		12-23-11	JWM	Sample Log-In
		12/30/11	KBS	Data Compilation
		1-6-12	MLT	First Technical Data Review
		1/6/12	[illegible]	Second Technical Data Review
		01/24/12	EJT	Data Entry/Electronic Deliverable
		01/24/12	EJT	Case Narrative
		1/24/12	[illegible]	Electronic Deliverable Proof
		1/24/12	[illegible]	Samples Analyzed within Holding Time Yes? ☐ No? ☐ /ES
		1/24/12	[illegible]	QA/QC Review
		01/30/11	EJT	Client in Possession of Data Electronic or Hard Copy
				Invoiced by Laboratory

Technical/Clerical Corrections, Signatures Needed, Problems, Etc	Date/Initials

Date package approved by: [illegible] 1/27/12

Laboratory Manager Date

Copy No. _____

SECTION I

CHAIN OF CUSTODY
& pH CHECK

USEPA
DateShipped: 11/10/2011
CarrierName: FedEx
AirbillNo: 797722979081

11-12141

CHAIN OF CUSTODY RECORD
Dysart #2 Uranium Mine
Contact Name: Kristie Warr
Contact Phone: 713-985-6636

~~11-11066~~
JWM 12-23-11

No: TO0035110901-111110-0002
Cooler #: 1
Lab: Eberline Services
Lab Phone: 865-481-0683

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Container	Preservative	MS/MSD	Samp_Concentration	Sampler
	DY2-11-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:35	16 oz jar	None	N	143,634 cpm	START
	DY2-17-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:37	16 oz jar	None	N	198,698 cpm	START
	DY2-17-32-111109	Gamma Spectroscopy	Soil	11/9/2011	08:37	16 oz jar	None	N	198,698 cpm	START
	DY2-32-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:46	16 oz jar	None	N	190,346 cpm	START
	DY2-33-31-111109	Gamma Spectroscopy	Soil	11/9/2011	08:51	16 oz jar	None	N	149,740 cpm	START
	DY2-41-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:15	16 oz jar	None	N	145,036 cpm	START
	DY2-44-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:10	16 oz jar	None	N	139,861 cpm	START
	DY2-48-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:05	16 oz jar	None	N	123,889 cpm	START
	DY2-65-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:31	16 oz jar	None	N	104,090 cpm	START
	DY2-77-31-111109	Gamma Spectroscopy	Soil	11/9/2011	09:29	16 oz jar	None	N	70,936 cpm	START
	DY2-BKGD-E-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:25	16 oz jar	None	N	17,123 cpm	START
	DY2-BKGD-N-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:15	16 oz jar	None	N	18,478 cpm	START
	DY2-BKGD-S-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:45	16 oz jar	None	N	17,866 cpm	START
	DY2-BKGD-W-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:00	16 oz jar	None	N	19,017 cpm	START
	MD-01-31-111109	Gamma Spectroscopy	Soil	11/9/2011	15:19	16 oz jar	None	N	104,285 cpm	START
4	ST1-01-111108	Gamma Spectroscopy	Surface Water	11/8/2011	10:40	4 L cubitainer	4 C	N	<25,000 cpm	START
	ST1-01-111108	Isotopic U, Isotopic Th (HOLD)	Surface Water	11/8/2011	10:40	500mL Polyethylene	HNO3 pH<2	N	<25,000 cpm	START

Special Instructions: Level IV Deliverable, Standard TAT. HOLD Alpha Spec for Isotopic U and Isotopic Th ASTM 3972-90M until Gamma Spec results are aquired.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
17/samples	[illegible]	11/9/11	[illegible]	11.11.11	0900						

REC'D DEC 23 2011 ~~REC'D NOV 11 2011~~
JWM 12-23-11

5000

USEPA
DateShipped: 11/10/2011
CarrierName: FedEx
AirbillNo: 795392961266

~~11-11067~~
JWM 12-23-12

CHAIN OF CUSTODY RECORD
Section 12 Uranium Mine
Contact Name: Kristie Warr
Contact Phone: 713-985-6636

11-12141

No: TO0035110902-111110-0002
Cooler #: 1
Lab: Eberline Services
Lab Phone: 865-481-0683

JWM 12-23-11

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Container	MS/MSD	Samp_Concentration
	ALSW-01-111107	Isotopic U, Isotopic Th (HOLD)	Surface Water	11/7/2011	15:00	500mL Polyethylene	N	<20,000 cpm
54	ALSW-01-111107	Gamma Spectroscopy	Surface Water	11/7/2011	15:00	4 L cubitainer	N	<20,000 cpm
	BKGD-E-31-111107	Gamma Spectroscopy	Soil	11/7/2011	15:06	16 oz jar	N	41,447 cpm
	BKGD-N-31-111107	Gamma Spectroscopy	Soil	11/7/2011	15:18	16 oz jar	N	18,444 cpm
	BKGD-S-31-111107	Gamma Spectroscopy	Soil	11/7/2011	15:45	16 oz jar	N	15,785 cpm
	BKGD-W-31-111107	Gamma Spectroscopy	Soil	11/7/2011	15:25	16 oz jar	N	17,800 cpm
	S12-12-31-111107	Gamma Spectroscopy	Soil	11/7/2011	14:20	16 oz jar	N	74,861 cpm
	S12-14-31-111107	Gamma Spectroscopy	Soil	11/7/2011	14:25	16 oz jar	N	144,468 cpm
	S12-22-31-111107	Gamma Spectroscopy	Soil	11/7/2011	14:40	16 oz jar	N	136,438 cpm
	S12-33-31-111107	Gamma Spectroscopy	Soil	11/7/2011	14:14	16 oz jar	N	231,451 cpm
	S12-34-31-111107	Gamma Spectroscopy	Soil	11/7/2011	14:12	16 oz jar	N	241,022 cpm
	S12-34-32-111107	Gamma Spectroscopy	Soil	11/7/2011	14:12	16 oz jar	N	241,022 cpm
	S12-35-31-111107	Gamma Spectroscopy	Soil	11/7/2011	14:10	16 oz jar	N	203,006 cpm
	S12-52-31-111107	Gamma Spectroscopy	Soil	11/7/2011	14:56	16 oz jar	N	137,567 cpm
	S12-56-31-111107	Gamma Spectroscopy	Soil	11/7/2011	14:49	16 oz jar	N	106,454 cpm
	S12-64-31-111107	Gamma Spectroscopy	Soil	11/7/2011	14:52	16 oz jar	N	38,998 cpm

Special Instructions: Level IV Deliverable, Standard TAT. HOLD Alpha Spec for Isotopic U and Th ASTM 3972-90M until Gamma Spec results are aquired.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16/samples	[signature]	11/9/11	Justin McKamey	11-11-11	0900						

Sig of 2-4-12

0006

REC'D DEC 23 2011

~~REC'D NOV 11 2011~~
JWM 12-23-11

EBERLINE SERVICES Oak Ridge Laboratory	Internal Chain of Custody	Work Order #	11-12141
		Lab Deadline	12/30/2011
		Analysis	GaGbT_ThSr - Level 4
		Sample Matrix	Water

Comments	Sample Fraction	HP 210 / 270 Detector Activity	Storage Location
	04	61	U1.2
	05	60	U1.2

	Location (circle one)					Initials	Date
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room	MR	27DEC11
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room	MR	30DEC110700
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room	[illegible]	12/30/11 0700
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room	[illegible]	12/30/11 0530
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Received by	Sample Storage	Rough Prep	Prep	Separations	Count Room		
Relinquished by	Sample Storage	Rough Prep	Prep	Separations	Count Room		

EBERLINE SERVICES

Sample Receiving Report
(Volumes, pH, & CPM)

Internal Work Order: **11-12141**

Received By: JMCKAMEY

FR	ClientID	# Btls	Comments	Matrix	Storage	Rec Vol Ttl	CPM Max
01	LCS	0		WA	U1.2		
02	BLANK	0		WA	U1.2		
03	DUP	0		WA	U1.2		
04	ST-01-111108	1		WA	U1.2	1.84	61
	1		Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	<2	<2	1.8400	61
05	ALSW-01-111107 ✓	1		WA	U1.2	2.15	60
			Container Number	pH Orig	pH Final	Volume (L)	CPM
			1	<2	<2	2.1500	60

KGT 12/23/11

Received by: Juan McKamey Date: 12·23·11

MP-001, Rev 5
Effective: 11/22/02

0008

SECTION II

SAMPLE ACKNOWLEDGEMENT &CORRESPONDENCE

Client Name	Contract/PO	Project Type	Date Received	Required Turnaround Days	Eberline Services Work Order
Weston Solutions, Inc.	0070138	Environmental	12/23/2011	14	11-12141
Project Name	**Client WO**	**Sample Disp**	**Lab Deadline**	**Internal Deadline**	**Client Deadline**
0070138 U Mines	Dysart #2 Uranium Mine	W	12/30/2011	01/04/2012	01/06/2012

Internal ID	Client ID	Sample Date	Matrix	Storage	GaGbT	Ttl
01	LCS	12/23/11	WA	U1.2	X	1
02	BLANK	12/23/11	WA	U1.2	X	1
03	DUP	12/23/11	WA	U1.2	X	1
04	ST1-01-111108	11/08/11 10:40	WA	U1.2	X	1
05	ALSW-01-111107	11/07/11 15:00	WA	U1.2	X	1
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
	Totals Per Analysis (non QA samples)				2	

EBERLINE SERVICES

Sample Log In Report

Oak Ridge Laboratory
601 Scarboro Rd.
Oak Ridge, TN 37830

Voice: (865) 481-0683
Fax: (865) 483-4621

Invoice	ACCOUNTS PAYABLE Weston Solutions, Inc. 5599 San Felipe Suite 700 Houston, TX 77056
Voice	713-985-6686
Fax	713-985-6703
Contact	Kristie Warr
Voice	713-985-6636
Fax	713-985-6703

Report Data	Kristie Warr Weston Solutions, Inc. 5599 San Felipe Suite 700 Houston, TX 77056
Voice	713-985-6636
Fax	713-985-6703

Printed: 12/23/2011 9:47 AM

Eberline Services – Oak Ridge Laboratory

SAMPLE RECEIPT CHECKLIST
MP-001-2

WORK ORDER # 11-12141

SAMPLE MATRIX/MATRICES: (CIRCLE ONE OR BOTH)

AQUEOUS NON-AQUEOUS

(CIRCLE EITHER YES, NO, OR N/A)

WERE SAMPLES:

Received in good condition?	Y	N	
If aqueous, properly preserved	Y	N	N/A

WERE CHAIN OF CUSTODY SEALS:

Present on outside of package?	Y	N
Unbroken on outside of package?	Y	N
Present on samples?	Y	N
Unbroken on samples?	Y	N
Was chain of custody present upon sample receipt?	Y	N

IF THE RESPONSE TO ANY OF THE ABOVE IS **NO**, A DISCREPANT SAMPLE RECEIPT REPORT (DSR) HAS BEEN ISSUED.

REMARKS: (2) 4L cubes of preserved H_2O.

SIGNATURE: Justin McKay DATE: 12-23-11

Elizabeth Towery

From: Kathy Shaulis
Sent: Friday, December 23, 2011 9:06 AM
To: Buster, Patrick
Cc: Elizabeth Towery
Subject: RE: Work orders #11-11066 and 11-11067

Patrick,
We have the samples and have reclogged for gross alpha/beta.
Regards,
Kathy

From: Buster, Patrick [mailto:Patrick.Buster@WestonSolutions.com]
Sent: Tuesday, December 20, 2011 5:43 PM
To: Kathy Shaulis
Cc: Warr (Kettler), Kristie
Subject: Work orders #11-11066 and 11-11067

Hi Kathy,

For the two water samples in the above referenced Lab Packages, could we run the samples for gross alpha/beta? It is my understanding that you still have the samples, would this be a problem for you guys?

Thank you, and have a good holiday!

Patrick Buster
Assistant Geoscientist II
Weston Solutions, Inc.
5599 San Felipe, Suite 700
Houston, TX 77056
713-985-6730 (Office)
903-348-3917 (Cell)
patrick.buster@westonsolutions.com

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SECTION III

CASE NARRATIVE

EBERLINE SERVICES

EBERLINE ANALYTICAL CORPORATION
601 SCARBORO ROAD
OAK RIDGE, TENNESSEE 37830
PHONE (865) 481-0683
FAX (865) 483-4621

EBS-OR-33312

January 27, 2012

Kristie Warr
Weston Solutions, Inc.
5599 San Felipe Suite 700
Houston, TX 77056

CASE NARRATIVE
Work Order # 11-12141-OR

SAMPLE RECEIPT

This work order contains two water samples relogged 12/23/2011. These samples were analyzed for Gross Alpha/Beta.

CLIENT ID	LAB ID
ST1-01-111108	11-12141-04
ALSW-01-111107	11-12141-05

ANALYTICAL METHODS

Gross Alpha/Beta was analyzed using EPA Method 900.0 Modified.

ANALYTICAL RESULTS

Combined Standard Uncertainty is reported at 2-sigma value.

GROSS ALPHA/BETA

Samples were prepared by evaporation of representative volumetric aliquots acidified with HNO_3. Reduced samples were then transferred to steel planchets for final evaporation to dryness and flaming. Samples were then counted on a gas proportional counter. Results were corrected as required for inherent self-absorption based on residual mass present.

Samples demonstrated acceptable results for Gross Alpha and Beta activity. The Gross Alpha and Beta method blank demonstrated acceptable results. Results for the Gross Alpha duplicate demonstrated a high relative percent difference; however, normalized difference is within acceptable limits for the analytical technique. Results for the Gross Beta duplicate demonstrated an acceptable relative percent difference and normalized difference. Results for the Gross Alpha and Beta laboratory control sample demonstrated an acceptable percent recovery.

CERTIFICATION OF ACCURACY

I certify that this data report is in compliance with the terms and conditions of the Purchase Order, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the cognizant project manager or his/her designee to be accurate as verified by the following signature.

M.R. McDougall
Laboratory Manager

Date: 1/27/2012

SECTION IV

ANALYTICAL RESULTS SUMMARY

Eberline Analytical
Final Report of Analysis

Report To:	
Kristie Warr	
Weston Solutions, Inc.	
5599 San Felipe Suite 700	
Houston, TX 77056	

Work Order Details:	
SDG:	11-12141
Purchase Order:	0070138
Analysis Category:	ENVIRONMENTAL
Sample Matrix:	WA

Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-12141-01	LCS	KNOWN	12/23/11 00:00	12/23/2011	12/30/2011	11-12141	Gross Alpha	EPA 900.0 Modified	3.14E+02	1.35E+01			pCi/l
11-12141-01	LCS	SPIKE	12/23/11 00:00	12/23/2011	12/30/2011	11-12141	Gross Alpha	EPA 900.0 Modified	2.83E+02	3.71E+00	3.11E+01	2.14E-01	pCi/l
11-12141-02	MBL	BLANK	12/23/11 00:00	12/23/2011	12/30/2011	11-12141	Gross Alpha	EPA 900.0 Modified	-2.37E-01	1.64E-01	1.66E-01	4.40E-01	pCi/l
11-12141-03	DUP	ST1-01-111108	11/08/11 10:40	12/23/2011	12/30/2011	11-12141	Gross Alpha	EPA 900.0 Modified	7.00E+00	1.76E+00	1.92E+00	3.44E-01	pCi/l
11-12141-04	DO	ST1-01-111108	11/08/11 10:40	12/23/2011	12/30/2011	11-12141	Gross Alpha	EPA 900.0 Modified	2.82E+00	2.18E+00	2.20E+00	4.20E+00	pCi/l
11-12141-05	TRG	ALSW-01-111107	11/07/11 15:00	12/23/2011	12/30/2011	11-12141	Gross Alpha	EPA 900.0 Modified	7.12E+01	1.32E+01	1.53E+01	9.82E+00	pCi/l
11-12141-01	LCS	KNOWN	12/23/11 00:00	12/23/2011	12/30/2011	11-12141	Gross Beta	EPA 900.0 Modified	2.28E+02	6.84E+00			pCi/l
11-12141-01	LCS	SPIKE	12/23/11 00:00	12/23/2011	12/30/2011	11-12141	Gross Beta	EPA 900.0 Modified	2.50E+02	2.97E+00	3.47E+01	5.28E-01	pCi/l
11-12141-02	MBL	BLANK	12/23/11 00:00	12/23/2011	12/30/2011	11-12141	Gross Beta	EPA 900.0 Modified	-9.01E-02	2.46E-01	2.47E-01	5.40E-01	pCi/l
11-12141-03	DUP	ST1-01-111108	11/08/11 10:40	12/23/2011	12/30/2011	11-12141	Gross Beta	EPA 900.0 Modified	1.76E+01	2.21E+00	3.28E+00	3.00E+00	pCi/l
11-12141-04	DO	ST1-01-111108	11/08/11 10:40	12/23/2011	12/30/2011	11-12141	Gross Beta	EPA 900.0 Modified	1.62E+01	2.34E+00	3.23E+00	3.60E+00	pCi/l
11-12141-05	TRG	ALSW-01-111107	11/07/11 15:00	12/23/2011	12/30/2011	11-12141	Gross Beta	EPA 900.0 Modified	6.76E+01	9.01E+00	1.30E+01	1.22E+01	pCi/l

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

EBERLINE SERVICES

EBERLINE ANALYTICAL CORPORATION
601 SCARBORO ROAD OAK RIDGE, TN 37830 865/481-0683 FAX 865/483-4621

SECTION V

ANALYTICAL STANDARDS

ANALYTICS

QA/QC REVIEWED
Date 4/30/96 Initials MT

Am-4

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

52094-416

Am-241 10 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master liquid radionuclide solution source. The master source was calibrated by liquid scintillation counting.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Am-241
ACTIVITY (dps):	1.975 E+05
HALF-LIFE:	432.2 years
CALIBRATION DATE:	March 19, 1996 12:00 EST
TOTAL ERROR:	3.0%
SYSTEMATIC ERROR:	2.37%
RANDOM ERROR:	0.63%

10.01177 grams of solution 1M HCl.

P O NUMBER OR3830, Item 1

SOURCE PREPARED BY: Kare O'Brie Beverly
K. O. Beverly, Radiochemist

Q A APPROVED: D M. Mahy 4-26-96

EBERLINE SERVICES

QUALITY CONTROL PROGRAM
MP-009

Rev.8; 1/10/03
Title: **Radioactive Reference Standards Solutions & Records**

EBERLINE SERVICES - OAK RIDGE LABORATORY
RADIOACTIVE REFERENCE STANDARD SOLUTIONS
SECONDARY DILUTION (RE-CERTIFICATION)

Solution Reference # Analytics 52094-416
Date 10/7/2011 0:00
Solution # A/B-7 (alpha)

Principal Radionuclide	Half Life, Years	Half Life, Days
^{241}Americium	4.322E+02	1.579E+05

Radionuclide of Interest ^{241}Am
Parent Solution Conc. 1.19E+04 dpm/ml
Reference Date 3/19/1996 0:00

Chemical Composition of Standard Solution
$^{241}AmCl_3$ in 1M HCL

Dilution Instructions:
Dilution Solvent Used 1 M HNO_3

SECONDARY VOLUMETRIC DILUTION

Vol. Parent Solution: 60.0000 ml
Total Activity: 7.1100E+05 dpm
Final Volume: 1000.00 ml

Final Activity Concentration: 7.1100E+02 dpm/ml

NOTES:

This activity concentration is based on the original reference date listed above. All activities are corrected to the date and time of analysis by the laboratory data processing software.

Expiration Date: October 7, 2012

Recertified By: _____ Date: 10/7/11

Verified & Approved By: Martin R. Kellar Date: 10/10/11

QC Approval: _____ Date: 10/11/11

National Institute of Standards & Technology

Certificate

Standard Reference Material 4234A
Strontium-90 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive strontium-90 chloride, non-radioactive strontium chloride, non-radioactive yttrium chloride, and hydrochloric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of beta-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains strontium-90 with a total activity of approximately 13 MBq. Strontium-90 decays by beta-particle emission to yttrium-90, which also decays by beta-particle emission. None of the beta particles escape from the SRM ampoule. The beta particles emitted from strontium-90 and yttrium-90 produce bremsstrahlung photons with energies up to 2 MeV. Most of these photons escape from the SRM ampoule and can represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. Appropriate shielding and/or distance should be used to minimize personnel exposure. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains hydrochloric acid (HCl) with a concentration of 1 mole per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least March 2005.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, J.M.R. Hutchinson, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group and D.B. Golas, Nuclear Energy Institute Research Associate.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by N.M. Trahey.

Gaithersburg, Maryland 20899
May 1995 (Text only revised November 1997)

Thomas E. Gills, Chief
Standard Reference Materials Program

*Notes and references are on pages 5 and 6.

0021

EBERLINE SERVICES

QUALITY CONTROL PROGRAM
QCP-009

Rev.7; 9/29/99
Title: **Radioactive Reference Standards Solutions & Records**

EBERLINE SERVICES - OAK RIDGE LABORATORY
RADIOACTIVE REFERENCE STANDARD SOLUTIONS
SECONDARY DILUTION (RE-CERTIFICATION)

Solution Reference # QCP-009-1-A NIST 4234A
Date 10/7/2011 0:00
Solution # A/B-7 (beta)

Principal Radionuclide ^{90}Strontium
Half Life, Years 2.878E+01
Half Life, Days 1.051E+04

Radionuclide of Interest ^{90}Sr
Parent Solution Conc. 1.52E+06 dpm/ml
Reference Date 3/13/1995 0:00

The beta activity of solution reflects the original ^{90}Strontium concentration and an equal concentration of ^{90}Yttrium.

Chemical Composition of Standard Solution
$^{90}SrCl_2$ in 1 M HCl

Dilution Instructions:
Dilution Solvent Used 1 M HNO_3

SECONDARY VOLUMETRIC DILUTION

Vol. Parent Solution: 0.5000 ml
Total Activity: 7.5764E+05 dpm
Final Volume: 1000.00 ml

Final Activity Concentration: 7.5764E+02 dpm/ml

NOTES:

This activity concentration is based on the original reference date listed above. All activities are corrected to the date and time of analysis by the laboratory data processing software.

Expiration Date: October 7, 2012

Recertified By: _____ Date: 10/07/11
Verified & Approved By Martin A. Kolb Date: 10/10/11
QC Approval _____ Date: 10/10/11

0022

SECTION VI

QUALITY CONTROL SAMPLE RESULTS SUMMARY

WO	Analysis	Run	Activity Units	Aliquot Units	Client Name
11-12141	GaGbT_ThSr	1	pCi	I	Weston Solutions, Inc.

Laboratory Control Sample

Analyte	Normalized Difference	LCS Measured	CSU Measured	LCS Expected	Uncert. Expected	Known	Known Error	Result	CSU	Standard ID	Standard ACT (dpm)	Standard Error	Standard Added (g)
GROSS ALPHA_TH	1.86	90.23%	11.00%	100.00%	4.30%	3.14E+02	1.35E+01	2.83E+02	3.11E+01	A/B-07	6.93E+02	4.30E+00	1.00E+00
GROSS BETA_SR	1.22	109.53%	13.87%	100.00%	3.00%	2.28E+02	6.84E+00	2.50E+02	3.47E+01	A/B-07	5.04E+02	3.00E+00	1.00E+00

Matrix Spike

Analyte	Normalized Difference	MS Actual % Rec	Expected MS Result	Expected MS Uncert	Actual MS Result	Actual MS CSU	Sample Result	Sample CSU	Sample Aliquot	Standard ID	Standard ACT (dpm)	Standard Error %	Standard Added (g)

Replicate Sample

Analyte	Normalized Difference	RPD	Original Result	Original CSU	Replicate Result	Replicate CSU
GROSS ALPHA_TH	2.80	85.02	2.82E+00	2.20E+00	7.00E+00	1.92E+00
GROSS BETA_SR	0.59	8.22	1.62E+01	3.23E+00	1.76E+01	3.28E+00

QC Summary

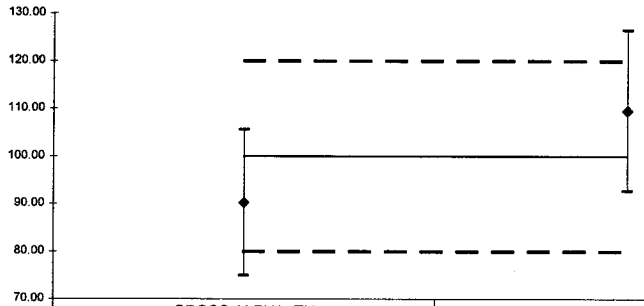
LCS Relative Bias	LCS % R	LCS ND	MS % R	MS ND	Rep RPD	Rep ND
0.90	OK	OK			INV	OK
1.10	OK	OK			OK	OK

Version

0024

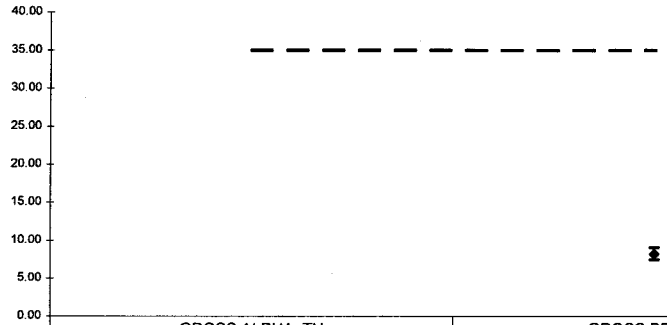
WO	Analysis	Run	Activity Units	Aliquot Units	Client Name
11-12141	GaGbT_ThSr	1	pCi	I	Weston Solutions, Inc.

LCS % Recovery



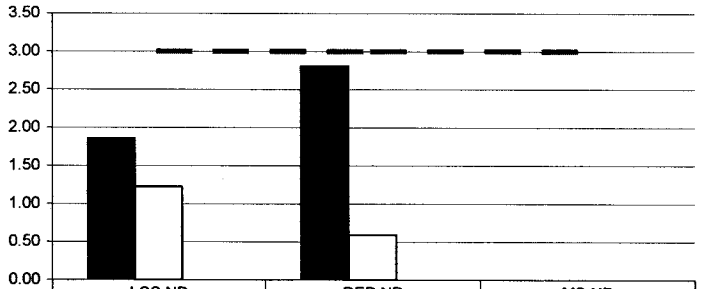
	GROSS ALPHA_TH	GROSS BETA_SR
Lower Error	74.93	92.66
Upper Error	105.53	126.40
%R	90.23	109.53
LCL	80	80
Mean	100	100
UCL	120	120

Replicate Sample RPD



	GROSS ALPHA_TH	GROSS BETA_SR
Lower Error	102.84	9.02
Upper Error	67.20	7.43
RPD	85.02	8.22
CL	35	35

Normalized Difference



	LCS ND	REP ND	MS ND
GROSS ALPHA_TH	1.86	2.80	0.00
GROSS BETA_SR	1.22	0.59	0.00
	0.00	0.00	0.00
UCL	3	3	3

No Matrix Spike

Version

0025

SECTION VII

LABORATORY TECHNICIAN'S NOTES
&
RUN LOGS

EBERLINE SERVICES **Work Order Analysis Notes**	**Oak Ridge Laboratory** **601 Scarboro Rd.** **Oak Ridge, TN 37830** **Voice: 865.481.0683** **www.eberlineservices.com**	Internal Work Order	11-12141
		Analysis Code	GaGbT_ThSr
		Run Number	1

#	Date	Dept	User	Notes
1	12/30/11 07:04	PREP	MHIGHTOWER	Ran TDS to determine aliquot room. Aliquoted samples, reduced volume on hot plate, transferred to tared planchets, dried, flamed, re-weighed, and submitted to count room

MH 30DEC4

EBERLINE SERVICES

Reagents Used in an Analysis

Internal Work Order	
11-12141	
Analysis Code	Run
GaGbT_ThSr	1

Reagent ID	Reagent Name	Reagent Concentration	Analyst ID	Date Recorded
011577D16	Nitric Acid	3N	MHIGHTOWER	12/30/2011

LP4110 RED

DATE	SAMPLE #	Client	Load Time	CT Time	Analysis Tech	
12/28/14	1112165AB(1)	UCOR	0952	30min	AB	✓
12/28/14	1112075RA(4)	UCOR	1037	30min	NASEZ	✓
12/29/11	1112099RA (1-4)	UCOR	1115	2hrs	RaD	ICB
12/29/11	1112074RA (4,4,6)	UCOR	1119	2hrs	RaD	ICB
12/29/14	1112037CL(4-3,5,7,9,11,13)	UCOR	1607	30mins.	CL34	ICB
12/30/14	EFFac	LAB	0510	30min	AIB	✓
12/30/14	BLGDAC	LAB	0548	60min	AIB	✓
12/30/14	1112141AB(1-5)	Weston	0727	2h	AIB	✓
12/30/14	1112051AB(1-4)	Access	0725	2h	AIB	✓

SECTION VIII

ANALYTICAL DATA (GROSS ALPHA/BETA)

11-12141
GaGbT_ThSr
Run 1

Work Order	11-12141
Analysis Code	GaGbT_ThSr
Run	1
Date Received	12/23/2011
Lab Deadline	12/30/2011
Client	Weston Solutions, Inc.
Project	0070138 U Mines
Report Level	4
Activity Units	pCi
Aliquot Units	l
Matrix	WA
Method	EPA 900.0 Modified
Instrument Type	Alpha/Beta GPC
Radiometric Tracer	
Radiometric Sol#	
Tracer Act (dpm/g)	
Carrier	
Carrier Conc (mg/ml)	

Internal Fraction	Sample Desc	Client ID	Login CPM	Sample Date	Sample Aliquot
01	LCS	LCS		12/23/11 00:00	1.0000E+00
02	MBL	BLANK		12/23/11 00:00	1.0000E+00
03	DUP	ST1-01-111108	61	11/08/11 10:40	2.0000E-01
04	DO	ST1-01-111108	61	11/08/11 10:40	2.0000E-01
05	TRG	ALSW-01-111107	60	11/07/11 15:00	5.0000E-02

* SAF1 is used for Gross Alpha and all other radionuclides. SAF2 is used for Gross Beta only. ** Actual mass exceeded the calibration curve range. Results should be qualified as appropriate.

11-12141
GaGbT_ThSr
Run 1

Internal Fraction	Sample Desc	Tracer Aliquot (g)	Tracer Total ACT (dpm)	Radiometric Tracer (pCi)	Radiometric % Rec	Grav Carrier Added (ml)	Grav Filter Tare (g)	Grav Filter Final (g)	Grav Filter Net (g)	Grav % Rec	Mean % Rec	SAF 1*	SAF 2*
01	LCS				0.00		7.3697	7.3698	0.0001			1.00	1.00
02	MBL				0.00		7.3459	7.3460	0.0001			1.00	1.00
03	DUP				0.00		7.3481	7.3899	0.0418			1.00	1.00
04	DO				0.00		7.3931	7.4356	0.0425			1.00	1.00
05	TRG				0.00		7.4042	7.4669	0.0627			1.00	1.00

* SAF1 is used for Gross Alpha and all other radionuclides. SAF2 is used for Gross Beta only. ** Actual mass exceeded the calibration curve range. Results should be qualified as appropriate.

11-12141
GaGbT_ThSr
Run 1

Internal Fraction	Sample Desc	Rough Prep Date	Rough Prep By	Prep Date	Prep By	Sep t0 Date/Time	Sep t0 By	Sep t1 Date/Time	Sep t1 By
01	LCS			12/30/11 05:08	MHIGHTOWER				
02	MBL			12/30/11 05:08	MHIGHTOWER				
03	DUP			12/30/11 05:08	MHIGHTOWER				
04	DO			12/30/11 05:08	MHIGHTOWER				
05	TRG			12/30/11 05:08	MHIGHTOWER				

* SAF1 is used for Gross Alpha and all other radionuclides. SAF2 is used for Gross Beta only. ** Actual mass exceeded the calibration curve range. Results should be qualified as appropriate.

0023

Eberline Services
Oak Ridge Laboratory

Preliminary Data Report & Analytical Calculations

Work Order: 11-12141-GaGbT-1

Client: Weston Solutions, Inc.
Eberline Services Work Order: 11-12141
Analysis Code: GaGbT
Run: 1

Lab Fraction	Nuclide	Sample Desc	Client Identification	Activity Units	Results	Error Estimate	MDA	LCS Known	LCS %R	LCS Flag	RPD Flag	MDA Flag	Blank Flag
01	GROSS ALPHA	LCS	LCS	pCi/l	2.83E+02	3.71E+00	2.14E-01	3.14E+02	90.23	OK		OK	
02	GROSS ALPHA	MBL	BLANK	pCi/l	-2.37E-01	1.64E-01	4.40E-01					OK	OK
03	GROSS ALPHA	DUP	ST1-01-111108	pCi/l	7.00E+00	1.76E+00	3.44E-01				INV	OK	
04	GROSS ALPHA	DO	ST1-01-111108	pCi/l	2.82E+00	2.18E+00	4.20E+00					OK	
05	GROSS ALPHA	TRG	ALSW-01-111107	pCi/l	7.12E+01	1.32E+01	9.82E+00					INV	

0034

Preliminary Data Report & Analytical Calculations

Work Order: 11-12141-GaGbT-1

Client	Eberline Services Work Order	Analysis Code	Run
Weston Solutions, Inc.	11-12141	GaGbT	1

Lab Fraction	Nuclide	Sample Desc	Sample Date	Sample Aliquot	Radiometric % Rec	Grav % Rec	Mean % Rec	SAF	Sep t0 Date/Time	Sep t1 Date/Time
01	GROSS ALPHA	LCS	12/23/11 00:00	1.00E+00	0.00	0.00	0.00	1.00		
02	GROSS ALPHA	MBL	12/23/11 00:00	1.00E+00	0.00	0.00	0.00	1.00		
03	GROSS ALPHA	DUP	11/08/11 10:40	2.00E-01	0.00	0.00	0.00	1.73		
04	GROSS ALPHA	DO	11/08/11 10:40	2.00E-01	0.00	0.00	0.00	1.74		
05	GROSS ALPHA	TRG	11/07/11 15:00	5.00E-02	0.00	0.00	0.00	2.25		

Preliminary Data Report & Analytical Calculations

Work Order: 11-12141-GaGbT-1

Client	Eberline Services Work Order	Analysis Code	Run
Weston Solutions, Inc.	11-12141	GaGbT	1

Lab Fraction	Nuclide	Sample Desc	Counting Date/Time	Halflife (days)	Detect	Carrier	Count Time	Counts	Bkg CPM	Eff
01	GROSS ALPHA	LCS	12/30/11 06:56		LB4110R	A2	120	22380	0.05	0.2968
02	GROSS ALPHA	MBL	12/30/11 06:56		LB4110R	A3	120	13	0.266666667	0.3007
03	GROSS ALPHA	DUP	12/30/11 06:56		LB4110R	A4	120	61	0	0.2825
04	GROSS ALPHA	DO	12/30/11 06:56		LB4110R	D2	120	61	0.3	0.2899
05	GROSS ALPHA	TRG	12/30/11 06:56		LB4110R	D4	120	129	0.05	0.2915

Eberline Services
Oak Ridge Laboratory

Preliminary Data Report & Analytical Calculations

Work Order: 11-12141-GaGbT-1

Client	Eberline Services Work Order	Analysis Code	Run
Weston Solutions, Inc.	11-12141	GaGbT	1

Lab Fraction	Nuclide	Sample Desc	Client Identification	Activity Units	Results	Error Estimate	MDA	LCS Known	LCS %R	LCS Flag	RPD Flag	MDA Flag	Blank Flag
01	GROSS BETA	LCS	LCS	pCi/l	2.50E+02	2.97E+00	5.28E-01	2.28E+02	109.53	OK		OK	
02	GROSS BETA	MBL	BLANK	pCi/l	-9.01E-02	2.46E-01	5.40E-01					OK	OK
03	GROSS BETA	DUP	ST1-01-111108	pCi/l	1.76E+01	2.21E+00	3.00E+00				OK	OK	
04	GROSS BETA	DO	ST1-01-111108	pCi/l	1.62E+01	2.34E+00	3.60E+00					OK	
05	GROSS BETA	TRG	ALSW-01-111107	pCi/l	6.76E+01	9.01E+00	1.22E+01					INV	

Preliminary Data Report & Analytical Calculations

Work Order: 11-12141-GaGbT-1

Client	Eberline Services Work Order	Analysis Code	Run
Weston Solutions, Inc.	11-12141	GaGbT	1

Lab Fraction	Nuclide	Sample Desc	Sample Date	Sample Aliquot	Radiometric % Rec	Grav % Rec	Mean % Rec	SAF	Sep t0 Date/Time	Sep t1 Date/Time
01	GROSS BETA	LCS	12/23/11 00:00	1.00E+00	0.00	0.00	0.00	1.00		
02	GROSS BETA	MBL	12/23/11 00:00	1.00E+00	0.00	0.00	0.00	1.00		
03	GROSS BETA	DUP	11/08/11 10:40	2.00E-01	0.00	0.00	0.00	1.07		
04	GROSS BETA	DO	11/08/11 10:40	2.00E-01	0.00	0.00	0.00	1.07		
05	GROSS BETA	TRG	11/07/11 15:00	5.00E-02	0.00	0.00	0.00	1.13		

Preliminary Data Report & Analytical Calculations

Work Order: 11-12141-GaGbT-1

Run: 1
Analysis Code: GaGbT
Eberline Services Work Order: 11-12141
Client: Weston Solutions, Inc.

Lab Fraction	Nuclide	Sample Desc	Counting Date/Time	Halflife (days)	Detect	Carrier	Count Time	Counts	Bkg CPM	Eff	A to B, Cor
01	GROSS BETA	LCS	12/30/11 06:56		LB4110R	A2	120	38534	1.1	0.4871	271.2838667
02	GROSS BETA	MBL	12/30/11 06:56		LB4110R	A3	120	134	1.216666667	0.4999	1.116666667
03	GROSS BETA	DUP	12/30/11 06:56		LB4110R	A4	120	577	1.2	0.4786	4.6783525
04	GROSS BETA	DO	12/30/11 06:56		LB4110R	D2	120	644	1.9	0.4993	5.236685833
05	GROSS BETA	TRG	12/30/11 06:56		LB4110R	D4	120	567	1.183333333	0.49	4.4501225

Count Room Report
Client: Weston Solutions, Inc.

11-12141-GaGbT_ThSr-1 (pCi/l) in WA
Tracer ID:

Internal Fraction	Sample Desc	Client ID	Sample Date	Sample Aliquot	Tracer Aliquot (g)	Tracer ACT (dpm)	Radiometric Tracer (pCi)	Radiometric % Rec	SAF 1*	SAF 2*
01	LCS	LCS	12/23/11 00:00	1.0000				0.00	1.00	1.00
02	MBL	BLANK	12/23/11 00:00	1.0000				0.00	1.00	1.00
03	DUP	ST1-01-111108	11/08/11 10:40	0.2000				0.00	1.00	1.00
04	DO	ST1-01-111108	11/08/11 10:40	0.2000				0.00	1.00	1.00
05	TRG	ALSW-01-111107	11/07/11 15:00	0.0500				0.00	1.00	1.00

Eberline Services
Oak Ridge Laboratory

Spike and Tracer Worksheet

Printed: 12/30/2011 5:08 AM

Internal Work Order	Run	Analysis Code	Date	Technician	Technician Initials	Witness Initials
11-12141	1	GaGbT_ThSr	12/30/2011 5:07	MHIGHTOWER	MH	

LCS & Matrix Spikes					LCS	MS	LCSD	MSD	LCS		MS		LCSD		MSD	
Isotope	Sol #	Activity dpm/g	Solution Date	Approx Addition	Volume Used (g)	Volume Used (g)	Volume Used (g)	Volume Used (g)	Known pCi	Error Estimate	Added pCi	Error Estimate	Known pCi	Error Estimate	Added pCi	Error Estimate
Am-241	A/B-07	693.247	12/30/2011	0.680	1.0043				313.62	13.485	0.00	0.000	0.00	0.000	0.00	0.000
SrY-90	A/B-07	504.240	12/30/2011	1.090	1.0043				228.11	6.843	0.00	0.000	0.00	0.000	0.00	0.000

Tracers						
fraction	Isotope	Sol #	Activity dpm/g	Solution Date	Volume Used (g)	Approx Addition

Balance Printer Tapes	
Tracer	LCS
	Matrix Spike

Version 2.0 08/99

Eberline Analytical
Oak Ridge Laboratory

Aliquot Worksheet

Work Order	Run	Analysis Code	Rpt Units	Lab Deadline	Technician
11-12141	1	GaGbT_ThSr	liters	12/30/2011	MHIGHTOWER

Lab Fraction	Weston Solutions, Inc. Client ID	Sample Type	Muffle Data	Dilution Data			Aliquot Data		MS Aliquot Data		H-3 Solids Only	
			Ratio Post/Pre	No of Dils	Dil Factor	Ratio	Aliquot	Net Equiv	Aliquot	Net Equiv	Water Added (ml)	H3 Dist Aliq
01	LCS	LCS					1.0000E+00	1.0000E+00				
02	BLANK	MBL					1.0000E+00	1.0000E+00				
03	ST1-01-111108	DUP					2.0000E-01	2.0000E-01				
04	ST1-01-111108	DO					2.0000E-01	2.0000E-01				
05	ALSW-01-111107	TRG					5.0000E-02	5.0000E-02				

Comments	

Technician: MN Date: 12/30/11

0042

Gravimetric Worksheet

Work Order	Run	Analysis Code	Gravimetric Carrier	Carrier Conc (mg/ml)	Technician
11-12141	1	GaGbT_ThSr			MHIGHTOWER

TRetec Fraction	Weston Solutions, Inc. Client ID	Sample Type	Carrier Data Carrier Added (ml)	Filter Data Filter Tare (g)	Filter Final (g)	Filter Net (g)	Gravimetric % Recovery
01	LCS			7.3697	7.3698	0.0001	
02	BLANK			7.3459	7.3460	0.0001	
03	DUP			7.3481	7.3899	0.0418	
04	ST1-01-111108			7.3931	7.4356	0.0425	
05	ALSW-01-111107			7.4042	7.4669	0.0627	

Technician: MR Date: 12/30/11

0043

TDS / TSS Worksheet

Work Order	Run	Analysis Code	Technician
11-12141	1	GaGbT_ThSr	MHIGHTOWER

TRetec Fraction	Weston Solutions, Inc. Client ID	Aliquot ml	Filter Data: Filter Tare (g)	Filter Final (g)	Filter Net (g)	TDS/TSS (mg/L)	Maximum Aliq (mL)
04	ST1-01-111108	5.0000	7.3686	7.3696	0.0010	200.0000	500.00
05	ALSW-01-111107	5.0000	7.3643	7.3729	0.0086	1720.0000	58.14

Technician: MW Date: 12/27/11

0044

Detector ID	Sample ID	Alpha	Beta	Count Time	Voltage	TOD
A3	1112141-02	13	134	120	1400	12/30/11 8:56
A4	1112141-03	61	577	120	1400	12/30/11 8:56
A2	1112141-01	22380	38534	120	1400	12/30/11 8:56
D2	1112141-04	61	644	120	1400	12/30/11 8:56
D4	1112141-05	129	567	120	1400	12/30/11 8:56

Eberline Analytical
Oak Ridge Laboratory

GPC Detector Report
(ALL Backgrounds)

12/29/11
1

Detector	Alpha/Beta	Calibration Date	Count Date	Bkg CPM	PFW	LCL	Mean	UCL
LB4110A - A1	Alpha	11/18/2007	12/29/2011	0.00E+00	P	-2.51E+01	3.57E-01	2.58E+01
LB4110A - A2	Alpha	11/18/2007	12/29/2011	0.00E+00	P	-2.14E+01	3.40E-01	2.20E+01
LB4110A - A3	Alpha	11/18/2007	12/29/2011	0.00E+00	P	-2.08E+01	2.95E-01	2.14E+01
LB4110A - A4	Alpha	11/18/2007	12/29/2011	0.00E+00	P	-2.21E+01	3.19E-01	2.27E+01
LB4110A - B1	Alpha	11/18/2007	12/29/2011	6.67E-02	P	-1.15E-01	7.46E-02	2.64E-01
LB4110A - B2	Alpha	11/18/2007	12/29/2011	5.00E-02	P	-8.51E-02	7.29E-02	2.31E-01
LB4110A - B3	Alpha	11/18/2007	12/29/2011	6.67E-02	P	-6.12E-02	4.88E-02	1.59E-01
LB4110A - B4	Alpha	11/18/2007	12/29/2011	6.83E-01	F	-1.37E-01	6.53E-02	2.68E-01
LB4110A - C1	Alpha	11/18/2007	12/29/2011	6.17E-01	F	-1.16E-01	8.05E-02	2.77E-01
LB4110A - C2	Alpha	11/18/2007	12/29/2011	1.00E-01	P	-1.98E-01	9.98E-02	3.98E-01
LB4110A - C3	Alpha	11/18/2007	12/29/2011	1.83E-01	P	-2.04E-01	1.05E-01	4.14E-01
LB4110A - C4	Alpha	11/18/2007	12/29/2011	5.00E-02	P	-6.83E-02	7.26E-02	2.13E-01
LB4110A - D1	Alpha	11/18/2007	12/29/2011	1.67E-01	P	-5.89E-02	8.31E-02	2.25E-01
LB4110A - D2	Alpha	11/18/2007	12/29/2011	6.67E-02	P	-6.98E-02	6.11E-02	1.92E-01
LB4110A - D3	Alpha	11/18/2007	12/29/2011	1.50E-01	P	-4.78E-02	6.92E-02	1.86E-01
LB4110A - D4	Alpha	11/18/2007	12/29/2011	1.17E-01	P	-5.72E-02	7.34E-02	2.04E-01
LB4110R - A1	Alpha	11/24/2006	12/29/2011	2.83E-01	W	-1.13E-01	9.08E-02	2.95E-01
LB4110R - A2	Alpha	11/24/2006	12/29/2011	5.00E-02	P	-9.45E-02	8.46E-02	2.64E-01
LB4110R - A3	Alpha	11/24/2006	12/29/2011	2.67E-01	F	-8.12E-02	7.31E-02	2.27E-01
LB4110R - A4	Alpha	11/24/2006	12/29/2011	0.00E+00	P	-5.24E-02	7.75E-02	2.07E-01
LB4110R - B1	Alpha	11/24/2006	12/29/2011	8.33E-02	P	-1.06E-01	6.38E-02	2.34E-01
LB4110R - B2	Alpha	11/24/2006	12/29/2011	6.67E-02	P	-7.39E-02	6.90E-02	2.12E-01
LB4110R - B3	Alpha	11/24/2006	12/29/2011	1.00E-01	P	-6.80E-02	6.81E-02	2.04E-01
LB4110R - B4	Alpha	11/24/2006	12/29/2011	6.67E-02	P	-6.70E-02	7.56E-02	2.18E-01
LB4110R - C1	Alpha	11/24/2006	12/29/2011	1.50E-01	P	-8.37E-02	7.88E-02	2.41E-01
LB4110R - C2	Alpha	11/24/2006	12/29/2011	3.33E-02	P	-7.96E-02	7.73E-02	2.34E-01
LB4110R - C3	Alpha	11/24/2006	12/29/2011	5.00E-02	P	-9.68E-02	8.51E-02	2.67E-01
LB4110R - C4	Alpha	11/24/2006	12/29/2011	1.00E-01	P	-6.66E-02	8.65E-02	2.40E-01
LB4110R - D1	Alpha	11/24/2006	12/29/2011	9.67E-01	F	-9.34E-02	8.25E-02	2.59E-01
LB4110R - D2	Alpha	11/24/2006	12/29/2011	3.00E-01	F	-6.14E-02	8.20E-02	2.25E-01
LB4110R - D3	Alpha	11/24/2006	12/29/2011	3.33E-02	P	-5.72E-02	7.43E-02	2.06E-01
LB4110R - D4	Alpha	11/24/2006	12/29/2011	5.00E-02	P	-5.56E-02	8.79E-02	2.31E-01
LB5100 - 1	Alpha	7/10/2006	10/26/2007	5.00E-02	P	-1.56E-02	9.58E-02	2.07E-01

0046

Eberline Analytical
Oak Ridge Laboratory

GPC Detector Report
(ALL Backgrounds)

1/2/2012

Detector	Alpha/Beta	Calibration Date	Count Date	Bkg CPM	PFW	LCL	Mean	UCL
LB4110A - A1	Beta	11/18/2007	12/29/2011	1.33E-01	P	-4.10E+01	2.68E+00	4.64E+01
LB4110A - A2	Beta	11/18/2007	12/29/2011	8.33E-02	P	-3.49E+01	1.87E+00	3.86E+01
LB4110A - A3	Beta	11/18/2007	12/29/2011	6.67E-02	P	-3.57E+01	1.67E+00	3.91E+01
LB4110A - A4	Beta	11/18/2007	12/29/2011	1.17E-01	P	-3.71E+01	2.19E+00	4.15E+01
LB4110A - B1	Beta	11/18/2007	12/29/2011	1.37E+00	P	-7.41E+00	2.98E+00	1.34E+01
LB4110A - B2	Beta	11/18/2007	12/29/2011	1.20E+00	P	2.02E-01	1.40E+00	2.60E+00
LB4110A - B3	Beta	11/18/2007	12/29/2011	1.60E+00	P	2.71E-01	1.41E+00	2.56E+00
LB4110A - B4	Beta	11/18/2007	12/29/2011	1.72E+00	P	1.22E-01	1.38E+00	2.65E+00
LB4110A - C1	Beta	11/18/2007	12/29/2011	1.60E+00	P	-6.29E+00	2.44E+00	1.12E+01
LB4110A - C2	Beta	11/18/2007	12/29/2011	1.07E+00	P	3.38E-01	1.32E+00	2.29E+00
LB4110A - C3	Beta	11/18/2007	12/29/2011	1.48E+00	P	4.80E-01	1.53E+00	2.58E+00
LB4110A - C4	Beta	11/18/2007	12/29/2011	5.25E+00	P	-1.81E+00	2.33E+00	6.46E+00
LB4110A - D1	Beta	11/18/2007	12/29/2011	2.23E+00	P	-2.99E+00	2.67E+00	8.34E+00
LB4110A - D2	Beta	11/18/2007	12/29/2011	1.40E+00	P	-8.90E-01	1.62E+00	4.13E+00
LB4110A - D3	Beta	11/18/2007	12/29/2011	4.85E+00	P	7.44E-01	4.36E+00	7.98E+00
LB4110A - D4	Beta	11/18/2007	12/29/2011	1.07E+00	P	-6.07E-01	1.43E+00	3.46E+00
LB4110R - A1	Beta	11/24/2006	12/29/2011	3.00E+00	P	-6.97E+01	4.46E+00	7.86E+01
LB4110R - A2	Beta	11/24/2006	12/29/2011	1.10E+00	P	-5.55E+01	2.36E+00	6.02E+01
LB4110R - A3	Beta	11/24/2006	12/29/2011	1.22E+00	P	-5.13E+01	3.24E+00	5.78E+01
LB4110R - A4	Beta	11/24/2006	12/29/2011	1.20E+00	P	-5.14E+01	2.25E+00	5.59E+01
LB4110R - B1	Beta	11/24/2006	12/29/2011	9.83E-01	P	-5.40E+01	2.26E+00	5.85E+01
LB4110R - B2	Beta	11/24/2006	12/29/2011	1.20E+00	P	-5.40E+01	2.31E+00	5.86E+01
LB4110R - B3	Beta	11/24/2006	12/29/2011	1.67E+00	P	-5.36E+01	3.08E+00	5.98E+01
LB4110R - B4	Beta	11/24/2006	12/29/2011	1.05E+00	P	-5.41E+01	2.14E+00	5.84E+01
LB4110R - C1	Beta	11/24/2006	12/29/2011	1.30E+00	P	-5.37E+01	3.55E+00	6.08E+01
LB4110R - C2	Beta	11/24/2006	12/29/2011	2.30E+00	P	-5.39E+01	3.03E+00	6.00E+01
LB4110R - C3	Beta	11/24/2006	12/29/2011	1.28E+00	P	-5.44E+01	2.87E+00	6.02E+01
LB4110R - C4	Beta	11/24/2006	12/29/2011	1.78E+00	P	-6.14E+01	3.34E+00	6.81E+01
LB4110R - D1	Beta	11/24/2006	12/29/2011	9.88E+00	P	-5.02E+01	6.90E+00	6.40E+01
LB4110R - D2	Beta	11/24/2006	12/29/2011	1.90E+00	P	-5.49E+01	2.17E+00	5.93E+01
LB4110R - D3	Beta	11/24/2006	12/29/2011	3.23E+00	P	-5.82E+01	6.30E+00	7.08E+01
LB4110R - D4	Beta	11/24/2006	12/29/2011	1.18E+00	P	-5.46E+01	2.52E+00	5.96E+01
LB5100 - 1	Beta	7/10/2006	10/26/2007	4.52E+00	F	-3.19E-01	1.58E+00	3.48E+00

0047

GPC Detector Report
(ALL Efficiencies)

12/29/11

Detector	Alpha/Beta	Calibration Date	Count Date	Eff	PFW	LCL	Mean	UCL
LB4110A - A1	Alpha	11/18/2007	12/29/2011	0.0000	F	0.0965	0.2354	0.3743
LB4110A - A2	Alpha	11/18/2007	12/29/2011	0.0000	F	0.0836	0.2069	0.3302
LB4110A - A3	Alpha	11/18/2007	12/29/2011	0.0000	F	0.0833	0.2045	0.3258
LB4110A - A4	Alpha	11/18/2007	12/29/2011	0.0000	F	0.0885	0.2151	0.3416
LB4110A - B1	Alpha	11/18/2007	12/29/2011	0.2153	P	0.1942	0.2264	0.2587
LB4110A - B2	Alpha	11/18/2007	12/29/2011	0.2111	P	0.1951	0.2244	0.2538
LB4110A - B3	Alpha	11/18/2007	12/29/2011	0.2229	P	0.2102	0.2405	0.2708
LB4110A - B4	Alpha	11/18/2007	12/29/2011	0.2343	P	0.2073	0.2375	0.2678
LB4110A - C1	Alpha	11/18/2007	12/29/2011	0.2169	P	0.1945	0.2210	0.2476
LB4110A - C2	Alpha	11/18/2007	12/29/2011	0.2274	P	0.1933	0.2255	0.2576
LB4110A - C3	Alpha	11/18/2007	12/29/2011	0.2517	P	0.2193	0.2490	0.2787
LB4110A - C4	Alpha	11/18/2007	12/29/2011	0.2238	P	0.1942	0.2267	0.2591
LB4110A - D1	Alpha	11/18/2007	12/29/2011	0.2275	P	0.2048	0.2360	0.2672
LB4110A - D2	Alpha	11/18/2007	12/29/2011	0.2601	P	0.2278	0.2606	0.2933
LB4110A - D3	Alpha	11/18/2007	12/29/2011	0.2628	P	0.2306	0.2657	0.3009
LB4110A - D4	Alpha	11/18/2007	12/29/2011	0.1949	P	0.1696	0.2038	0.2380
LB4110R - A1	Alpha	11/24/2006	12/29/2011	0.2381	P	0.2044	0.2396	0.2747
LB4110R - A2	Alpha	11/24/2006	12/29/2011	0.2165	P	0.1950	0.2227	0.2504
LB4110R - A3	Alpha	11/24/2006	12/29/2011	0.2254	P	0.2003	0.2265	0.2527
LB4110R - A4	Alpha	11/24/2006	12/29/2011	0.2458	P	0.2185	0.2465	0.2745
LB4110R - B1	Alpha	11/24/2006	12/29/2011	0.2219	P	0.1882	0.2275	0.2669
LB4110R - B2	Alpha	11/24/2006	12/29/2011	0.2174	P	0.1819	0.2195	0.2571
LB4110R - B3	Alpha	11/24/2006	12/29/2011	0.2418	P	0.2074	0.2448	0.2822
LB4110R - B4	Alpha	11/24/2006	12/29/2011	0.2269	P	0.1979	0.2347	0.2714
LB4110R - C1	Alpha	11/24/2006	12/29/2011	0.2132	P	0.1873	0.2160	0.2448
LB4110R - C2	Alpha	11/24/2006	12/29/2011	0.2268	P	0.1989	0.2260	0.2531
LB4110R - C3	Alpha	11/24/2006	12/29/2011	0.2347	P	0.2084	0.2412	0.2739
LB4110R - C4	Alpha	11/24/2006	12/29/2011	0.2106	P	0.1940	0.2267	0.2595
LB4110R - D1	Alpha	11/24/2006	12/29/2011	0.2234	P	0.1982	0.2285	0.2587
LB4110R - D2	Alpha	11/24/2006	12/29/2011	0.2496	P	0.2296	0.2592	0.2888
LB4110R - D3	Alpha	11/24/2006	12/29/2011	0.2516	P	0.2257	0.2536	0.2814
LB4110R - D4	Alpha	11/24/2006	12/29/2011	0.1920	P	0.1745	0.2067	0.2388
LB5100 - 1	Alpha	7/10/2006	10/26/2007	0.3368	P	0.3332	0.3455	0.3578

0048

GPC Detector Report
(ALL Efficiencies)

12/29/11

Detector	Alpha/Beta	Calibration Date	Count Date	Eff	PFW	LCL	Mean	UCL
LB4110A - A1	Beta	11/18/2007	12/29/2011	0.3426	F	0.4415	0.5750	0.7086
LB4110A - A2	Beta	11/18/2007	12/29/2011	0.3011	F	0.3823	0.5085	0.6347
LB4110A - A3	Beta	11/18/2007	12/29/2011	0.3020	F	0.3906	0.5137	0.6368
LB4110A - A4	Beta	11/18/2007	12/29/2011	0.3120	F	0.4090	0.5356	0.6622
LB4110A - B1	Beta	11/18/2007	12/29/2011	0.4982	P	0.4612	0.5323	0.6033
LB4110A - B2	Beta	11/18/2007	12/29/2011	0.4992	P	0.4606	0.5303	0.6000
LB4110A - B3	Beta	11/18/2007	12/29/2011	0.5159	P	0.4742	0.5482	0.6223
LB4110A - B4	Beta	11/18/2007	12/29/2011	0.5285	P	0.4848	0.5529	0.6210
LB4110A - C1	Beta	11/18/2007	12/29/2011	0.4901	P	0.4429	0.5022	0.5616
LB4110A - C2	Beta	11/18/2007	12/29/2011	0.4900	P	0.4189	0.5019	0.5849
LB4110A - C3	Beta	11/18/2007	12/29/2011	0.5936	P	0.5190	0.5871	0.6552
LB4110A - C4	Beta	11/18/2007	12/29/2011	0.5164	P	0.4523	0.5278	0.6034
LB4110A - D1	Beta	11/18/2007	12/29/2011	0.5430	P	0.4815	0.5605	0.6395
LB4110A - D2	Beta	11/18/2007	12/29/2011	0.5736	P	0.4959	0.5980	0.7001
LB4110A - D3	Beta	11/18/2007	12/29/2011	0.6152	P	0.5324	0.6187	0.7050
LB4110A - D4	Beta	11/18/2007	12/29/2011	0.4570	P	0.3972	0.4833	0.5694
LB4110R - A1	Beta	11/24/2006	12/29/2011	0.5647	P	0.4815	0.5696	0.6577
LB4110R - A2	Beta	11/24/2006	12/29/2011	0.5134	P	0.4170	0.5088	0.6007
LB4110R - A3	Beta	11/24/2006	12/29/2011	0.5233	P	0.4647	0.5446	0.6244
LB4110R - A4	Beta	11/24/2006	12/29/2011	0.6022	P	0.5098	0.5915	0.6731
LB4110R - B1	Beta	11/24/2006	12/29/2011	0.5391	P	0.4556	0.5465	0.6374
LB4110R - B2	Beta	11/24/2006	12/29/2011	0.5213	P	0.4324	0.5238	0.6151
LB4110R - B3	Beta	11/24/2006	12/29/2011	0.5753	P	0.5010	0.5912	0.6813
LB4110R - B4	Beta	11/24/2006	12/29/2011	0.5419	P	0.4697	0.5553	0.6408
LB4110R - C1	Beta	11/24/2006	12/29/2011	0.5123	P	0.4262	0.5049	0.5836
LB4110R - C2	Beta	11/24/2006	12/29/2011	0.5225	P	0.4521	0.5314	0.6108
LB4110R - C3	Beta	11/24/2006	12/29/2011	0.5655	P	0.4807	0.5732	0.6657
LB4110R - C4	Beta	11/24/2006	12/29/2011	0.4990	P	0.4454	0.5346	0.6239
LB4110R - D1	Beta	11/24/2006	12/29/2011	0.5432	P	0.4638	0.5453	0.6268
LB4110R - D2	Beta	11/24/2006	12/29/2011	0.5990	P	0.5234	0.6109	0.6985
LB4110R - D3	Beta	11/24/2006	12/29/2011	0.5997	P	0.5085	0.5909	0.6734
LB4110R - D4	Beta	11/24/2006	12/29/2011	0.4631	P	0.4037	0.4918	0.5799
LB5100 - 1	Beta	7/10/2006	10/26/2007	0.4428	F	0.4555	0.4731	0.4906

December 1, 2011

Ms. Kristie Warr
Weston Solutions, Inc.
5599 San Felipe, Ste. 700
Houston, TX 77056

Re:	ALS Workorder:	11-11-162
	Project Name:	Dysart #2 Uranium Mine
	Project Number:	TO 0035110902-111110-0001

Dear Ms. Warr:

Fifteen soil and one water samples were received from Weston Solutions, Inc. on November 11, 2011. The samples were scheduled for the following analysis:

Metals pages 1-617

The results for this analysis are contained in the enclosed report.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Lance Steere
Senior Project Manager

LRS/eg
Enclosure (s): Report

ALS is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

Accreditation Body	License or Certification Number
Washington	C1280
Utah	CO00078
Arizona	AZ0742
Alaska	UST-086
Alaska	CO00078
Florida	E87914
Missouri	175
North Dakota	R-057
New Jersey	CO003
Nevada	CO000782008A
California	06251CA
Kansas	E-10381
Maryland	285
Pennsylvania	68-03116
Texas	T104704241-09-1
Colorado	CO00078
Connecticut	PH-0232
Idaho	CO00078
Tennessee	2976
Kentucky	90137
L-A-B (DoD ELAP/ISO 17025)	L2257

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1111162
Client Name: Weston Solutions, Inc.
Client Project Name: Dysart #2 Uranium Mine
Client Project Number: TO0035110901-111110-0001
Client PO Number:

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
DY2-11-31-111109	1111162-1		SOIL	09-Nov-11	8:35
DY2-17-31-111109	1111162-2		SOIL	09-Nov-11	8:37
DY2-17-32-111109	1111162-3		SOIL	09-Nov-11	8:37
DY2-32-31-111109	1111162-4		SOIL	09-Nov-11	8:46
DY2-33-31-111109	1111162-5		SOIL	09-Nov-11	8:51
DY2-41-31-111109	1111162-6		SOIL	09-Nov-11	9:15
DY2-44-31-111109	1111162-7		SOIL	09-Nov-11	9:10
DY2-48-31-111109	1111162-8		SOIL	09-Nov-11	9:05
DY2-65-31-111109	1111162-9		SOIL	09-Nov-11	9:31
DY2-77-31-111109	1111162-10		SOIL	09-Nov-11	9:29
DY2-BKGD-E-31-111109	1111162-11		SOIL	09-Nov-11	15:25
DY2-BKGD-N-31-111109	1111162-12		SOIL	09-Nov-11	15:15
DY2-BKGD-S-31-111109	1111162-13		SOIL	09-Nov-11	15:45
DY2-BKGD-W-31-111109	1111162-14		SOIL	09-Nov-11	15:00
MD-01-31-111109	1111162-15		SOIL	09-Nov-11	15:19
ST1-01-111108	1111162-16		WATER	08-Nov-11	10:40

1111162

USEPA
DateShipped: 11/10/2011
CarrierName: FedEx
AirbillNo: 797722802537

CHAIN OF CUSTODY RECORD
Dysart #2 Uranium Mine
Contact Name: Kristie Warr
Contact Phone: 713-985-6636

No: TO0035110901-111110-0001
Cooler #: 1
Lab: ALS Laboratory Group
Lab Phone: 970-490-1511

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Container	Preservative	MS/MSD	Samp_Concentration	Sampler
1	DY2-11-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	08:35	Jar	4 C	N	143,634 cpm	START
2	DY2-17-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	08:37	Jar	4 C	N	198,698 cpm	START
3	DY2-17-32-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	08:37	Jar	4 C	N	198,698 cpm	START
4	DY2-32-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	08:46	Jar	4 C	N	190,346 cpm	START
5	DY2-33-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	08:51	Jar	4 C	N	149,740 cpm	START
6	DY2-41-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	09:15	Jar	4 C	N	145,036 cpm	START
7	DY2-44-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	09:10	Jar	4 C	N	139,861 cpm	START
8	DY2-48-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	09:05	Jar	4 C	N	123,889 cpm	START
9	DY2-65-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	09:31	Jar	4 C	N	104,090 cpm	START
10	DY2-77-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	09:29	Jar	4 C	N	70,936 cpm	START
11	DY2-BKGD-E-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	15:25	Jar	4 C	N	17,123 cpm	START

Special Instructions: Standard TAT, SW846 6010/6020
SW846 7470/7471

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16/samples	[signature]	11/9/11	[signature]	11/11/11	1015						

1111162

USEPA

DateShipped: 11/10/2011
CarrierName: FedEx
AirbillNo: 797722802537

CHAIN OF CUSTODY RECORD

Dysart #2 Uranium Mine
Contact Name: Kristie Warr
Contact Phone: 713-985-6636

No: TO0035110901-111110-0001

Cooler #: 1
Lab: ALS Laboratory Group
Lab Phone: 970-490-1511

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Container	Preservative	MS/MSD	Samp_Concentration	Sampler
12	DY2-BKGD-N-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	15:15	Jar	4 C	N	18,478 cpm	START
13	DY2-BKGD-S-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	15:45	Jar	4 C	N	17,866 cpm	START
14	DY2-BKGD-W-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	15:00	Jar	4 C	N	19,017 cpm	START
15	MD-01-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	15:19	Jar	4 C	N	104,285 cpm	START
16	ST1-01-111108	Metals, Mercury, Molybdenum, Tin, Total Uranium	Surface Water	11/8/2011	10:40	500mL Polyethylene	HNO3 pH<2	N	<25,000 cpm	START

Special Instructions: Standard TAT, SW846 6010/6020
SW846 7470/7471

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16/Samples	[illegible]	11/9/11	[illegible]	11/11/11	1015						

CONDITION OF SAMPLE UPON RECEIPT FORM

Client: Weston Workorder No: 1111162

Project Manager: LRS Initials: LAS Date: 11/11/11

1.	Does this project require any **special handling** in addition to standard Paragon procedures?		YES	NO
*2.	Are custody **seals** on **shipping containers** intact?	NONE	YES	NO
3.	Are Custody seals on **sample containers** intact?	NONE	YES	NO
4.	Is there a **COC (Chain-of-Custody) present** or other representative documents?		YES	NO
5.	Are the **COC and bottle labels complete and legible**?		YES	NO
6.	Is the **COC in agreement** with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	NO
7.	Were **airbills / shipping documents** present and/or removable?	DROP OFF	YES	NO
8.	Are all **aqueous samples requiring preservation preserved correctly? (excluding volatiles)**	N/A	YES	NO
9.	Are all aqueous **non-preserved samples pH 4-9**?	N/A	YES	NO
10.	Is there **sufficient sample** for the requested analyses?		YES	NO
11.	Were all samples placed in the **proper containers** for the requested analyses?		YES	NO
12.	Are all samples within **holding times** for the requested analyses?		YES	NO
13.	Were all sample containers received **intact**? (not broken or leaking, etc.)		YES	NO
14.	Are all samples requiring **no** headspace (**VOC, GRO, RSK/MEE, Rx CN/S, radon**) headspace free? **Size of bubble**: ____ < green pea ____> green pea	N/A	YES	NO
15.	Do perchlorate LCMS-MS samples **have** headspace? (at least 1/3 of container required)	N/A	YES	NO
16.	Were samples checked for and free from the presence of **residual chlorine?** (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	N/A	YES	NO
17.	Were the samples **shipped on ice**?		YES	NO
18.	Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** #2 #4	RAD ONLY	YES	NO

Cooler #:	1							
Temperature (°C):	2.0							
No. of custody seals on cooler:	Ø*							
DOT Survey/ Acceptance Information — External µR/hr reading:	15							
Background µR/hr reading:	12							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

(*) Cooler arrived with no tape or custody seals. Inner bag containing samples was sealed with tape; no tampering appeared probable.

If applicable, was the client contacted? **YES / NO / NA** Contact: K Warr Date/Time: _____

Project Manager Signature / Date: 11/11/11

*IR Gun #2: Oakton, SN 29922500201-0066 *IR Gun #4: Oakton, SN 2372220101-0002

Form 201r22.xls (6/1/09)

eas 11/11/11 ~~111160~~

1111162

From: (903) 348-3917 Origin ID: GUPA
Patrick Buster
START6- Weston Solutions, Inc.
825 E. Santa Fe Ave.

Grants, NM 87020

FedEx Express

J1120110805022 5

Ship Date: 10NOV11
ActWgt: 40.0 LB
CAD: 2557564/INET3210

Delivery Address Bar Code

Ref # 20406.016.035.0672.01
Invoice #
PO #
Dept #

SHIP TO: (970) 490-1511 BILL SENDER

Lance Steere
ALS Laboratory Group
225 Commerce Drive

Fort Collins, CO 80524

FRI - 11 NOV A2
PRIORITY OVERNIGHT

TRK# 0201 7977 2280 2537

XH FTCA

80524
CO-US
DEN

50FG1/8C50/F5F4

After printing this label
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic valueof the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

15

Ø

tape intact. inside

2.0

ALS Environmental

Metals

Case Narrative

Weston Solutions, Inc.

Dysart #2 Uranium Mine -- TO0035110902-111110-0001

Work Order Number: 1111162

1. This report consists of 1 water sample and 15 soil samples.

2. The samples were received cool and intact by ALS on 11/11/11.

3. The water sample had a pH less than 2 upon receipt.

4. The samples were prepared and analyzed based on SW-846, 3rd Edition procedures.

   The initial sample aliquots consisted of a fine grained, sandy matrix. Rocks, chunks, and vegetable material were not used. The samples were not air dried, ground, or sieved.

   For analysis by Trace ICP and ICP-MS, the water sample was digested following method 3005A and SOP 806 Rev. 15. The soil samples were digested following method 3050B and SOP 806 Rev. 15.

   For analysis by Cold Vapor AA (CVAA), the water sample was digested following method 7470A and SOP 812 Rev. 15. The soil samples were digested following method 7471A and SOP 812 Rev. 15.

5. Analysis by Trace ICP followed method 6010B and SOP 834 Rev. 8.

   Analysis by ICP-MS followed method 6020A and SOP 827 Rev. 7.

   Water analysis by CVAA followed method 7470A and SOP 812 Rev. 15. Soil analysis by CVAA followed method 7471A and SOP 812 Rev. 15.

6. All standards and solutions are NIST traceable and were used within their recommended shelf life.

7. The samples were prepared and analyzed within the established hold times.

All in house quality control procedures were followed, as described below.

8. General quality control procedures.

   - A preparation (method) blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
   - The preparation (method) blank associated with each digestion batch was below the practical quantitation limit for the requested analytes.
   - All laboratory control sample criteria were met.
   - All initial and continuing calibration blanks were below the practical quantitation limit for the requested analytes with the exception of CCB8 and CCB10 for uranium on 11/18/11. The samples bracketed by these CCBs contained more than ten times the concentrations of uranium that were detected in the CCBs.
   - All initial and continuing calibration verifications were within the acceptance criteria for the requested analytes with the exception of CCV8 for uranium on 11/18/11. None of the samples associated with this order number were bracketed by this CCV.
   - The high standard readbacks associated with Method 6010B and 6020A analyses were within acceptance criteria.
   - The interference check samples associated with Method 6010B were within acceptance criteria.
   - The interference check samples associated with Method 6020A were analyzed.

9. Matrix specific quality control procedures.

   Sample 1111162-1 was designated as the quality control sample for the soil analyses. Per method requirements, matrix QC was performed for water analyses. Since a sample from this order number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

   Similarity of matrix and therefore relevance of the QC results should not be automatically inferred for any sample other than the native sample selected for QC.

   - A matrix spike and matrix spike duplicate were digested and analyzed with each soil batch. All acceptance criteria for accuracy were met. with the following exceptions:

Analyte	Sample ID
Antimony	1111162-1MS & MSD
Manganese	1111162-1MS

     The native sample results are flagged for matrix spike failure and an analytical post spike was performed. The results of the spike were acceptable indicating that the matrix was not significantly affecting quantitation of these analytes.

- Matrix spike recoveries could not be evaluated for the following analytes:

Analyte	Sample ID
Aluminum	1111162-1
Calcium	1111162-1
Iron	1111162-1
Uranium	1111162-1

  The concentrations of these analytes in the native sample were greater than four times the concentration of matrix spike added during the digestion. When sample concentration is that much greater than the spike added, spike recoveries may not be accurate. The laboratory control samples indicate that the digestion and analyses were in control.

- A sample duplicate and matrix spike duplicate were digested and analyzed with the each soil batch. All acceptance criteria for precision were met.
- A serial dilution was analyzed with each ICP batch. All acceptance criteria were met with the following exception:

Analyte	Sample ID
Potassium	1111162-1L

  The native sample result is flagged for serial dilution failure.

10. It is a standard practice that samples for ICP-MS are analyzed at a dilution.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Emily Knodel
Inorganics Primary Data Reviewer

11-30-11
Date

Inorganics Final Data Reviewer

11-30-11
Date

Inorganic Data Reporting Qualifiers

The following qualifiers are used by the laboratory when reporting results of inorganic analyses.

- USE ONLY for PRL REPORTING Result qualifier -- If the analyte was analyzed for but not detected a "U" is entered.

- QC qualifier -- Specified entries and their meanings are as follows:

  E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

  M - Duplicate injection precision was not met.

  N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

  Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

  * - Duplicate analysis (relative percent difference) not within control limits.

Chain of Custody

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1111162
Client Name: Weston Solutions, Inc.
Client Project Name: Dysart #2 Uranium Mine
Client Project Number: TO0035110902-111110-0001
Client PO Number: 0077655

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
DY2-11-31-111109	1111162-1		SOIL	09-Nov-11	8:35
DY2-17-31-111109	1111162-2		SOIL	09-Nov-11	8:37
DY2-17-32-111109	1111162-3		SOIL	09-Nov-11	8:37
DY2-32-31-111109	1111162-4		SOIL	09-Nov-11	8:46
DY2-33-31-111109	1111162-5		SOIL	09-Nov-11	8:51
DY2-41-31-111109	1111162-6		SOIL	09-Nov-11	9:15
DY2-44-31-111109	1111162-7		SOIL	09-Nov-11	9:10
DY2-48-31-111109	1111162-8		SOIL	09-Nov-11	9:05
DY2-65-31-111109	1111162-9		SOIL	09-Nov-11	9:31
DY2-77-31-111109	1111162-10		SOIL	09-Nov-11	9:29
DY2-BKGD-E-31-111109	1111162-11		SOIL	09-Nov-11	15:25
DY2-BKGD-N-31-111109	1111162-12		SOIL	09-Nov-11	15:15
DY2-BKGD-S-31-111109	1111162-13		SOIL	09-Nov-11	15:45
DY2-BKGD-W-31-111109	1111162-14		SOIL	09-Nov-11	15:00
MD-01-31-111109	1111162-15		SOIL	09-Nov-11	15:19
ST1-01-111108	1111162-16		WATER	08-Nov-11	10:40

1111162

USEPA
DateShipped: 11/10/2011
CarrierName: FedEx
AirbillNo: 797722802537

CHAIN OF CUSTODY RECORD
Dysart #2 Uranium Mine
Contact Name: Kristie Warr
Contact Phone: 713-985-6636

No: TO0035110901-111110-0001
Cooler #: 1
Lab: ALS Laboratory Group
Lab Phone: 970-490-1511

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Container	Preservative	MS/MSD	Samp_Concentration	Sampler
1	DY2-11-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	08:35	Jar	4 C	N	143,634 cpm	START
2	DY2-17-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	08:37	Jar	4 C	N	198,698 cpm	START
3	DY2-17-32-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	08:37	Jar	4 C	N	198,698 cpm	START
4	DY2-32-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	08:46	Jar	4 C	N	190,346 cpm	START
5	DY2-33-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	08:51	Jar	4 C	N	149,740 cpm	START
6	DY2-41-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	09:15	Jar	4 C	N	145,036 cpm	START
7	DY2-44-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	09:10	Jar	4 C	N	139,861 cpm	START
8	DY2-48-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	09:05	Jar	4 C	N	123,889 cpm	START
9	DY2-65-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	09:31	Jar	4 C	N	104,090 cpm	START
10	DY2-77-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	09:29	Jar	4 C	N	70,936 cpm	START
11	DY2-BKGD-E-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	15:25	Jar	4 C	N	17,123 cpm	START

Special Instructions: Standard TAT, SW846 6010/6020
SW846 7470/7471

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16/samples	[illegible]	11/9/11	[illegible]	11/11/11	1015						

1111162

USEPA
DateShipped: 11/10/2011
CarrierName: FedEx
AirbillNo: 797722802537

CHAIN OF CUSTODY RECORD
Dysart #2 Uranium Mine
Contact Name: Kristie Warr
Contact Phone: 713-985-6636

No: TO0035110901-111110-0001
Cooler #: 1
Lab: ALS Laboratory Group
Lab Phone: 970-490-1511

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Container	Preservative	MS/MSD	Samp_Concentration	Sampler
12	DY2-BKGD-N-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	15:15	Jar	4 C	N	18,478 cpm	START
13	DY2-BKGD-S-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	15:45	Jar	4 C	N	17,866 cpm	START
14	DY2-BKGD-W-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	15:00	Jar	4 C	N	19,017 cpm	START
15	MD-01-31-111109	Metals, Mercury, Molybdenum, Tin, Total Uranium	Soil	11/9/2011	15:19	Jar	4 C	N	104,285 cpm	START
16	ST1-01-111108	Metals, Mercury, Molybdenum, Tin, Total Uranium	Surface Water	11/8/2011	10:40	500mL Polyethylene	HNO3 pH<2	N	<25,000 cpm	START

Special Instructions: Standard TAT, SW846 6010/6020
SW846 7470/7471

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16 Samples	[signature]	11/9/11	[signature]	11/11/11	1015						

ALS Laboratory Group - Fort Collins

CONDITION OF SAMPLE UPON RECEIPT FORM

Client: Weston Workorder No: 1111162

Project Manager: LRS Initials: LAS Date: 11/11/11

1.	Does this project require any **special handling** in addition to standard Paragon procedures?		YES	(NO)
*(2)	Are custody **seals** on **shipping containers** intact?	(NONE)	YES	NO
3.	Are Custody seals on **sample containers** intact?	(NONE)	YES	NO
4.	Is there a **COC (Chain-of-Custody) present** or other representative documents?		(YES)	NO
5.	Are the **COC and bottle labels complete and legible**?		(YES)	NO
6.	Is the **COC in agreement** with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7.	Were **airbills / shipping documents** present and/or removable?	DROP OFF	(YES)	NO
8.	Are all **aqueous samples requiring preservation preserved correctly? (excluding volatiles)**	N/A	(YES)	NO
9.	Are all aqueous **non-preserved samples pH 4-9**?	(N/A)	YES	NO
10.	Is there **sufficient sample** for the requested analyses?		(YES)	NO
11.	Were all samples placed in the **proper containers** for the requested analyses?		(YES)	NO
12.	Are all samples within **holding times** for the requested analyses?		(YES)	NO
13.	Were all sample containers received **intact**? (not broken or leaking, etc.)		(YES)	NO
14.	Are all samples requiring **no** headspace (**VOC, GRO, RSK/MEE, Rx CN/S, radon**) headspace free? **Size of bubble**: ____ < green pea ____ > green pea	(N/A)	YES	NO
15.	Do perchlorate LCMS-MS samples **have** headspace? (at least 1/3 of container required)	(N/A)	YES	NO
16.	Were samples checked for and free from the presence of **residual chlorine?** (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	(N/A)	YES	NO
17.	Were the samples **shipped on ice**?		(YES)	NO
18.	Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** (#2) #4	RAD ONLY	(YES)	NO

Cooler #:	1							
Temperature (°C):	2.0							
No. of custody seals on cooler:	Ø*							
DOT Survey/ Acceptance Information — External µR/hr reading:	15							
Background µR/hr reading:	12							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? (YES) / NO / NA (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

(*) Cooler arrived with no tape or custody seals. Inner bag containing samples was sealed with tape; no tampering appeared probable.

If applicable, was the client contacted? (YES) / NO / NA Contact: K Warr Date/Time: ____

Project Manager Signature / Date: 11/11/11

*IR Gun #2: Oakton, SN 29922500201-0066 *IR Gun #4: Oakton, SN 2372220101-0002

Form 201r22.xls (6/1/09)

From: (903) 348-3917
Patrick Buster
START6- Weston Solutions, Inc
825 E Santa Fe Ave

Grants, NM 87020

Origin ID: GUPA

FedEx Express

Ship Date: 10NOV11
ActWgt: 40.0 LB
CAD: 2557564/INET3210

Delivery Address Bar Code

Ref # 20406.016.035.0672.01
Invoice #
PO #
Dept #

SHIP TO: (970) 490-1511
Lance Steere
ALS Laboratory Group
225 Commerce Drive

Fort Collins, CO 80524

BILL SENDER

FRI - 11 NOV A2
PRIORITY OVERNIGHT

TRK# 7977 2280 2537
0201

XH FTCA

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After printing this label
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer
2. Fold the printed page along the horizontal line
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide

15

tape intact inside

2.0

Sample Results

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
Lab ID: 1111162-1

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.008 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8600	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U	N
7440-38-2	ARSENIC	1	5.9	1.1		
7440-39-3	BARIUM	1	110	11		
7440-41-7	BERYLLIUM	1	0.76	0.54		
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	19000	110		
7440-47-3	CHROMIUM	1	7.4	1.1		
7440-48-4	COBALT	1	6.3	1.1		
7440-50-8	COPPER	1	11	1.1		
7439-89-6	IRON	1	19000	11		
7439-92-1	LEAD	1	12	0.32		
7439-95-4	MAGNESIUM	1	5000	110		
7439-96-5	MANGANESE	1	210	1.1		N
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	10	2.2		
7440-09-7	POTASSIUM	1	1800	110		E
7782-49-2	SELENIUM	1	0.89	0.54		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	150	110		
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	17	1.1		
7440-66-6	ZINC	1	41	2.2		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-17-31-111109
Lab ID: 1111162-2

Sample Matrix: SOIL
% Moisture: 9.3
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.029 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5200	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	4.2	1.1		
7440-39-3	BARIUM	1	70	11		
7440-41-7	BERYLLIUM	1	0.54	0.54	U	
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	13000	110		
7440-47-3	CHROMIUM	1	4.5	1.1		
7440-48-4	COBALT	1	3.6	1.1		
7440-50-8	COPPER	1	6.2	1.1		
7439-89-6	IRON	1	12000	11		
7439-92-1	LEAD	1	8.6	0.32		
7439-95-4	MAGNESIUM	1	4100	110		
7439-96-5	MANGANESE	1	180	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	5.9	2.1		
7440-09-7	POTASSIUM	1	1600	110		
7782-49-2	SELENIUM	1	3.1	0.54		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	21	1.1		
7440-66-6	ZINC	1	27	2.1		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-17-32-111109
Lab ID: 1111162-3

Sample Matrix: SOIL
% Moisture: 9.2
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.044 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5400	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	4	1.1		
7440-39-3	BARIUM	1	69	11		
7440-41-7	BERYLLIUM	1	0.54	0.53		
7440-43-9	CADMIUM	1	0.53	0.53	U	
7440-70-2	CALCIUM	1	13000	110		
7440-47-3	CHROMIUM	1	4.6	1.1		
7440-48-4	COBALT	1	3.8	1.1		
7440-50-8	COPPER	1	6.4	1.1		
7439-89-6	IRON	1	12000	11		
7439-92-1	LEAD	1	8.8	0.32		
7439-95-4	MAGNESIUM	1	4300	110		
7439-96-5	MANGANESE	1	170	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	6	2.1		
7440-09-7	POTASSIUM	1	1700	110		
7782-49-2	SELENIUM	1	2.1	0.53		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.3	5.3	U	
7440-62-2	VANADIUM	1	21	1.1		
7440-66-6	ZINC	1	28	2.1		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-32-31-111109
Lab ID: 1111162-4

Sample Matrix: SOIL
% Moisture: 5.8
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.029 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	4100	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	2.3	1		
7440-39-3	BARIUM	1	18	10		
7440-41-7	BERYLLIUM	1	0.52	0.52	U	
7440-43-9	CADMIUM	1	0.52	0.52	U	
7440-70-2	CALCIUM	1	5900	100		
7440-47-3	CHROMIUM	1	1.7	1		
7440-48-4	COBALT	1	1.6	1		
7440-50-8	COPPER	1	3.2	1		
7439-89-6	IRON	1	8300	10		
7439-92-1	LEAD	1	11	0.31		
7439-95-4	MAGNESIUM	1	1600	100		
7439-96-5	MANGANESE	1	140	1		
7439-98-7	MOLYBDENUM	1	1.9	1		
7440-02-0	NICKEL	1	2.1	2.1	U	
7440-09-7	POTASSIUM	1	700	100		
7782-49-2	SELENIUM	1	10	0.52		
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5.2	5.2	U	
7440-62-2	VANADIUM	1	45	1		
7440-66-6	ZINC	1	16	2.1		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-33-31-111109
Lab ID: 1111162-5

Sample Matrix: SOIL
% Moisture: 4.1
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.026 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	3200	20		
7440-36-0	ANTIMONY	1	2	2	U	
7440-38-2	ARSENIC	1	2.5	1		
7440-39-3	BARIUM	1	16	10		
7440-41-7	BERYLLIUM	1	0.51	0.51	U	
7440-43-9	CADMIUM	1	0.51	0.51	U	
7440-70-2	CALCIUM	1	8100	100		
7440-47-3	CHROMIUM	1	1.7	1		
7440-48-4	COBALT	1	1.5	1		
7440-50-8	COPPER	1	2.6	1		
7439-89-6	IRON	1	7300	10		
7439-92-1	LEAD	1	9.2	0.3		
7439-95-4	MAGNESIUM	1	1400	100		
7439-96-5	MANGANESE	1	150	1		
7439-98-7	MOLYBDENUM	1	1	1	U	
7440-02-0	NICKEL	1	2	2	U	
7440-09-7	POTASSIUM	1	690	100		
7782-49-2	SELENIUM	1	20	0.51		
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5.1	5.1	U	
7440-62-2	VANADIUM	1	41	1		
7440-66-6	ZINC	1	14	2		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-41-31-111109
Lab ID: 1111162-6

Sample Matrix: SOIL
% Moisture: 4.0
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.014 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	4700	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	5.5	1		
7440-39-3	BARIUM	1	24	10		
7440-41-7	BERYLLIUM	1	0.51	0.51	U	
7440-43-9	CADMIUM	1	0.51	0.51	U	
7440-70-2	CALCIUM	1	10000	100		
7440-47-3	CHROMIUM	1	3.6	1		
7440-48-4	COBALT	1	2.4	1		
7440-50-8	COPPER	1	3.4	1		
7439-89-6	IRON	1	9900	10		
7439-92-1	LEAD	1	14	0.31		
7439-95-4	MAGNESIUM	1	1800	100		
7439-96-5	MANGANESE	1	190	1		
7439-98-7	MOLYBDENUM	1	7.8	1		
7440-02-0	NICKEL	1	3.5	2.1		
7440-09-7	POTASSIUM	1	830	100		
7782-49-2	SELENIUM	1	21	0.51		
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5.1	5.1	U	
7440-62-2	VANADIUM	1	53	1		
7440-66-6	ZINC	1	20	2.1		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-44-31-111109
Lab ID: 1111162-7

Sample Matrix: SOIL
% Moisture: 3.3
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.03 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	3800	20		
7440-36-0	ANTIMONY	1	2	2	U	
7440-38-2	ARSENIC	1	2.9	1		
7440-39-3	BARIUM	1	15	10		
7440-41-7	BERYLLIUM	1	0.5	0.5	U	
7440-43-9	CADMIUM	1	0.5	0.5	U	
7440-70-2	CALCIUM	1	4500	100		
7440-47-3	CHROMIUM	1	1.7	1		
7440-48-4	COBALT	1	1.3	1		
7440-50-8	COPPER	1	2.1	1		
7439-89-6	IRON	1	8700	10		
7439-92-1	LEAD	1	11	0.3		
7439-95-4	MAGNESIUM	1	1600	100		
7439-96-5	MANGANESE	1	110	1		
7439-98-7	MOLYBDENUM	1	1	1	U	
7440-02-0	NICKEL	1	2	2	U	
7440-09-7	POTASSIUM	1	690	100		
7782-49-2	SELENIUM	1	13	0.5		
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5	5	U	
7440-62-2	VANADIUM	1	67	1		
7440-66-6	ZINC	1	16	2		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-48-31-111109
Lab ID: 1111162-8

Sample Matrix: SOIL
% Moisture: 5.1
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.01 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	3800	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	4	1		
7440-39-3	BARIUM	1	62	10		
7440-41-7	BERYLLIUM	1	0.52	0.52	U	
7440-43-9	CADMIUM	1	0.52	0.52	U	
7440-70-2	CALCIUM	1	11000	100		
7440-47-3	CHROMIUM	1	3.6	1		
7440-48-4	COBALT	1	4.1	1		
7440-50-8	COPPER	1	5.5	1		
7439-89-6	IRON	1	12000	10		
7439-92-1	LEAD	1	6.9	0.31		
7439-95-4	MAGNESIUM	1	3700	100		
7439-96-5	MANGANESE	1	150	1		
7439-98-7	MOLYBDENUM	1	1	1	U	
7440-02-0	NICKEL	1	5.6	2.1		
7440-09-7	POTASSIUM	1	770	100		
7782-49-2	SELENIUM	1	0.52	0.52	U	
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5.2	5.2	U	
7440-62-2	VANADIUM	1	11	1		
7440-66-6	ZINC	1	24	2.1		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-65-31-111109
Lab ID: 1111162-9

Sample Matrix: SOIL
% Moisture: 9.5
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.016 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	6100	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U	
7440-38-2	ARSENIC	1	4.3	1.1		
7440-39-3	BARIUM	1	85	11		
7440-41-7	BERYLLIUM	1	0.6	0.54		
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	13000	110		
7440-47-3	CHROMIUM	1	5.4	1.1		
7440-48-4	COBALT	1	4.5	1.1		
7440-50-8	COPPER	1	8.2	1.1		
7439-89-6	IRON	1	14000	11		
7439-92-1	LEAD	1	9.4	0.33		
7439-95-4	MAGNESIUM	1	4700	110		
7439-96-5	MANGANESE	1	170	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	7.2	2.2		
7440-09-7	POTASSIUM	1	2400	110		
7782-49-2	SELENIUM	1	0.68	0.54		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	15	1.1		
7440-66-6	ZINC	1	33	2.2		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-77-31-111109
Lab ID: 1111162-10

Sample Matrix: SOIL
% Moisture: 9.9
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.005 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	3900	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U	
7440-38-2	ARSENIC	1	2.4	1.1		
7440-39-3	BARIUM	1	42	11		
7440-41-7	BERYLLIUM	1	0.55	0.55	U	
7440-43-9	CADMIUM	1	0.55	0.55	U	
7440-70-2	CALCIUM	1	8500	110		
7440-47-3	CHROMIUM	1	3.2	1.1		
7440-48-4	COBALT	1	2.4	1.1		
7440-50-8	COPPER	1	4.1	1.1		
7439-89-6	IRON	1	9100	11		
7439-92-1	LEAD	1	6.4	0.33		
7439-95-4	MAGNESIUM	1	2700	110		
7439-96-5	MANGANESE	1	150	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	3.5	2.2		
7440-09-7	POTASSIUM	1	990	110		
7782-49-2	SELENIUM	1	2.1	0.55		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.5	5.5	U	
7440-62-2	VANADIUM	1	23	1.1		
7440-66-6	ZINC	1	20	2.2		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-BKGD-E-31-111109
Lab ID: 1111162-11

Sample Matrix: SOIL
% Moisture: 5.9
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.043 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	4200	20		
7440-36-0	ANTIMONY	1	2	2	U	
7440-38-2	ARSENIC	1	3.2	1		
7440-39-3	BARIUM	1	48	10		
7440-41-7	BERYLLIUM	1	0.51	0.51	U	
7440-43-9	CADMIUM	1	0.51	0.51	U	
7440-70-2	CALCIUM	1	15000	100		
7440-47-3	CHROMIUM	1	3.6	1		
7440-48-4	COBALT	1	3.4	1		
7440-50-8	COPPER	1	4.4	1		
7439-89-6	IRON	1	9600	10		
7439-92-1	LEAD	1	6.9	0.31		
7439-95-4	MAGNESIUM	1	3900	100		
7439-96-5	MANGANESE	1	170	1		
7439-98-7	MOLYBDENUM	1	1	1	U	
7440-02-0	NICKEL	1	4.9	2		
7440-09-7	POTASSIUM	1	1300	100		
7782-49-2	SELENIUM	1	0.51	0.51	U	
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5.1	5.1	U	
7440-62-2	VANADIUM	1	9.5	1		
7440-66-6	ZINC	1	21	2		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-BKGD-N-31-111109
Lab ID: 1111162-12

Sample Matrix: SOIL
% Moisture: 6.5
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.003 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	6500	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	3.8	1.1		
7440-39-3	BARIUM	1	66	11		
7440-41-7	BERYLLIUM	1	0.53	0.53	U	
7440-43-9	CADMIUM	1	0.53	0.53	U	
7440-70-2	CALCIUM	1	13000	110		
7440-47-3	CHROMIUM	1	5.4	1.1		
7440-48-4	COBALT	1	3.8	1.1		
7440-50-8	COPPER	1	6.6	1.1		
7439-89-6	IRON	1	12000	11		
7439-92-1	LEAD	1	8.8	0.32		
7439-95-4	MAGNESIUM	1	4400	110		
7439-96-5	MANGANESE	1	150	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	6.2	2.1		
7440-09-7	POTASSIUM	1	2100	110		
7782-49-2	SELENIUM	1	0.53	0.53	U	
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.3	5.3	U	
7440-62-2	VANADIUM	1	13	1.1		
7440-66-6	ZINC	1	26	2.1		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-BKGD-S-31-111109
Lab ID: 1111162-13

Sample Matrix: SOIL
% Moisture: 10.0
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.028 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	12000	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U	
7440-38-2	ARSENIC	1	5.9	1.1		
7440-39-3	BARIUM	1	100	11		
7440-41-7	BERYLLIUM	1	0.91	0.54		
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	12000	110		
7440-47-3	CHROMIUM	1	9.4	1.1		
7440-48-4	COBALT	1	6.6	1.1		
7440-50-8	COPPER	1	13	1.1		
7439-89-6	IRON	1	20000	11		
7439-92-1	LEAD	1	14	0.32		
7439-95-4	MAGNESIUM	1	4400	110		
7439-96-5	MANGANESE	1	220	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	11	2.2		
7440-09-7	POTASSIUM	1	3600	110		
7782-49-2	SELENIUM	1	0.54	0.54	U	
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	20	1.1		
7440-66-6	ZINC	1	46	2.2		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-BKGD-W-31-111109
Lab ID: 1111162-14

Sample Matrix: SOIL
% Moisture: 10.0
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.02 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	12000	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U	
7440-38-2	ARSENIC	1	6.5	1.1		
7440-39-3	BARIUM	1	120	11		
7440-41-7	BERYLLIUM	1	0.94	0.54		
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	23000	110		
7440-47-3	CHROMIUM	1	9.6	1.1		
7440-48-4	COBALT	1	7	1.1		
7440-50-8	COPPER	1	14	1.1		
7439-89-6	IRON	1	21000	11		
7439-92-1	LEAD	1	15	0.33		
7439-95-4	MAGNESIUM	1	5600	110		
7439-96-5	MANGANESE	1	270	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	11	2.2		
7440-09-7	POTASSIUM	1	3200	110		
7782-49-2	SELENIUM	1	0.54	0.54	U	
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	20	1.1		
7440-66-6	ZINC	1	49	2.2		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: MD-01-31-111109
Lab ID: 1111162-15

Sample Matrix: SOIL
% Moisture: 6.5
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 0.996 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5500	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	4.7	1.1		
7440-39-3	BARIUM	1	55	11		
7440-41-7	BERYLLIUM	1	0.55	0.54		
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	10000	110		
7440-47-3	CHROMIUM	1	7.5	1.1		
7440-48-4	COBALT	1	3.6	1.1		
7440-50-8	COPPER	1	6.5	1.1		
7439-89-6	IRON	1	12000	11		
7439-92-1	LEAD	1	9.6	0.32		
7439-95-4	MAGNESIUM	1	3000	110		
7439-96-5	MANGANESE	1	150	1.1		
7439-98-7	MOLYBDENUM	1	1.7	1.1		
7440-02-0	NICKEL	1	59	2.1		
7440-09-7	POTASSIUM	1	1500	110		
7782-49-2	SELENIUM	1	2.7	0.54		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	28	1.1		
7440-66-6	ZINC	1	28	2.1		

Data Package ID: *IT1111162-1*

Total Recoverable ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: ST1-01-111108
Lab ID: 1111162-16

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 08-Nov-11
Date Extracted: 16-Nov-11
Date Analyzed: 17-Nov-11
Prep Method: SW3005 Rev A

Prep Batch: IP111116-4
QCBatchID: IP111116-4-5
Run ID: IT111117-2A1
Cleanup: NONE
Basis: As Received
File Name: 111117A.

Sample Aliquot: 50G
Final Volume: 50G
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	2.6	0.2		
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	45	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	3.1	0.1		
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	7	1		
7439-96-5	MANGANESE	1	0.05	0.01		
7439-98-7	MOLYBDENUM	1	0.01	0.01	U	
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	10	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	1.9	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-31-5	TIN	1	0.05	0.05	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

Data Package ID: *IT1111162-1*

Total URANIUM

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: Weston Solutions, Inc.
Client Project ID: Dysart #2 Uranium Mine TO0035110902-111110-0001
Work Order Number: 1111162 **Final Volume:** 100 ml
Reporting Basis: Dry Weight **Matrix:** SOIL
Prep Method: SW3050B **Result Units:** UG/KG

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
DY2-11-31-111109	1111162-1	11/09/2011	11/17/2011	11/21/2011	8.1	10	14000	11		1.008 g
DY2-17-31-111109	1111162-2	11/09/2011	11/17/2011	11/18/2011	9.3	10	29000	11		1.029 g
DY2-17-32-111109	1111162-3	11/09/2011	11/17/2011	11/18/2011	9.2	10	27000	11		1.044 g
DY2-32-31-111109	1111162-4	11/09/2011	11/17/2011	11/18/2011	5.8	10	170000	10		1.029 g
DY2-33-31-111109	1111162-5	11/09/2011	11/17/2011	11/18/2011	4.1	10	120000	10		1.026 g
DY2-41-31-111109	1111162-6	11/09/2011	11/17/2011	11/18/2011	4.0	10	360000	10		1.014 g
DY2-44-31-111109	1111162-7	11/09/2011	11/17/2011	11/18/2011	3.3	10	130000	10		1.03 g
DY2-48-31-111109	1111162-8	11/09/2011	11/17/2011	11/18/2011	5.1	10	10000	10		1.01 g
DY2-65-31-111109	1111162-9	11/09/2011	11/17/2011	11/18/2011	9.5	10	8800	11		1.016 g
DY2-77-31-111109	1111162-10	11/09/2011	11/17/2011	11/18/2011	9.9	10	14000	11		1.005 g
DY2-BKGD-E-31-111109	1111162-11	11/09/2011	11/17/2011	11/18/2011	5.9	10	1100	10		1.043 g
DY2-BKGD-N-31-111109	1111162-12	11/09/2011	11/17/2011	11/18/2011	6.5	10	2400	11		1.003 g
DY2-BKGD-S-31-111109	1111162-13	11/09/2011	11/17/2011	11/18/2011	10.0	10	1800	11		1.028 g
DY2-BKGD-W-31-111109	1111162-14	11/09/2011	11/17/2011	11/18/2011	10.0	10	1800	11		1.02 g
MD-01-31-111109	1111162-15	11/09/2011	11/17/2011	11/18/2011	6.5	10	66000	11		0.996 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *IM1111162-1*

Total Recoverable URANIUM

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: Weston Solutions, Inc.
Client Project ID: Dysart #2 Uranium Mine TO0035110902-111110-0001
Work Order Number: 1111162 **Final Volume:** 50 g
Reporting Basis: As Received **Matrix:** WATER
Prep Method: SW3005A **Result Units:** UG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
ST1-01-111108	1111162-16	11/08/2011	11/16/2011	11/18/2011	N/A	10	3.7	0.1		50 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *IM1111162-1*

Total MERCURY

Method SW7471A

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: Weston Solutions, Inc.
Client Project ID: Dysart #2 Uranium Mine TO0035110902-111110-0001
Work Order Number: 1111162 **Final Volume:** 100 g ML
Reporting Basis: Dry Weight **Matrix:** SOIL
Prep Method: METHOD **Result Units:** MG/KG

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
DY2-11-31-111109	1111162-1	11/09/2011	11/18/2011	11/22/2011	8.1	1	0.036	0.036	U	0.609 g
DY2-17-31-111109	1111162-2	11/09/2011	11/18/2011	11/22/2011	9.3	1	0.037	0.037	U	0.604 g
DY2-17-32-111109	1111162-3	11/09/2011	11/18/2011	11/22/2011	9.2	1	0.037	0.037		0.6 g
DY2-32-31-111109	1111162-4	11/09/2011	11/18/2011	11/22/2011	5.8	1	0.071	0.035		0.613 g
DY2-33-31-111109	1111162-5	11/09/2011	11/18/2011	11/22/2011	4.1	1	0.075	0.034		0.609 g
DY2-41-31-111109	1111162-6	11/09/2011	11/18/2011	11/22/2011	4.0	1	0.099	0.034		0.614 g
DY2-44-31-111109	1111162-7	11/09/2011	11/18/2011	11/22/2011	3.3	1	0.059	0.034		0.604 g
DY2-48-31-111109	1111162-8	11/09/2011	11/18/2011	11/22/2011	5.1	1	0.035	0.035	U	0.602 g
DY2-65-31-111109	1111162-9	11/09/2011	11/18/2011	11/22/2011	9.5	1	0.037	0.037	U	0.603 g
DY2-77-31-111109	1111162-10	11/09/2011	11/18/2011	11/22/2011	9.9	1	0.036	0.036	U	0.613 g
DY2-BKGD-E-31-111109	1111162-11	11/09/2011	11/18/2011	11/22/2011	5.9	1	0.035	0.035	U	0.607 g
DY2-BKGD-N-31-111109	1111162-12	11/09/2011	11/18/2011	11/22/2011	6.5	1	0.035	0.035	U	0.614 g
DY2-BKGD-S-31-111109	1111162-13	11/09/2011	11/18/2011	11/22/2011	10.0	1	0.036	0.036	U	0.609 g
DY2-BKGD-W-31-111109	1111162-14	11/09/2011	11/18/2011	11/22/2011	10.0	1	0.036	0.036	U	0.614 g
MD-01-31-111109	1111162-15	11/09/2011	11/18/2011	11/22/2011	6.5	1	0.04	0.036		0.601 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *HG1111162-1*

Total MERCURY

Method SW7470A

Sample Results

Lab Name: **ALS Environmental -- FC**
Client Name: Weston Solutions, Inc.
Client Project ID: Dysart #2 Uranium Mine TO0035110902-111110-0001
Work Order Number: 1111162 **Final Volume:** 20 g
Reporting Basis: As Received **Matrix:** WATER
Prep Method: METHOD **Result Units:** MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
ST1-01-111108	1111162-16	11/08/2011	11/15/2011	11/16/2011	N/A	1	0.0002	0.0002	U	20 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *HG1111162-1*

Summary Report Forms

ICP Metals

Method SW6010B

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: IP111116-4MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 16-Nov-11
Date Analyzed: 17-Nov-11
Prep Method: SW3005 Rev A

Prep Batch: IP111116-4
QCBatchID: IP111116-4-5
Run ID: IT111117-2A1
Cleanup: NONE
Basis: N/A
File Name: 111117A.

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	1	1	U	
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	1	1	U	
7439-96-5	MANGANESE	1	0.01	0.01	U	
7439-98-7	MOLYBDENUM	1	0.01	0.01	U	
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1	1	U	
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	1	1	U	
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-31-5	TIN	1	0.05	0.05	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010B

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: IP111117-2MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: N/A
File Name: 111118A.

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	20	20	U	
7440-36-0	ANTIMONY	1	2	2	U	
7440-38-2	ARSENIC	1	1	1	U	
7440-39-3	BARIUM	1	10	10	U	
7440-41-7	BERYLLIUM	1	0.5	0.5	U	
7440-43-9	CADMIUM	1	0.5	0.5	U	
7440-70-2	CALCIUM	1	100	100	U	
7440-47-3	CHROMIUM	1	1	1	U	
7440-48-4	COBALT	1	1	1	U	
7440-50-8	COPPER	1	1	1	U	
7439-89-6	IRON	1	10	10	U	
7439-92-1	LEAD	1	0.3	0.3	U	
7439-95-4	MAGNESIUM	1	100	100	U	
7439-96-5	MANGANESE	1	1	1	U	
7439-98-7	MOLYBDENUM	1	1	1	U	
7440-02-0	NICKEL	1	2	2	U	
7440-09-7	POTASSIUM	1	100	100	U	
7782-49-2	SELENIUM	1	0.5	0.5	U	
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5	5	U	
7440-62-2	VANADIUM	1	1	1	U	
7440-66-6	ZINC	1	2	2	U	

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010B

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: IP111116-4LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/16/2011
Date Analyzed: 11/17/2011
Prep Method: SW3005A

Prep Batch: IP111116-4
QCBatchID: IP111116-4-5
Run ID: IT111117-2A1
Cleanup: NONE
Basis: N/A
File Name: 111117A.

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7429-90-5	ALUMINUM	2	2.03	0.2		102	80 - 120%
7440-36-0	ANTIMONY	0.5	0.448	0.02		90	80 - 120%
7440-38-2	ARSENIC	2	1.93	0.01		96	80 - 120%
7440-39-3	BARIUM	2	1.92	0.1		96	80 - 120%
7440-41-7	BERYLLIUM	0.05	0.0484	0.005		97	80 - 120%
7440-43-9	CADMIUM	0.05	0.0508	0.005		102	80 - 120%
7440-70-2	CALCIUM	40	37.9	1		95	80 - 120%
7440-47-3	CHROMIUM	0.2	0.193	0.01		96	80 - 120%
7440-48-4	COBALT	0.5	0.481	0.01		96	80 - 120%
7440-50-8	COPPER	0.25	0.24	0.01		96	80 - 120%
7439-89-6	IRON	1	0.971	0.1		97	80 - 120%
7439-92-1	LEAD	0.5	0.479	0.003		96	80 - 120%
7439-95-4	MAGNESIUM	40	37.5	1		94	80 - 120%
7439-96-5	MANGANESE	0.5	0.477	0.01		95	80 - 120%
7439-98-7	MOLYBDENUM	1	0.966	0.01		97	80 - 120%
7440-02-0	NICKEL	0.5	0.468	0.02		94	80 - 120%
7440-09-7	POTASSIUM	40	37.4	1		93	80 - 120%
7782-49-2	SELENIUM	2	2.03	0.005		102	80 - 120%
7440-22-4	SILVER	0.1	0.0966	0.01		97	80 - 120%
7440-23-5	SODIUM	40	36.4	1		91	80 - 120%
7440-28-0	THALLIUM	2	1.93	0.01		96	80 - 120%
7440-31-5	TIN	0.5	0.482	0.05		96	80 - 120%
7440-62-2	VANADIUM	0.5	0.488	0.01		98	80 - 120%
7440-66-6	ZINC	0.5	0.467	0.02		93	80 - 120%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: IP111117-2LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/17/2011
Date Analyzed: 11/18/2011
Prep Method: SW3050B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: N/A
File Name: 111118A.

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7429-90-5	ALUMINUM	200	210	20		105	80 - 120%
7440-36-0	ANTIMONY	50	46.4	2		93	80 - 120%
7440-38-2	ARSENIC	200	189	1		94	80 - 120%
7440-39-3	BARIUM	200	199	10		100	80 - 120%
7440-41-7	BERYLLIUM	5	4.55	0.5		91	80 - 120%
7440-43-9	CADMIUM	5	4.59	0.5		92	80 - 120%
7440-70-2	CALCIUM	4000	3570	100		89	80 - 120%
7440-47-3	CHROMIUM	20	18.7	1		93	80 - 120%
7440-48-4	COBALT	50	46.4	1		93	80 - 120%
7440-50-8	COPPER	25	25.1	1		100	80 - 120%
7439-89-6	IRON	100	99.8	10		100	80 - 120%
7439-92-1	LEAD	50	47.2	0.3		94	80 - 120%
7439-95-4	MAGNESIUM	4000	3620	100		90	80 - 120%
7439-96-5	MANGANESE	50	47.2	1		94	80 - 120%
7439-98-7	MOLYBDENUM	100	94.8	1		95	80 - 120%
7440-02-0	NICKEL	50	48.5	2		97	80 - 120%
7440-09-7	POTASSIUM	4000	3600	100		90	80 - 120%
7782-49-2	SELENIUM	200	182	0.5		91	80 - 120%
7440-22-4	SILVER	10	8.78	1		88	80 - 120%
7440-23-5	SODIUM	4000	3570	100		89	80 - 120%
7440-28-0	THALLIUM	200	203	1		102	80 - 120%
7440-31-5	TIN	50	50.9	5		102	80 - 120%
7440-62-2	VANADIUM	50	47.6	1		95	80 - 120%
7440-66-6	ZINC	50	45.2	2		90	80 - 120%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010B

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
LabID: 1111162-1MS

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.017 g
Final Volume: 100 ml
Result Units: MG/KG
File Name: 111118A.

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7429-90-5	ALUMINUM	8600		12800		21.4	214	1966	80 - 120%
7440-36-0	ANTIMONY	2.2	U	32.2	N	2.14	53.5	60	80 - 120%
7440-38-2	ARSENIC	5.9		208		1.07	214	95	80 - 120%
7440-39-3	BARIUM	110		326		10.7	214	99	80 - 120%
7440-41-7	BERYLLIUM	0.76		5.58		0.535	5.35	90	80 - 120%
7440-43-9	CADMIUM	0.54	U	4.99		0.535	5.35	93	80 - 120%
7440-70-2	CALCIUM	19000		22700		107	4280	86	80 - 120%
7440-47-3	CHROMIUM	7.4		28.9		1.07	21.4	100	80 - 120%
7440-48-4	COBALT	6.3		54.8		1.07	53.5	91	80 - 120%
7440-50-8	COPPER	11		40		1.07	26.7	106	80 - 120%
7439-89-6	IRON	19000		19200		10.7	107	469	80 - 120%
7439-92-1	LEAD	12		61.7		0.321	53.5	93	80 - 120%
7439-95-4	MAGNESIUM	5000		9150		107	4280	98	80 - 120%
7439-96-5	MANGANESE	210		252	N	1.07	53.5	78	80 - 120%
7439-98-7	MOLYBDENUM	1.1	U	95.2		1.07	107	89	80 - 120%
7440-02-0	NICKEL	10		61		2.14	53.5	95	80 - 120%
7440-09-7	POTASSIUM	1800		6590		107	4280	112	80 - 120%
7782-49-2	SELENIUM	0.89		197		0.535	214	92	80 - 120%
7440-22-4	SILVER	1.1	U	9.45		1.07	10.7	88	80 - 120%
7440-23-5	SODIUM	150		4630		107	4280	105	80 - 120%
7440-28-0	THALLIUM	1.1	U	215		1.07	214	100	80 - 120%
7440-31-5	TIN	5.4	U	53.9		5.35	53.5	101	80 - 120%
7440-62-2	VANADIUM	17		69.5		1.07	53.5	99	80 - 120%
7440-66-6	ZINC	41		87.3		2.14	53.5	86	80 - 120%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010B

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
LabID: 1111162-1MSD

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.014 g
Final Volume: 100 ml
Result Units: MG/KG
File Name: 111118A.

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7429-90-5	ALUMINUM	13200		215	2129	21.5	20	3
7440-36-0	ANTIMONY	32.5	N	53.6	61	2.15	20	1
7440-38-2	ARSENIC	209		215	95	1.07	20	0
7440-39-3	BARIUM	328		215	100	10.7	20	1
7440-41-7	BERYLLIUM	5.61		5.36	90	0.536	20	0
7440-43-9	CADMIUM	4.99		5.36	93	0.536	20	0
7440-70-2	CALCIUM	22800		4290	88	107	20	0
7440-47-3	CHROMIUM	29.2		21.5	102	1.07	20	1
7440-48-4	COBALT	55		53.6	91	1.07	20	0
7440-50-8	COPPER	40.2		26.8	107	1.07	20	1
7439-89-6	IRON	19900		107	1094	10.7	20	3
7439-92-1	LEAD	62		53.6	93	0.322	20	0
7439-95-4	MAGNESIUM	9280		4290	101	107	20	1
7439-96-5	MANGANESE	257		53.6	87	1.07	20	2
7439-98-7	MOLYBDENUM	95.2		107	89	1.07	20	0
7440-02-0	NICKEL	61.8		53.6	96	2.15	20	1
7440-09-7	POTASSIUM	6670		4290	114	107	20	1
7782-49-2	SELENIUM	197		215	91	0.536	20	0
7440-22-4	SILVER	9.5		10.7	89	1.07	20	1
7440-23-5	SODIUM	4660		4290	105	107	20	1
7440-28-0	THALLIUM	215		215	100	1.07	20	0
7440-31-5	TIN	53.8		53.6	100	5.36	20	0
7440-62-2	VANADIUM	70.2		53.6	100	1.07	20	1
7440-66-6	ZINC	88.9		53.6	89	2.15	20	2

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Analytical Spike Sample Recovery

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
LabID: 1111162-1A

Run ID: IT111118-2A1
Date Analyzed: 18-Nov-11
Result Units: mg/l

Target Analyte	Sample Result	Samp Qual	PS Result	PS Qual	Spike Added	PS % Rec.	Control Limits
ANTIMONY	0.0200	U	0.490		0.5	98	75 - 125%
MANGANESE	1.95		2.38		0.5	86	75 - 125%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Duplicate Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
Lab ID: 1111162-1D

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 11/09/2011
Date Extracted: 11/17/2011
Date Analyzed: 11/18/2011

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.022 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Sample Result	Samp Qual	Duplicate Result	Dup Qual	Reporting Limit	Dilution Factor	RPD	RPD Limit
7429-90-5	ALUMINUM	8600		8690		21.3	1	1	20
7440-36-0	ANTIMONY	2.2	U	2.13	U	2.13	1		20
7440-38-2	ARSENIC	5.9		6.39		1.06	1	8	20
7440-39-3	BARIUM	110		113		10.6	1	0	20
7440-41-7	BERYLLIUM	0.76		0.811		0.532	1		20
7440-43-9	CADMIUM	0.54	U	0.532	U	0.532	1		20
7440-70-2	CALCIUM	19000		19700		106	1	4	20
7440-47-3	CHROMIUM	7.4		7.51		1.06	1	1	20
7440-48-4	COBALT	6.3		6.52		1.06	1	3	20
7440-50-8	COPPER	11		11.9		1.06	1	3	20
7439-89-6	IRON	19000		19100		10.6	1	2	20
7439-92-1	LEAD	12		12.3		0.319	1	1	20
7439-95-4	MAGNESIUM	5000		4990		106	1	1	20
7439-96-5	MANGANESE	210		221		1.06	1	5	20
7439-98-7	MOLYBDENUM	1.1	U	1.06	U	1.06	1		20
7440-02-0	NICKEL	10		10.3		2.13	1		20
7440-09-7	POTASSIUM	1800		1810		106	1	1	20
7782-49-2	SELENIUM	0.89		0.532	U	0.532	1		20
7440-22-4	SILVER	1.1	U	1.06	U	1.06	1		20
7440-23-5	SODIUM	150		156		106	1		20
7440-28-0	THALLIUM	1.1	U	1.06	U	1.06	1		20
7440-31-5	TIN	5.4	U	5.32	U	5.32	1		20
7440-62-2	VANADIUM	17		16.8		1.06	1	0	20
7440-66-6	ZINC	41		41.6		2.13	1	1	20

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Serial Dilution

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
Lab ID: 1111162-1L

Run ID: IT111118-2A1
Date Analyzed: 18-Nov-11
Result Units: mg/l

CASNO	Target Analyte	Sample Result	Samp Qual	SD Result	SD Qual	EPA Qualifier	%D
7429-90-5	ALUMINUM	80.1		78.7			2
7440-36-0	ANTIMONY	0.0200	U	0.100	U		
7440-38-2	ARSENIC	0.0549		0.0500	U		
7440-39-3	BARIUM	1.05		1.07			2
7440-41-7	BERYLLIUM	0.00708		0.0250	U		
7440-43-9	CADMIUM	0.00500	U	0.0250	U		
7440-70-2	CALCIUM	176		172			2
7440-47-3	CHROMIUM	0.0688		0.0696			
7440-48-4	COBALT	0.0585		0.0573			
7440-50-8	COPPER	0.107		0.0972			9
7439-89-6	IRON	173		164			6
7439-92-1	LEAD	0.113		0.113			1
7439-95-4	MAGNESIUM	45.9		46.5			1
7439-96-5	MANGANESE	1.95		2.04			5
7439-98-7	MOLYBDENUM	0.0100	U	0.0500	U		
7440-02-0	NICKEL	0.0938		0.100	U		
7440-09-7	POTASSIUM	16.6		12.0		E	27
7782-49-2	SELENIUM	0.00826		0.0250	U		
7440-22-4	SILVER	0.0100	U	0.0500	U		
7440-23-5	SODIUM	1.38		5.00	U		
7440-28-0	THALLIUM	0.0100	U	0.0500	U		
7440-31-5	TIN	0.0500	U	0.250	U		
7440-62-2	VANADIUM	0.155		0.157			1
7440-66-6	ZINC	0.380		0.406			7

Data Package ID: *IT1111162-1*

Prep Batch ID: IP111116-4

Start Date: 11/16/11
Start Time: 14:00
Prep Analyst: Brent A. Stanfield

End Date: 11/16/11
End Time: 18:00

Concentration Method: NONE
Extract Method: SW3005A
Initial Volume Units: g
Final Volume Units: g

Batch Created By: bas
Date Created: 11/16/11
Time Created: 13:58
Validated By: bas
Date Validated: 11/16/11
Time Validated: 14:31

Comments:

QC Batch ID: IP111116-4-5

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
IP111116-4	MB	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185
IP111116-4	LCS	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185
1111185-13	MS	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185
1111185-13	MSD	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185
1111185-13	DUP	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185
1111160-1	SMP	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111160
1111162-16	SMP	ST1-01-111108	WATER	11/8/2011	50	50	NONE	1	1111162
1111185-13	SMP	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185

QC Types

CAR	Carrier reference sample	DUP	Laboratory Duplicate
LCS	Laboratory Control Sample	LCSD	Laboratory Control Sample Duplicat
MB	Method Blank	MS	Laboratory Matrix Spike
MSD	Laboratory Matrix Spike Duplicate	REP	Sample replicate
RVS	Reporting Level Verification Standar	SMP	Field Sample
SYS	Sample Yield Spike		

Prep Batch ID: IP111117-2

Start Date: 11/17/11
Start Time: 9:00
Prep Analyst: Brent A. Stanfield

End Date: 11/17/11
End Time: 17:00

Concentration Method: NONE
Extract Method: SW3050B
Initial Volume Units: g
Final Volume Units: ml

Batch Created By: bas
Date Created: 11/17/11
Time Created: 8:26
Validated By: bas
Date Validated: 11/17/11
Time Validated: 9:16

Comments:

QC Batch ID: IP111117-2-1

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
IP111117-2	MB	XXXXXX	SOIL	XXXXXX	1	100	NONE	1	1111162
IP111117-2	LCS	XXXXXX	SOIL	XXXXXX	1	100	NONE	1	1111162
1111162-1	MS	DY2-11-31-111109	SOIL	11/9/2011	1.017	100	NONE	1	1111162
1111162-1	MSD	DY2-11-31-111109	SOIL	11/9/2011	1.014	100	NONE	1	1111162
1111162-1	DUP	DY2-11-31-111109	SOIL	11/9/2011	1.022	100	NONE	1	1111162
1111162-1	SMP	DY2-11-31-111109	SOIL	11/9/2011	1.008	100	NONE	1	1111162
1111162-10	SMP	DY2-77-31-111109	SOIL	11/9/2011	1.005	100	NONE	1	1111162
1111162-11	SMP	DY2-BKGD-E-31-111	SOIL	11/9/2011	1.043	100	NONE	1	1111162
1111162-12	SMP	DY2-BKGD-N-31-111	SOIL	11/9/2011	1.003	100	NONE	1	1111162
1111162-13	SMP	DY2-BKGD-S-31-111	SOIL	11/9/2011	1.028	100	NONE	1	1111162
1111162-14	SMP	DY2-BKGD-W-31-111	SOIL	11/9/2011	1.02	100	NONE	1	1111162
1111162-15	SMP	MD-01-31-111109	SOIL	11/9/2011	0.996	100	NONE	1	1111162
1111162-2	SMP	DY2-17-31-111109	SOIL	11/9/2011	1.029	100	NONE	1	1111162
1111162-3	SMP	DY2-17-32-111109	SOIL	11/9/2011	1.044	100	NONE	1	1111162
1111162-4	SMP	DY2-32-31-111109	SOIL	11/9/2011	1.029	100	NONE	1	1111162
1111162-5	SMP	DY2-33-31-111109	SOIL	11/9/2011	1.026	100	NONE	1	1111162
1111162-6	SMP	DY2-41-31-111109	SOIL	11/9/2011	1.014	100	NONE	1	1111162
1111162-7	SMP	DY2-44-31-111109	SOIL	11/9/2011	1.03	100	NONE	1	1111162
1111162-8	SMP	DY2-48-31-111109	SOIL	11/9/2011	1.01	100	NONE	1	1111162
1111162-9	SMP	DY2-65-31-111109	SOIL	11/9/2011	1.016	100	NONE	1	1111162

QC Types

CAR	Carrier reference sample		DUP	Laboratory Duplicate
LCS	Laboratory Control Sample		LCSD	Laboratory Control Sample Duplicat
MB	Method Blank		MS	Laboratory Matrix Spike
MSD	Laboratory Matrix Spike Duplicate		REP	Sample replicate
RVS	Reporting Level Verification Standar		SMP	Field Sample
SYS	Sample Yield Spike			

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: ICV
QC Type: Initial Calibration

File Name: 111117A.

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 14:28
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	25	25.6	0.2		102	90 - 110%
7440-36-0	ANTIMONY	0.25	0.256	0.02		102	90 - 110%
7440-38-2	ARSENIC	0.25	0.251	0.01		100	90 - 110%
7440-39-3	BARIUM	0.5	0.498	0.1		100	90 - 110%
7440-41-7	BERYLLIUM	0.25	0.241	0.005		97	90 - 110%
7440-43-9	CADMIUM	0.25	0.260	0.005		104	90 - 110%
7440-70-2	CALCIUM	25	25.0	1		100	90 - 110%
7440-47-3	CHROMIUM	0.5	0.501	0.01		100	90 - 110%
7440-48-4	COBALT	0.25	0.250	0.01		100	90 - 110%
7440-50-8	COPPER	0.5	0.492	0.01		98	90 - 110%
7439-89-6	IRON	10	10.2	0.1		102	90 - 110%
7439-92-1	LEAD	0.5	0.495	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	25	25.3	1		101	90 - 110%
7439-96-5	MANGANESE	0.5	0.496	0.01		99	90 - 110%
7439-98-7	MOLYBDENUM	0.5	0.498	0.01		100	90 - 110%
7440-02-0	NICKEL	0.5	0.478	0.02		96	90 - 110%
7440-09-7	POTASSIUM	25	24.7	1		99	90 - 110%
7782-49-2	SELENIUM	0.5	0.500	0.005		100	90 - 110%
7440-22-4	SILVER	0.1	0.102	0.01		102	90 - 110%
7440-23-5	SODIUM	25	23.8	1		95	90 - 110%
7440-28-0	THALLIUM	0.25	0.245	0.01		98	90 - 110%
7440-31-5	TIN	0.5	0.495	0.05		99	90 - 110%
7440-62-2	VANADIUM	0.25	0.249	0.01		100	90 - 110%
7440-66-6	ZINC	0.5	0.483	0.02		97	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV1
QC Type: Continuing Calibration

File Name: 111117A.

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 14:46
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	51.6	0.2		103	90 - 110%
7440-36-0	ANTIMONY	0.5	0.481	0.02		96	90 - 110%
7440-38-2	ARSENIC	0.5	0.511	0.01		102	90 - 110%
7440-39-3	BARIUM	1	1.01	0.1		101	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.491	0.005		98	90 - 110%
7440-43-9	CADMIUM	0.5	0.531	0.005		106	90 - 110%
7440-70-2	CALCIUM	50	51.1	1		102	90 - 110%
7440-47-3	CHROMIUM	1	1.02	0.01		102	90 - 110%
7440-48-4	COBALT	0.5	0.505	0.01		101	90 - 110%
7440-50-8	COPPER	1	1.01	0.01		101	90 - 110%
7439-89-6	IRON	20	20.8	0.1		104	90 - 110%
7439-92-1	LEAD	1	1.01	0.003		101	90 - 110%
7439-95-4	MAGNESIUM	50	51.1	1		102	90 - 110%
7439-96-5	MANGANESE	1	0.997	0.01		100	90 - 110%
7439-98-7	MOLYBDENUM	1	1.02	0.01		102	90 - 110%
7440-02-0	NICKEL	1	0.986	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	51.9	1		104	90 - 110%
7782-49-2	SELENIUM	1	1.03	0.005		103	90 - 110%
7440-22-4	SILVER	0.2	0.217	0.01		108	90 - 110%
7440-23-5	SODIUM	50	49.0	1		98	90 - 110%
7440-28-0	THALLIUM	0.5	0.509	0.01		102	90 - 110%
7440-31-5	TIN	1	1.02	0.05		102	90 - 110%
7440-62-2	VANADIUM	0.5	0.503	0.01		101	90 - 110%
7440-66-6	ZINC	1	0.983	0.02		98	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV2
QC Type: Continuing Calibration

File Name: 111117A.

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 15:09
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	52.1	0.2		104	90 - 110%
7440-36-0	ANTIMONY	0.5	0.487	0.02		97	90 - 110%
7440-38-2	ARSENIC	0.5	0.524	0.01		105	90 - 110%
7440-39-3	BARIUM	1	1.03	0.1		103	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.491	0.005		98	90 - 110%
7440-43-9	CADMIUM	0.5	0.535	0.005		107	90 - 110%
7440-70-2	CALCIUM	50	51.1	1		102	90 - 110%
7440-47-3	CHROMIUM	1	1.02	0.01		102	90 - 110%
7440-48-4	COBALT	0.5	0.508	0.01		102	90 - 110%
7440-50-8	COPPER	1	1.03	0.01		103	90 - 110%
7439-89-6	IRON	20	20.8	0.1		104	90 - 110%
7439-92-1	LEAD	1	1.01	0.003		101	90 - 110%
7439-95-4	MAGNESIUM	50	51.3	1		103	90 - 110%
7439-96-5	MANGANESE	1	0.996	0.01		100	90 - 110%
7439-98-7	MOLYBDENUM	1	1.03	0.01		103	90 - 110%
7440-02-0	NICKEL	1	1.00	0.02		100	90 - 110%
7440-09-7	POTASSIUM	50	52.6	1		105	90 - 110%
7782-49-2	SELENIUM	1	1.04	0.005		104	90 - 110%
7440-22-4	SILVER	0.2	0.219	0.01		110	90 - 110%
7440-23-5	SODIUM	50	49.3	1		99	90 - 110%
7440-28-0	THALLIUM	0.5	0.521	0.01		104	90 - 110%
7440-31-5	TIN	1	1.02	0.05		102	90 - 110%
7440-62-2	VANADIUM	0.5	0.506	0.01		101	90 - 110%
7440-66-6	ZINC	1	0.971	0.02		97	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV3
QC Type: Continuing Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 15:16
File Name: 111117A.
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	50.8	0.2		102	90 - 110%
7440-36-0	ANTIMONY	0.5	0.471	0.02		94	90 - 110%
7440-38-2	ARSENIC	0.5	0.503	0.01		101	90 - 110%
7440-39-3	BARIUM	1	0.997	0.1		100	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.476	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.522	0.005		104	90 - 110%
7440-70-2	CALCIUM	50	49.5	1		99	90 - 110%
7440-47-3	CHROMIUM	1	0.990	0.01		99	90 - 110%
7440-48-4	COBALT	0.5	0.492	0.01		98	90 - 110%
7440-50-8	COPPER	1	1.00	0.01		100	90 - 110%
7439-89-6	IRON	20	20.2	0.1		101	90 - 110%
7439-92-1	LEAD	1	0.978	0.003		98	90 - 110%
7439-95-4	MAGNESIUM	50	49.9	1		100	90 - 110%
7439-96-5	MANGANESE	1	0.969	0.01		97	90 - 110%
7439-98-7	MOLYBDENUM	1	0.994	0.01		99	90 - 110%
7440-02-0	NICKEL	1	0.960	0.02		96	90 - 110%
7440-09-7	POTASSIUM	50	51.5	1		103	90 - 110%
7782-49-2	SELENIUM	1	1.01	0.005		101	90 - 110%
7440-22-4	SILVER	0.2	0.214	0.01		107	90 - 110%
7440-23-5	SODIUM	50	48.4	1		97	90 - 110%
7440-28-0	THALLIUM	0.5	0.501	0.01		100	90 - 110%
7440-31-5	TIN	1	0.985	0.05		99	90 - 110%
7440-62-2	VANADIUM	0.5	0.492	0.01		98	90 - 110%
7440-66-6	ZINC	1	0.938	0.02		94	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV4
QC Type: Continuing Calibration

File Name: 111117A.

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 15:40
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	50.5	0.2		101	90 - 110%
7440-36-0	ANTIMONY	0.5	0.465	0.02		93	90 - 110%
7440-38-2	ARSENIC	0.5	0.496	0.01		99	90 - 110%
7440-39-3	BARIUM	1	0.990	0.1		99	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.471	0.005		94	90 - 110%
7440-43-9	CADMIUM	0.5	0.520	0.005		104	90 - 110%
7440-70-2	CALCIUM	50	49.2	1		98	90 - 110%
7440-47-3	CHROMIUM	1	0.979	0.01		98	90 - 110%
7440-48-4	COBALT	0.5	0.488	0.01		98	90 - 110%
7440-50-8	COPPER	1	1.00	0.01		100	90 - 110%
7439-89-6	IRON	20	20.0	0.1		100	90 - 110%
7439-92-1	LEAD	1	0.969	0.003		97	90 - 110%
7439-95-4	MAGNESIUM	50	49.5	1		99	90 - 110%
7439-96-5	MANGANESE	1	0.956	0.01		96	90 - 110%
7439-98-7	MOLYBDENUM	1	0.983	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.957	0.02		96	90 - 110%
7440-09-7	POTASSIUM	50	51.4	1		103	90 - 110%
7782-49-2	SELENIUM	1	0.997	0.005		100	90 - 110%
7440-22-4	SILVER	0.2	0.212	0.01		106	90 - 110%
7440-23-5	SODIUM	50	48.3	1		97	90 - 110%
7440-28-0	THALLIUM	0.5	0.489	0.01		98	90 - 110%
7440-31-5	TIN	1	0.981	0.05		98	90 - 110%
7440-62-2	VANADIUM	0.5	0.487	0.01		97	90 - 110%
7440-66-6	ZINC	1	0.919	0.02		92	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV5
QC Type: Continuing Calibration

File Name: 111117A.

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 16:03
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	50.9	0.2		102	90 - 110%
7440-36-0	ANTIMONY	0.5	0.464	0.02		93	90 - 110%
7440-38-2	ARSENIC	0.5	0.496	0.01		99	90 - 110%
7440-39-3	BARIUM	1	0.994	0.1		99	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.479	0.005		96	90 - 110%
7440-43-9	CADMIUM	0.5	0.515	0.005		103	90 - 110%
7440-70-2	CALCIUM	50	49.5	1		99	90 - 110%
7440-47-3	CHROMIUM	1	0.994	0.01		99	90 - 110%
7440-48-4	COBALT	0.5	0.493	0.01		99	90 - 110%
7440-50-8	COPPER	1	0.998	0.01		100	90 - 110%
7439-89-6	IRON	20	20.2	0.1		101	90 - 110%
7439-92-1	LEAD	1	0.983	0.003		98	90 - 110%
7439-95-4	MAGNESIUM	50	50.1	1		100	90 - 110%
7439-96-5	MANGANESE	1	0.973	0.01		97	90 - 110%
7439-98-7	MOLYBDENUM	1	0.989	0.01		99	90 - 110%
7440-02-0	NICKEL	1	0.949	0.02		95	90 - 110%
7440-09-7	POTASSIUM	50	51.2	1		102	90 - 110%
7782-49-2	SELENIUM	1	1.02	0.005		102	90 - 110%
7440-22-4	SILVER	0.2	0.213	0.01		106	90 - 110%
7440-23-5	SODIUM	50	48.4	1		97	90 - 110%
7440-28-0	THALLIUM	0.5	0.489	0.01		98	90 - 110%
7440-31-5	TIN	1	0.986	0.05		99	90 - 110%
7440-62-2	VANADIUM	0.5	0.492	0.01		98	90 - 110%
7440-66-6	ZINC	1	0.947	0.02		95	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV6

QC Type: Continuing Calibration

File Name: 111117A.

Run ID: IT111117-2A1

Date Analyzed: 11/17/2011

Time Analyzed: 16:33

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	50.7	0.2		101	90 - 110%
7440-36-0	ANTIMONY	0.5	0.464	0.02		93	90 - 110%
7440-38-2	ARSENIC	0.5	0.500	0.01		100	90 - 110%
7440-39-3	BARIUM	1	0.989	0.1		99	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.477	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.515	0.005		103	90 - 110%
7440-70-2	CALCIUM	50	49.3	1		99	90 - 110%
7440-47-3	CHROMIUM	1	0.989	0.01		99	90 - 110%
7440-48-4	COBALT	0.5	0.491	0.01		98	90 - 110%
7440-50-8	COPPER	1	0.998	0.01		100	90 - 110%
7439-89-6	IRON	20	20.1	0.1		101	90 - 110%
7439-92-1	LEAD	1	0.977	0.003		98	90 - 110%
7439-95-4	MAGNESIUM	50	49.9	1		100	90 - 110%
7439-96-5	MANGANESE	1	0.967	0.01		97	90 - 110%
7439-98-7	MOLYBDENUM	1	0.985	0.01		99	90 - 110%
7440-02-0	NICKEL	1	0.948	0.02		95	90 - 110%
7440-09-7	POTASSIUM	50	51.1	1		102	90 - 110%
7782-49-2	SELENIUM	1	1.00	0.005		100	90 - 110%
7440-22-4	SILVER	0.2	0.213	0.01		106	90 - 110%
7440-23-5	SODIUM	50	48.4	1		97	90 - 110%
7440-28-0	THALLIUM	0.5	0.487	0.01		97	90 - 110%
7440-31-5	TIN	1	0.985	0.05		99	90 - 110%
7440-62-2	VANADIUM	0.5	0.490	0.01		98	90 - 110%
7440-66-6	ZINC	1	0.941	0.02		94	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV7

QC Type: Continuing Calibration

File Name: 111117A.

Run ID: IT111117-2A1

Date Analyzed: 11/17/2011

Time Analyzed: 16:55

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	50.6	0.2		101	90 - 110%
7440-36-0	ANTIMONY	0.5	0.462	0.02		92	90 - 110%
7440-38-2	ARSENIC	0.5	0.500	0.01		100	90 - 110%
7440-39-3	BARIUM	1	0.989	0.1		99	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.472	0.005		94	90 - 110%
7440-43-9	CADMIUM	0.5	0.514	0.005		103	90 - 110%
7440-70-2	CALCIUM	50	49.0	1		98	90 - 110%
7440-47-3	CHROMIUM	1	0.983	0.01		98	90 - 110%
7440-48-4	COBALT	0.5	0.487	0.01		97	90 - 110%
7440-50-8	COPPER	1	1.00	0.01		100	90 - 110%
7439-89-6	IRON	20	20.0	0.1		100	90 - 110%
7439-92-1	LEAD	1	0.967	0.003		97	90 - 110%
7439-95-4	MAGNESIUM	50	49.7	1		99	90 - 110%
7439-96-5	MANGANESE	1	0.958	0.01		96	90 - 110%
7439-98-7	MOLYBDENUM	1	0.987	0.01		99	90 - 110%
7440-02-0	NICKEL	1	0.950	0.02		95	90 - 110%
7440-09-7	POTASSIUM	50	51.1	1		102	90 - 110%
7782-49-2	SELENIUM	1	1.00	0.005		100	90 - 110%
7440-22-4	SILVER	0.2	0.213	0.01		107	90 - 110%
7440-23-5	SODIUM	50	48.3	1		97	90 - 110%
7440-28-0	THALLIUM	0.5	0.500	0.01		100	90 - 110%
7440-31-5	TIN	1	0.980	0.05		98	90 - 110%
7440-62-2	VANADIUM	0.5	0.488	0.01		98	90 - 110%
7440-66-6	ZINC	1	0.928	0.02		93	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV8

QC Type: Continuing Calibration

File Name: 111117A.

Run ID: IT111117-2A1

Date Analyzed: 11/17/2011

Time Analyzed: 17:19

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	50.5	0.2		101	90 - 110%
7440-36-0	ANTIMONY	0.5	0.463	0.02		93	90 - 110%
7440-38-2	ARSENIC	0.5	0.496	0.01		99	90 - 110%
7440-39-3	BARIUM	1	0.985	0.1		98	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.469	0.005		94	90 - 110%
7440-43-9	CADMIUM	0.5	0.515	0.005		103	90 - 110%
7440-70-2	CALCIUM	50	48.8	1		98	90 - 110%
7440-47-3	CHROMIUM	1	0.975	0.01		98	90 - 110%
7440-48-4	COBALT	0.5	0.485	0.01		97	90 - 110%
7440-50-8	COPPER	1	1.00	0.01		100	90 - 110%
7439-89-6	IRON	20	19.8	0.1		99	90 - 110%
7439-92-1	LEAD	1	0.960	0.003		96	90 - 110%
7439-95-4	MAGNESIUM	50	49.4	1		99	90 - 110%
7439-96-5	MANGANESE	1	0.951	0.01		95	90 - 110%
7439-98-7	MOLYBDENUM	1	0.977	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.951	0.02		95	90 - 110%
7440-09-7	POTASSIUM	50	51.0	1		102	90 - 110%
7782-49-2	SELENIUM	1	1.00	0.005		100	90 - 110%
7440-22-4	SILVER	0.2	0.213	0.01		107	90 - 110%
7440-23-5	SODIUM	50	48.3	1		97	90 - 110%
7440-28-0	THALLIUM	0.5	0.492	0.01		98	90 - 110%
7440-31-5	TIN	1	0.975	0.05		97	90 - 110%
7440-62-2	VANADIUM	0.5	0.485	0.01		97	90 - 110%
7440-66-6	ZINC	1	0.916	0.02		92	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV9
QC Type: Continuing Calibration

File Name: 111117A.

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 17:43
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	50.7	0.2		101	90 - 110%
7440-36-0	ANTIMONY	0.5	0.464	0.02		93	90 - 110%
7440-38-2	ARSENIC	0.5	0.496	0.01		99	90 - 110%
7440-39-3	BARIUM	1	0.983	0.1		98	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.477	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.512	0.005		102	90 - 110%
7440-70-2	CALCIUM	50	49.4	1		99	90 - 110%
7440-47-3	CHROMIUM	1	0.990	0.01		99	90 - 110%
7440-48-4	COBALT	0.5	0.491	0.01		98	90 - 110%
7440-50-8	COPPER	1	0.996	0.01		100	90 - 110%
7439-89-6	IRON	20	20.1	0.1		101	90 - 110%
7439-92-1	LEAD	1	0.977	0.003		98	90 - 110%
7439-95-4	MAGNESIUM	50	50.1	1		100	90 - 110%
7439-96-5	MANGANESE	1	0.966	0.01		97	90 - 110%
7439-98-7	MOLYBDENUM	1	0.982	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.946	0.02		95	90 - 110%
7440-09-7	POTASSIUM	50	50.8	1		102	90 - 110%
7782-49-2	SELENIUM	1	1.01	0.005		101	90 - 110%
7440-22-4	SILVER	0.2	0.214	0.01		107	90 - 110%
7440-23-5	SODIUM	50	48.2	1		96	90 - 110%
7440-28-0	THALLIUM	0.5	0.497	0.01		99	90 - 110%
7440-31-5	TIN	1	0.987	0.05		99	90 - 110%
7440-62-2	VANADIUM	0.5	0.489	0.01		98	90 - 110%
7440-66-6	ZINC	1	0.948	0.02		95	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: ICV
QC Type: Initial Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 14:47
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	25	25.9	0.2		103	90 - 110%
7440-36-0	ANTIMONY	0.25	0.239	0.02		96	90 - 110%
7440-38-2	ARSENIC	0.25	0.250	0.01		100	90 - 110%
7440-39-3	BARIUM	0.5	0.501	0.1		100	90 - 110%
7440-41-7	BERYLLIUM	0.25	0.240	0.005		96	90 - 110%
7440-43-9	CADMIUM	0.25	0.245	0.005		98	90 - 110%
7440-70-2	CALCIUM	25	24.4	1		98	90 - 110%
7440-47-3	CHROMIUM	0.5	0.496	0.01		99	90 - 110%
7440-48-4	COBALT	0.25	0.245	0.01		98	90 - 110%
7440-50-8	COPPER	0.5	0.497	0.01		99	90 - 110%
7439-89-6	IRON	10	10.1	0.1		101	90 - 110%
7439-92-1	LEAD	0.5	0.509	0.003		102	90 - 110%
7439-95-4	MAGNESIUM	25	25.2	1		101	90 - 110%
7439-96-5	MANGANESE	0.5	0.506	0.01		101	90 - 110%
7439-98-7	MOLYBDENUM	0.5	0.492	0.01		98	90 - 110%
7440-02-0	NICKEL	0.5	0.474	0.02		95	90 - 110%
7440-09-7	POTASSIUM	25	22.9	1		92	90 - 110%
7782-49-2	SELENIUM	0.5	0.517	0.005		103	90 - 110%
7440-22-4	SILVER	0.1	0.0927	0.01		93	90 - 110%
7440-23-5	SODIUM	25	23.3	1		93	90 - 110%
7440-28-0	THALLIUM	0.25	0.252	0.01		101	90 - 110%
7440-31-5	TIN	0.5	0.515	0.05		103	90 - 110%
7440-62-2	VANADIUM	0.25	0.245	0.01		98	90 - 110%
7440-66-6	ZINC	0.5	0.499	0.02		100	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV1
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 15:00
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	53.5	0.2		107	90 - 110%
7440-36-0	ANTIMONY	0.5	0.503	0.02		101	90 - 110%
7440-38-2	ARSENIC	0.5	0.512	0.01		102	90 - 110%
7440-39-3	BARIUM	1	1.05	0.1		105	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.486	0.005		97	90 - 110%
7440-43-9	CADMIUM	0.5	0.496	0.005		99	90 - 110%
7440-70-2	CALCIUM	50	48.6	1		97	90 - 110%
7440-47-3	CHROMIUM	1	0.988	0.01		99	90 - 110%
7440-48-4	COBALT	0.5	0.487	0.01		97	90 - 110%
7440-50-8	COPPER	1	1.05	0.01		105	90 - 110%
7439-89-6	IRON	20	20.6	0.1		103	90 - 110%
7439-92-1	LEAD	1	1.03	0.003		103	90 - 110%
7439-95-4	MAGNESIUM	50	51.0	1		102	90 - 110%
7439-96-5	MANGANESE	1	1.00	0.01		100	90 - 110%
7439-98-7	MOLYBDENUM	1	0.993	0.01		99	90 - 110%
7440-02-0	NICKEL	1	0.961	0.02		96	90 - 110%
7440-09-7	POTASSIUM	50	49.8	1		100	90 - 110%
7782-49-2	SELENIUM	1	1.07	0.005		107	90 - 110%
7440-22-4	SILVER	0.2	0.198	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.6	1		99	90 - 110%
7440-28-0	THALLIUM	0.5	0.535	0.01		107	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.491	0.01		98	90 - 110%
7440-66-6	ZINC	1	0.964	0.02		96	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV2

QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1

Date Analyzed: 11/18/2011

Time Analyzed: 15:23

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	53.6	0.2		107	90 - 110%
7440-36-0	ANTIMONY	0.5	0.505	0.02		101	90 - 110%
7440-38-2	ARSENIC	0.5	0.512	0.01		102	90 - 110%
7440-39-3	BARIUM	1	1.05	0.1		105	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.484	0.005		97	90 - 110%
7440-43-9	CADMIUM	0.5	0.498	0.005		100	90 - 110%
7440-70-2	CALCIUM	50	48.4	1		97	90 - 110%
7440-47-3	CHROMIUM	1	0.983	0.01		98	90 - 110%
7440-48-4	COBALT	0.5	0.488	0.01		98	90 - 110%
7440-50-8	COPPER	1	1.06	0.01		106	90 - 110%
7439-89-6	IRON	20	20.5	0.1		103	90 - 110%
7439-92-1	LEAD	1	1.02	0.003		102	90 - 110%
7439-95-4	MAGNESIUM	50	51.1	1		102	90 - 110%
7439-96-5	MANGANESE	1	0.997	0.01		100	90 - 110%
7439-98-7	MOLYBDENUM	1	0.991	0.01		99	90 - 110%
7440-02-0	NICKEL	1	0.963	0.02		96	90 - 110%
7440-09-7	POTASSIUM	50	50.1	1		100	90 - 110%
7782-49-2	SELENIUM	1	1.06	0.005		106	90 - 110%
7440-22-4	SILVER	0.2	0.199	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.6	1		99	90 - 110%
7440-28-0	THALLIUM	0.5	0.545	0.01		109	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.490	0.01		98	90 - 110%
7440-66-6	ZINC	1	0.951	0.02		95	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV3
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 15:48
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	53.6	0.2		107	90 - 110%
7440-36-0	ANTIMONY	0.5	0.502	0.02		100	90 - 110%
7440-38-2	ARSENIC	0.5	0.518	0.01		104	90 - 110%
7440-39-3	BARIUM	1	1.05	0.1		105	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.485	0.005		97	90 - 110%
7440-43-9	CADMIUM	0.5	0.501	0.005		100	90 - 110%
7440-70-2	CALCIUM	50	48.1	1		96	90 - 110%
7440-47-3	CHROMIUM	1	0.981	0.01		98	90 - 110%
7440-48-4	COBALT	0.5	0.486	0.01		97	90 - 110%
7440-50-8	COPPER	1	1.05	0.01		105	90 - 110%
7439-89-6	IRON	20	20.4	0.1		102	90 - 110%
7439-92-1	LEAD	1	1.02	0.003		102	90 - 110%
7439-95-4	MAGNESIUM	50	51.0	1		102	90 - 110%
7439-96-5	MANGANESE	1	0.993	0.01		99	90 - 110%
7439-98-7	MOLYBDENUM	1	0.995	0.01		100	90 - 110%
7440-02-0	NICKEL	1	0.988	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	50.0	1		100	90 - 110%
7782-49-2	SELENIUM	1	1.05	0.005		105	90 - 110%
7440-22-4	SILVER	0.2	0.199	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.0	1		98	90 - 110%
7440-28-0	THALLIUM	0.5	0.525	0.01		105	90 - 110%
7440-31-5	TIN	1	1.06	0.05		106	90 - 110%
7440-62-2	VANADIUM	0.5	0.488	0.01		98	90 - 110%
7440-66-6	ZINC	1	0.963	0.02		96	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV4
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 16:17
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	54.1	0.2		108	90 - 110%
7440-36-0	ANTIMONY	0.5	0.507	0.02		101	90 - 110%
7440-38-2	ARSENIC	0.5	0.525	0.01		105	90 - 110%
7440-39-3	BARIUM	1	1.06	0.1		106	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.493	0.005		99	90 - 110%
7440-43-9	CADMIUM	0.5	0.512	0.005		102	90 - 110%
7440-70-2	CALCIUM	50	49.6	1		99	90 - 110%
7440-47-3	CHROMIUM	1	1.00	0.01		100	90 - 110%
7440-48-4	COBALT	0.5	0.497	0.01		99	90 - 110%
7440-50-8	COPPER	1	1.05	0.01		105	90 - 110%
7439-89-6	IRON	20	20.8	0.1		104	90 - 110%
7439-92-1	LEAD	1	1.03	0.003		103	90 - 110%
7439-95-4	MAGNESIUM	50	51.5	1		103	90 - 110%
7439-96-5	MANGANESE	1	1.01	0.01		101	90 - 110%
7439-98-7	MOLYBDENUM	1	1.01	0.01		101	90 - 110%
7440-02-0	NICKEL	1	1.01	0.02		101	90 - 110%
7440-09-7	POTASSIUM	50	50.3	1		101	90 - 110%
7782-49-2	SELENIUM	1	1.07	0.005		107	90 - 110%
7440-22-4	SILVER	0.2	0.202	0.01		101	90 - 110%
7440-23-5	SODIUM	50	50.1	1		100	90 - 110%
7440-28-0	THALLIUM	0.5	0.541	0.01		108	90 - 110%
7440-31-5	TIN	1	1.08	0.05		108	90 - 110%
7440-62-2	VANADIUM	0.5	0.497	0.01		99	90 - 110%
7440-66-6	ZINC	1	0.991	0.02		99	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV5
QC Type: Continuing Calibration
File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 16:44
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	53.2	0.2		106	90 - 110%
7440-36-0	ANTIMONY	0.5	0.508	0.02		102	90 - 110%
7440-38-2	ARSENIC	0.5	0.512	0.01		102	90 - 110%
7440-39-3	BARIUM	1	1.04	0.1		104	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.483	0.005		97	90 - 110%
7440-43-9	CADMIUM	0.5	0.506	0.005		101	90 - 110%
7440-70-2	CALCIUM	50	48.7	1		97	90 - 110%
7440-47-3	CHROMIUM	1	0.982	0.01		98	90 - 110%
7440-48-4	COBALT	0.5	0.488	0.01		98	90 - 110%
7440-50-8	COPPER	1	1.04	0.01		104	90 - 110%
7439-89-6	IRON	20	20.3	0.1		102	90 - 110%
7439-92-1	LEAD	1	1.01	0.003		101	90 - 110%
7439-95-4	MAGNESIUM	50	50.6	1		101	90 - 110%
7439-96-5	MANGANESE	1	0.987	0.01		99	90 - 110%
7439-98-7	MOLYBDENUM	1	1.00	0.01		100	90 - 110%
7440-02-0	NICKEL	1	0.997	0.02		100	90 - 110%
7440-09-7	POTASSIUM	50	49.6	1		99	90 - 110%
7782-49-2	SELENIUM	1	1.05	0.005		105	90 - 110%
7440-22-4	SILVER	0.2	0.200	0.01		100	90 - 110%
7440-23-5	SODIUM	50	49.4	1		99	90 - 110%
7440-28-0	THALLIUM	0.5	0.536	0.01		107	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.490	0.01		98	90 - 110%
7440-66-6	ZINC	1	0.963	0.02		96	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV6

QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1

Date Analyzed: 11/18/2011

Time Analyzed: 17:07

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	53.0	0.2		106	90 - 110%
7440-36-0	ANTIMONY	0.5	0.505	0.02		101	90 - 110%
7440-38-2	ARSENIC	0.5	0.515	0.01		103	90 - 110%
7440-39-3	BARIUM	1	1.04	0.1		104	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.477	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.501	0.005		100	90 - 110%
7440-70-2	CALCIUM	50	47.9	1		96	90 - 110%
7440-47-3	CHROMIUM	1	0.967	0.01		97	90 - 110%
7440-48-4	COBALT	0.5	0.482	0.01		96	90 - 110%
7440-50-8	COPPER	1	1.05	0.01		105	90 - 110%
7439-89-6	IRON	20	20.0	0.1		100	90 - 110%
7439-92-1	LEAD	1	0.993	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.3	1		101	90 - 110%
7439-96-5	MANGANESE	1	0.972	0.01		97	90 - 110%
7439-98-7	MOLYBDENUM	1	0.986	0.01		99	90 - 110%
7440-02-0	NICKEL	1	0.993	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	49.8	1		100	90 - 110%
7782-49-2	SELENIUM	1	1.05	0.005		105	90 - 110%
7440-22-4	SILVER	0.2	0.198	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.4	1		99	90 - 110%
7440-28-0	THALLIUM	0.5	0.528	0.01		106	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.483	0.01		97	90 - 110%
7440-66-6	ZINC	1	0.939	0.02		94	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV7

QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1

Date Analyzed: 11/18/2011

Time Analyzed: 17:26

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	54.1	0.2		108	90 - 110%
7440-36-0	ANTIMONY	0.5	0.517	0.02		103	90 - 110%
7440-38-2	ARSENIC	0.5	0.529	0.01		106	90 - 110%
7440-39-3	BARIUM	1	1.06	0.1		106	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.489	0.005		98	90 - 110%
7440-43-9	CADMIUM	0.5	0.514	0.005		103	90 - 110%
7440-70-2	CALCIUM	50	49.1	1		98	90 - 110%
7440-47-3	CHROMIUM	1	0.988	0.01		99	90 - 110%
7440-48-4	COBALT	0.5	0.495	0.01		99	90 - 110%
7440-50-8	COPPER	1	1.07	0.01		107	90 - 110%
7439-89-6	IRON	20	20.4	0.1		102	90 - 110%
7439-92-1	LEAD	1	1.02	0.003		102	90 - 110%
7439-95-4	MAGNESIUM	50	51.3	1		103	90 - 110%
7439-96-5	MANGANESE	1	0.991	0.01		99	90 - 110%
7439-98-7	MOLYBDENUM	1	1.01	0.01		101	90 - 110%
7440-02-0	NICKEL	1	1.02	0.02		102	90 - 110%
7440-09-7	POTASSIUM	50	50.7	1		101	90 - 110%
7782-49-2	SELENIUM	1	1.07	0.005		107	90 - 110%
7440-22-4	SILVER	0.2	0.201	0.01		101	90 - 110%
7440-23-5	SODIUM	50	50.0	1		100	90 - 110%
7440-28-0	THALLIUM	0.5	0.548	0.01		110	90 - 110%
7440-31-5	TIN	1	1.08	0.05		108	90 - 110%
7440-62-2	VANADIUM	0.5	0.496	0.01		99	90 - 110%
7440-66-6	ZINC	1	0.965	0.02		97	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV8

QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1

Date Analyzed: 11/18/2011

Time Analyzed: 18:08

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	53.2	0.2		106	90 - 110%
7440-36-0	ANTIMONY	0.5	0.510	0.02		102	90 - 110%
7440-38-2	ARSENIC	0.5	0.522	0.01		104	90 - 110%
7440-39-3	BARIUM	1	1.04	0.1		104	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.482	0.005		96	90 - 110%
7440-43-9	CADMIUM	0.5	0.508	0.005		102	90 - 110%
7440-70-2	CALCIUM	50	48.5	1		97	90 - 110%
7440-47-3	CHROMIUM	1	0.975	0.01		98	90 - 110%
7440-48-4	COBALT	0.5	0.487	0.01		97	90 - 110%
7440-50-8	COPPER	1	1.06	0.01		106	90 - 110%
7439-89-6	IRON	20	20.0	0.1		100	90 - 110%
7439-92-1	LEAD	1	1.00	0.003		100	90 - 110%
7439-95-4	MAGNESIUM	50	50.6	1		101	90 - 110%
7439-96-5	MANGANESE	1	0.977	0.01		98	90 - 110%
7439-98-7	MOLYBDENUM	1	0.995	0.01		99	90 - 110%
7440-02-0	NICKEL	1	1.01	0.02		101	90 - 110%
7440-09-7	POTASSIUM	50	49.8	1		100	90 - 110%
7782-49-2	SELENIUM	1	1.05	0.005		105	90 - 110%
7440-22-4	SILVER	0.2	0.200	0.01		100	90 - 110%
7440-23-5	SODIUM	50	49.4	1		99	90 - 110%
7440-28-0	THALLIUM	0.5	0.539	0.01		108	90 - 110%
7440-31-5	TIN	1	1.07	0.05		107	90 - 110%
7440-62-2	VANADIUM	0.5	0.487	0.01		97	90 - 110%
7440-66-6	ZINC	1	0.947	0.02		95	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV9
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 18:34
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	52.4	0.2		105	90 - 110%
7440-36-0	ANTIMONY	0.5	0.501	0.02		100	90 - 110%
7440-38-2	ARSENIC	0.5	0.512	0.01		102	90 - 110%
7440-39-3	BARIUM	1	1.02	0.1		102	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.476	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.504	0.005		101	90 - 110%
7440-70-2	CALCIUM	50	48.4	1		97	90 - 110%
7440-47-3	CHROMIUM	1	0.969	0.01		97	90 - 110%
7440-48-4	COBALT	0.5	0.481	0.01		96	90 - 110%
7440-50-8	COPPER	1	1.03	0.01		103	90 - 110%
7439-89-6	IRON	20	19.9	0.1		99	90 - 110%
7439-92-1	LEAD	1	0.987	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.0	1		100	90 - 110%
7439-96-5	MANGANESE	1	0.968	0.01		97	90 - 110%
7439-98-7	MOLYBDENUM	1	0.983	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.994	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	48.9	1		98	90 - 110%
7782-49-2	SELENIUM	1	1.03	0.005		103	90 - 110%
7440-22-4	SILVER	0.2	0.198	0.01		99	90 - 110%
7440-23-5	SODIUM	50	48.8	1		98	90 - 110%
7440-28-0	THALLIUM	0.5	0.532	0.01		106	90 - 110%
7440-31-5	TIN	1	1.06	0.05		106	90 - 110%
7440-62-2	VANADIUM	0.5	0.482	0.01		96	90 - 110%
7440-66-6	ZINC	1	0.948	0.02		95	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV10
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 18:57
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	52.4	0.2		105	90 - 110%
7440-36-0	ANTIMONY	0.5	0.499	0.02		100	90 - 110%
7440-38-2	ARSENIC	0.5	0.514	0.01		103	90 - 110%
7440-39-3	BARIUM	1	1.03	0.1		103	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.474	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.501	0.005		100	90 - 110%
7440-70-2	CALCIUM	50	47.9	1		96	90 - 110%
7440-47-3	CHROMIUM	1	0.961	0.01		96	90 - 110%
7440-48-4	COBALT	0.5	0.479	0.01		96	90 - 110%
7440-50-8	COPPER	1	1.04	0.01		104	90 - 110%
7439-89-6	IRON	20	19.7	0.1		99	90 - 110%
7439-92-1	LEAD	1	0.985	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.0	1		100	90 - 110%
7439-96-5	MANGANESE	1	0.961	0.01		96	90 - 110%
7439-98-7	MOLYBDENUM	1	0.982	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.992	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	49.2	1		98	90 - 110%
7782-49-2	SELENIUM	1	1.03	0.005		103	90 - 110%
7440-22-4	SILVER	0.2	0.198	0.01		99	90 - 110%
7440-23-5	SODIUM	50	48.9	1		98	90 - 110%
7440-28-0	THALLIUM	0.5	0.531	0.01		106	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.481	0.01		96	90 - 110%
7440-66-6	ZINC	1	0.934	0.02		93	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV11
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 19:20
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	52.6	0.2		105	90 - 110%
7440-36-0	ANTIMONY	0.5	0.506	0.02		101	90 - 110%
7440-38-2	ARSENIC	0.5	0.515	0.01		103	90 - 110%
7440-39-3	BARIUM	1	1.03	0.1		103	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.474	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.504	0.005		101	90 - 110%
7440-70-2	CALCIUM	50	47.9	1		96	90 - 110%
7440-47-3	CHROMIUM	1	0.963	0.01		96	90 - 110%
7440-48-4	COBALT	0.5	0.481	0.01		96	90 - 110%
7440-50-8	COPPER	1	1.05	0.01		105	90 - 110%
7439-89-6	IRON	20	19.7	0.1		98	90 - 110%
7439-92-1	LEAD	1	0.986	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.1	1		100	90 - 110%
7439-96-5	MANGANESE	1	0.960	0.01		96	90 - 110%
7439-98-7	MOLYBDENUM	1	0.978	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.995	0.02		100	90 - 110%
7440-09-7	POTASSIUM	50	49.3	1		99	90 - 110%
7782-49-2	SELENIUM	1	1.03	0.005		103	90 - 110%
7440-22-4	SILVER	0.2	0.199	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.1	1		98	90 - 110%
7440-28-0	THALLIUM	0.5	0.538	0.01		108	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.482	0.01		96	90 - 110%
7440-66-6	ZINC	1	0.929	0.02		93	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV12
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 19:44
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	52.8	0.2		106	90 - 110%
7440-36-0	ANTIMONY	0.5	0.502	0.02		100	90 - 110%
7440-38-2	ARSENIC	0.5	0.510	0.01		102	90 - 110%
7440-39-3	BARIUM	1	1.03	0.1		103	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.477	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.498	0.005		100	90 - 110%
7440-70-2	CALCIUM	50	47.8	1		96	90 - 110%
7440-47-3	CHROMIUM	1	0.966	0.01		97	90 - 110%
7440-48-4	COBALT	0.5	0.481	0.01		96	90 - 110%
7440-50-8	COPPER	1	1.05	0.01		105	90 - 110%
7439-89-6	IRON	20	19.8	0.1		99	90 - 110%
7439-92-1	LEAD	1	0.992	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.4	1		101	90 - 110%
7439-96-5	MANGANESE	1	0.967	0.01		97	90 - 110%
7439-98-7	MOLYBDENUM	1	0.980	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.980	0.02		98	90 - 110%
7440-09-7	POTASSIUM	50	49.3	1		99	90 - 110%
7782-49-2	SELENIUM	1	1.04	0.005		104	90 - 110%
7440-22-4	SILVER	0.2	0.198	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.2	1		98	90 - 110%
7440-28-0	THALLIUM	0.5	0.527	0.01		105	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.483	0.01		97	90 - 110%
7440-66-6	ZINC	1	0.944	0.02		94	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV13
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 20:08
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	52.7	0.2		105	90 - 110%
7440-36-0	ANTIMONY	0.5	0.499	0.02		100	90 - 110%
7440-38-2	ARSENIC	0.5	0.514	0.01		103	90 - 110%
7440-39-3	BARIUM	1	1.02	0.1		102	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.479	0.005		96	90 - 110%
7440-43-9	CADMIUM	0.5	0.503	0.005		101	90 - 110%
7440-70-2	CALCIUM	50	48.3	1		97	90 - 110%
7440-47-3	CHROMIUM	1	0.973	0.01		97	90 - 110%
7440-48-4	COBALT	0.5	0.483	0.01		97	90 - 110%
7440-50-8	COPPER	1	1.04	0.01		104	90 - 110%
7439-89-6	IRON	20	19.9	0.1		99	90 - 110%
7439-92-1	LEAD	1	0.993	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.4	1		101	90 - 110%
7439-96-5	MANGANESE	1	0.971	0.01		97	90 - 110%
7439-98-7	MOLYBDENUM	1	0.980	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.991	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	48.9	1		98	90 - 110%
7782-49-2	SELENIUM	1	1.03	0.005		103	90 - 110%
7440-22-4	SILVER	0.2	0.199	0.01		99	90 - 110%
7440-23-5	SODIUM	50	48.9	1		98	90 - 110%
7440-28-0	THALLIUM	0.5	0.533	0.01		107	90 - 110%
7440-31-5	TIN	1	1.06	0.05		106	90 - 110%
7440-62-2	VANADIUM	0.5	0.485	0.01		97	90 - 110%
7440-66-6	ZINC	1	0.958	0.02		96	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV14
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 20:31
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	52.4	0.2		105	90 - 110%
7440-36-0	ANTIMONY	0.5	0.495	0.02		99	90 - 110%
7440-38-2	ARSENIC	0.5	0.513	0.01		103	90 - 110%
7440-39-3	BARIUM	1	1.02	0.1		102	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.476	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.498	0.005		100	90 - 110%
7440-70-2	CALCIUM	50	48.0	1		96	90 - 110%
7440-47-3	CHROMIUM	1	0.966	0.01		97	90 - 110%
7440-48-4	COBALT	0.5	0.480	0.01		96	90 - 110%
7440-50-8	COPPER	1	1 03	0.01		103	90 - 110%
7439-89-6	IRON	20	19.7	0.1		99	90 - 110%
7439-92-1	LEAD	1	0.991	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.1	1		100	90 - 110%
7439-96-5	MANGANESE	1	0.965	0.01		96	90 - 110%
7439-98-7	MOLYBDENUM	1	0.977	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.981	0.02		98	90 - 110%
7440-09-7	POTASSIUM	50	48.6	1		97	90 - 110%
7782-49-2	SELENIUM	1	1.03	0.005		103	90 - 110%
7440-22-4	SILVER	0.2	0.198	0.01		99	90 - 110%
7440-23-5	SODIUM	50	48.7	1		97	90 - 110%
7440-28-0	THALLIUM	0.5	0.532	0.01		106	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.480	0.01		96	90 - 110%
7440-66-6	ZINC	1	0.955	0.02		95	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV15

QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1

Date Analyzed: 11/18/2011

Time Analyzed: 20:55

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	52.8	0.2		106	90 - 110%
7440-36-0	ANTIMONY	0.5	0.503	0.02		101	90 - 110%
7440-38-2	ARSENIC	0.5	0.512	0.01		102	90 - 110%
7440-39-3	BARIUM	1	1.03	0.1		103	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.477	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.504	0.005		101	90 - 110%
7440-70-2	CALCIUM	50	48.1	1		96	90 - 110%
7440-47-3	CHROMIUM	1	0.968	0.01		97	90 - 110%
7440-48-4	COBALT	0.5	0.482	0.01		96	90 - 110%
7440-50-8	COPPER	1	1.05	0.01		105	90 - 110%
7439-89-6	IRON	20	19.8	0.1		99	90 - 110%
7439-92-1	LEAD	1	0.989	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.3	1		101	90 - 110%
7439-96-5	MANGANESE	1	0.965	0.01		97	90 - 110%
7439-98-7	MOLYBDENUM	1	0.980	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.992	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	49.1	1		98	90 - 110%
7782-49-2	SELENIUM	1	1.03	0.005		103	90 - 110%
7440-22-4	SILVER	0.2	0.199	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.1	1		98	90 - 110%
7440-28-0	THALLIUM	0.5	0.528	0.01		106	90 - 110%
7440-31-5	TIN	1	1.06	0.05		106	90 - 110%
7440-62-2	VANADIUM	0.5	0.483	0.01		97	90 - 110%
7440-66-6	ZINC	1	0.946	0.02		95	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV16
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 21:18
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	53.0	0.2		106	90 - 110%
7440-36-0	ANTIMONY	0.5	0.497	0.02		99	90 - 110%
7440-38-2	ARSENIC	0.5	0.516	0.01		103	90 - 110%
7440-39-3	BARIUM	1	1.03	0.1		103	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.475	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.500	0.005		100	90 - 110%
7440-70-2	CALCIUM	50	48.0	1		96	90 - 110%
7440-47-3	CHROMIUM	1	0.963	0.01		96	90 - 110%
7440-48-4	COBALT	0.5	0.482	0.01		96	90 - 110%
7440-50-8	COPPER	1	1.05	0.01		105	90 - 110%
7439-89-6	IRON	20	19.7	0.1		99	90 - 110%
7439-92-1	LEAD	1	0.990	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.5	1		101	90 - 110%
7439-96-5	MANGANESE	1	0.962	0.01		96	90 - 110%
7439-98-7	MOLYBDENUM	1	0.979	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.994	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	49.3	1		99	90 - 110%
7782-49-2	SELENIUM	1	1.04	0.005		104	90 - 110%
7440-22-4	SILVER	0.2	0.199	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.3	1		99	90 - 110%
7440-28-0	THALLIUM	0.5	0.532	0.01		106	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.482	0.01		96	90 - 110%
7440-66-6	ZINC	1	0.941	0.02		94	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV17
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 21:41
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	53.0	0.2		106	90 - 110%
7440-36-0	ANTIMONY	0.5	0.503	0.02		101	90 - 110%
7440-38-2	ARSENIC	0.5	0.520	0.01		104	90 - 110%
7440-39-3	BARIUM	1	1.03	0.1		103	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.475	0.005		95	90 - 110%
7440-43-9	CADMIUM	0.5	0.500	0.005		100	90 - 110%
7440-70-2	CALCIUM	50	47.6	1		95	90 - 110%
7440-47-3	CHROMIUM	1	0.961	0.01		96	90 - 110%
7440-48-4	COBALT	0.5	0.481	0.01		96	90 - 110%
7440-50-8	COPPER	1	1.06	0.01		106	90 - 110%
7439-89-6	IRON	20	19.7	0.1		99	90 - 110%
7439-92-1	LEAD	1	0.988	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.4	1		101	90 - 110%
7439-96-5	MANGANESE	1	0.961	0.01		96	90 - 110%
7439-98-7	MOLYBDENUM	1	0.978	0.01		98	90 - 110%
7440-02-0	NICKEL	1	0.995	0.02		100	90 - 110%
7440-09-7	POTASSIUM	50	49.6	1		99	90 - 110%
7782-49-2	SELENIUM	1	1.04	0.005		104	90 - 110%
7440-22-4	SILVER	0.2	0.198	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.3	1		99	90 - 110%
7440-28-0	THALLIUM	0.5	0.533	0.01		107	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.483	0.01		97	90 - 110%
7440-66-6	ZINC	1	0.936	0.02		94	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV18
QC Type: Continuing Calibration

File Name: 111118A.

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 22:06
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	53.0	0.2		106	90 - 110%
7440-36-0	ANTIMONY	0.5	0.506	0.02		101	90 - 110%
7440-38-2	ARSENIC	0.5	0.516	0.01		103	90 - 110%
7440-39-3	BARIUM	1	1.03	0.1		103	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.472	0.005		94	90 - 110%
7440-43-9	CADMIUM	0.5	0.500	0.005		100	90 - 110%
7440-70-2	CALCIUM	50	47.5	1		95	90 - 110%
7440-47-3	CHROMIUM	1	0.958	0.01		96	90 - 110%
7440-48-4	COBALT	0.5	0.480	0.01		96	90 - 110%
7440-50-8	COPPER	1	1.06	0.01		106	90 - 110%
7439-89-6	IRON	20	19.6	0.1		98	90 - 110%
7439-92-1	LEAD	1	0.986	0.003		99	90 - 110%
7439-95-4	MAGNESIUM	50	50.2	1		100	90 - 110%
7439-96-5	MANGANESE	1	0.956	0.01		96	90 - 110%
7439-98-7	MOLYBDENUM	1	0.974	0.01		97	90 - 110%
7440-02-0	NICKEL	1	0.994	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	49.6	1		99	90 - 110%
7782-49-2	SELENIUM	1	1.04	0.005		104	90 - 110%
7440-22-4	SILVER	0.2	0.198	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.4	1		99	90 - 110%
7440-28-0	THALLIUM	0.5	0.530	0.01		106	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.481	0.01		96	90 - 110%
7440-66-6	ZINC	1	0.927	0.02		93	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCV19
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 22:25
File Name: 111118A.
Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	50	52.8	0.2		106	90 - 110%
7440-36-0	ANTIMONY	0.5	0.499	0.02		100	90 - 110%
7440-38-2	ARSENIC	0.5	0.519	0.01		104	90 - 110%
7440-39-3	BARIUM	1	1.02	0.1		102	90 - 110%
7440-41-7	BERYLLIUM	0.5	0.472	0.005		94	90 - 110%
7440-43-9	CADMIUM	0.5	0.501	0.005		100	90 - 110%
7440-70-2	CALCIUM	50	47.8	1		96	90 - 110%
7440-47-3	CHROMIUM	1	0.960	0.01		96	90 - 110%
7440-48-4	COBALT	0.5	0.479	0.01		96	90 - 110%
7440-50-8	COPPER	1	1.05	0.01		105	90 - 110%
7439-89-6	IRON	20	19.7	0.1		99	90 - 110%
7439-92-1	LEAD	1	0.981	0.003		98	90 - 110%
7439-95-4	MAGNESIUM	50	50.3	1		101	90 - 110%
7439-96-5	MANGANESE	1	0.957	0.01		96	90 - 110%
7439-98-7	MOLYBDENUM	1	0.973	0.01		97	90 - 110%
7440-02-0	NICKEL	1	0.993	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	49.2	1		98	90 - 110%
7782-49-2	SELENIUM	1	1.03	0.005		103	90 - 110%
7440-22-4	SILVER	0.2	0.198	0.01		99	90 - 110%
7440-23-5	SODIUM	50	49.2	1		98	90 - 110%
7440-28-0	THALLIUM	0.5	0.530	0.01		106	90 - 110%
7440-31-5	TIN	1	1.05	0.05		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.480	0.01		96	90 - 110%
7440-66-6	ZINC	1	0.934	0.02		93	90 - 110%

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: ICB
QC Type: Initial Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 2:32:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB1
QC Type: Continuing Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 2:48:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB2
QC Type: Continuing Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 3:10:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB3
QC Type: Continuing Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 3:20:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB4
QC Type: Continuing Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 3:42:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB5
QC Type: Continuing Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 4:05:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0 01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB6
QC Type: Continuing Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 4:35:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB7
QC Type: Continuing Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 4:57:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB8
QC Type: Continuing Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 5:21:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB9
QC Type: Continuing Calibration

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Time Analyzed: 5:46:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: ICB
QC Type: Initial Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 2:49:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB1
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 3:02:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB2
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 3:25:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB3
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 3:50:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB4
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 4:19:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB5
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 4:46:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB6
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 5:09:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB7
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 5:28:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB8
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 6:10:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB9

QC Type: Continuing Calibration

Run ID: IT111118-2A1

Date Analyzed: 11/18/2011

Time Analyzed: 6:36:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB10
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 6:59:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB11
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 7:22:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB12
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 7:46:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB13
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 8:10:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB14
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 8:33:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB15
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 8:57:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB16

QC Type: Continuing Calibration

Run ID: IT111118-2A1

Date Analyzed: 11/18/2011

Time Analyzed: 9:20:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB17
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 9:43:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB18
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 10:08:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: CCB19
QC Type: Continuing Calibration

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Time Analyzed: 10:27:00 PM
Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.2	0.2	U
7440-36-0	ANTIMONY	0.02	0.02	U
7440-38-2	ARSENIC	0.01	0.01	U
7440-39-3	BARIUM	0.1	0.1	U
7440-41-7	BERYLLIUM	0.005	0.005	U
7440-43-9	CADMIUM	0.005	0.005	U
7440-70-2	CALCIUM	1	1	U
7440-47-3	CHROMIUM	0.01	0.01	U
7440-48-4	COBALT	0.01	0.01	U
7440-50-8	COPPER	0.01	0.01	U
7439-89-6	IRON	0.1	0.1	U
7439-92-1	LEAD	0.003	0.003	U
7439-95-4	MAGNESIUM	1	1	U
7439-96-5	MANGANESE	0.01	0.01	U
7439-98-7	MOLYBDENUM	0.01	0.01	U
7440-02-0	NICKEL	0.02	0.02	U
7440-09-7	POTASSIUM	1	1	U
7782-49-2	SELENIUM	0.005	0.005	U
7440-22-4	SILVER	0.01	0.01	U
7440-23-5	SODIUM	1	1	U
7440-28-0	THALLIUM	0.01	0.01	U
7440-31-5	TIN	0.05	0.05	U
7440-62-2	VANADIUM	0.01	0.01	U
7440-66-6	ZINC	0.02	0.02	U

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

ICP Interference Check Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Result Units: MG/L

CASNO	Target Analyte	Spike Added		Results		% Rec.
		ICSA1	ICSAB1	ICSA1	ICSAB1	
7429-90-5	ALUMINUM	250	250	265	214	85
7440-36-0	ANTIMONY		0.6		0.56300	94
7440-38-2	ARSENIC		0.1		0.10100	101
7440-39-3	BARIUM		0.5		0.50900	102
7440-41-7	BERYLLIUM		0.5		0.478	96
7440-43-9	CADMIUM		1		1.04	104
7440-70-2	CALCIUM	250	250	262	267	107
7440-47-3	CHROMIUM		0.5		0.48	96
7440-48-4	COBALT		0.5		0.484	97
7440-50-8	COPPER		0.5		0.51800	104
7439-89-6	IRON	100	100	108	110	110
7439-92-1	LEAD		0.05		0.0477	95
7439-95-4	MAGNESIUM	250	250	267	271	108
7439-96-5	MANGANESE		0.5		0.49000	98
7439-98-7	MOLYBDENUM		1		0.99900	100
7440-02-0	NICKEL		1		0.95	95
7440-09-7	POTASSIUM					
7782-49-2	SELENIUM		0.05		0.04800	96
7440-22-4	SILVER		0.2		0.203	102
7440-23-5	SODIUM					
7440-28-0	THALLIUM		0.1		0.10700	107
7440-31-5	TIN		1		1	100
7440-62-2	VANADIUM		0.5		0.489	98
7440-66-6	ZINC		1		0.91500	91

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

ICP Interference Check Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: IT111117-2A1
Date Analyzed: 11/17/2011
Result Units: MG/L

CASNO	Target Analyte	Spike Added		Results		% Rec.
		ICSA2	ICSAB2	ICSA2	ICSAB2	
7429-90-5	ALUMINUM	250	250	264	211	84
7440-36-0	ANTIMONY		0.6		0.553	92
7440-38-2	ARSENIC		0.1		0.09860	99
7440-39-3	BARIUM		0.5		0.498	100
7440-41-7	BERYLLIUM		0.5		0.471	94
7440-43-9	CADMIUM		1		1.04	104
7440-70-2	CALCIUM	250	250	264	264	106
7440-47-3	CHROMIUM		0.5		0.475	95
7440-48-4	COBALT		0.5		0.48	96
7440-50-8	COPPER		0.5		0.52	104
7439-89-6	IRON	100	100	107	107	107
7439-92-1	LEAD		0.05		0.05000	100
7439-95-4	MAGNESIUM	250	250	268	268	107
7439-96-5	MANGANESE		0.5		0.48	96
7439-98-7	MOLYBDENUM		1		0.983	98
7440-02-0	NICKEL		1		0.94700	95
7440-09-7	POTASSIUM					
7782-49-2	SELENIUM		0.05		0.051	102
7440-22-4	SILVER		0.2		0.205	102
7440-23-5	SODIUM					
7440-28-0	THALLIUM		0.1		0.10300	103
7440-31-5	TIN		1		0.99900	100
7440-62-2	VANADIUM		0.5		0.48300	97
7440-66-6	ZINC		1		0.89700	90

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

ICP Interference Check Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Result Units: MG/L

CASNO	Target Analyte	Spike Added		Results		% Rec.
		ICSA1	ICSAB1	ICSA1	ICSAB1	
7429-90-5	ALUMINUM	250	250	277	222	89
7440-36-0	ANTIMONY		0.6		0.58	97
7440-38-2	ARSENIC		0.1		0.106	106
7440-39-3	BARIUM		0.5		0.52100	104
7440-41-7	BERYLLIUM		0.5		0.477	95
7440-43-9	CADMIUM		1		0.98000	98
7440-70-2	CALCIUM	250	250	264	264	105
7440-47-3	CHROMIUM		0.5		0.471	94
7440-48-4	COBALT		0.5		0.47200	94
7440-50-8	COPPER		0.5		0.53700	107
7439-89-6	IRON	100	100	111	112	112
7439-92-1	LEAD		0.05		0.04940	99
7439-95-4	MAGNESIUM	250	250	274	276	110
7439-96-5	MANGANESE		0.5		0.496	99
7439-98-7	MOLYBDENUM		1		0.977	98
7440-02-0	NICKEL		1		0.92400	92
7440-09-7	POTASSIUM					
7782-49-2	SELENIUM		0.05		0.05040	101
7440-22-4	SILVER		0.2		0.189	94
7440-23-5	SODIUM					
7440-28-0	THALLIUM		0.1		0.10300	103
7440-31-5	TIN		1		1.05	105
7440-62-2	VANADIUM		0.5		0.477	95
7440-66-6	ZINC		1		0.92000	92

Data Package ID: *IT1111162-1*

ICP Metals

Method SW6010

ICP Interference Check Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: IT111118-2A1
Date Analyzed: 11/18/2011
Result Units: MG/L

CASNO	Target Analyte	Spike Added		Results		% Rec.
		ICSA2	ICSAB2	ICSA2	ICSAB2	
7429-90-5	ALUMINUM	250	250	276	218	87
7440-36-0	ANTIMONY		0.6		0.58300	97
7440-38-2	ARSENIC		0.1		0.09780	98
7440-39-3	BARIUM		0.5		0.50800	102
7440-41-7	BERYLLIUM		0.5		0.461	92
7440-43-9	CADMIUM		1		0.98900	99
7440-70-2	CALCIUM	250	250	256	257	103
7440-47-3	CHROMIUM		0.5		0.45500	91
7440-48-4	COBALT		0.5		0.461	92
7440-50-8	COPPER		0.5		0.53500	107
7439-89-6	IRON	100	100	105	105	105
7439-92-1	LEAD		0.05		0.0479	96
7439-95-4	MAGNESIUM	250	250	270	269	108
7439-96-5	MANGANESE		0.5		0.471	94
7439-98-7	MOLYBDENUM		1		0.95800	96
7440-02-0	NICKEL		1		0.959	96
7440-09-7	POTASSIUM					
7782-49-2	SELENIUM		0.05		0.0503	101
7440-22-4	SILVER		0.2		0.188	94
7440-23-5	SODIUM					
7440-28-0	THALLIUM		0.1		0.10300	103
7440-31-5	TIN		1		1.05	105
7440-62-2	VANADIUM		0.5		0.466	93
7440-66-6	ZINC		1		0.88800	89

Data Package ID: *IT1111162-1*

Metals Linear Ranges

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Instrument ID: ICPTrace2
Active Date: 03/02/2010
Expiration Date: 05/31/2015

CASNO	Target Analyte	Concentration (ppm)
7429-90-5	ALUMINUM	500
7440-36-0	ANTIMONY	2
7440-38-2	ARSENIC	5
7440-39-3	BARIUM	10
7440-41-7	BERYLLIUM	1
7440-43-9	CADMIUM	5
7440-70-2	CALCIUM	500
7440-47-3	CHROMIUM	10
7440-48-4	COBALT	5
7440-50-8	COPPER	10
7439-89-6	IRON	200
7439-92-1	LEAD	10
7439-95-4	MAGNESIUM	500
7439-96-5	MANGANESE	10
7439-98-7	MOLYBDENUM	10
7440-02-0	NICKEL	10
7440-09-7	POTASSIUM	250
7782-49-2	SELENIUM	5
7440-22-4	SILVER	2
7440-23-5	SODIUM	150
7440-28-0	THALLIUM	5
7440-31-5	TIN	10
7440-61-1	URANIUM	50
7440-62-2	VANADIUM	5
7440-66-6	ZINC	10

ICP Interelement Correction Factors

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Instrument ID: ICPTrace2
Active Date: 11/17/2009
Expiration Date: 11/17/2010

Analyte	Lamda (nm)	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	Th
ALUMINUM																	
ANTIMONY									0.0103504								
BERYLLIUM																	
CADMIUM				0.0068507													
CHROMIUM																	
COBALT					-0.001400												
COPPER																	
LEAD		0.0002386										0.0000243					
SELENIUM												0.000036					
SILVER																	
THALLIUM												-0.000142			-0.000176		
TIN																	
URANIUM												0.0006809					
VANADIUM												-0.000194					

ICP Interelement Correction Factors

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Instrument ID: ICPTrace2
Active Date: 11/17/2009
Expiration Date: 11/17/2010

Analyte	Lamda (nm)	K	Se	Ag	Na	Tl	V	Zn	Sn	Ti	Mo	Li	Sr	B	Si	U	Zr
ALUMINUM							0.0125517				0.0033239					-0.028003	
ANTIMONY											-0.008489						
BERYLLIUM							0.0010513										
CADMIUM																	
CHROMIUM																0.0005333	
COBALT										0.002105							
COPPER																0.0007767	
LEAD										0.0002142	-0.001821					0.0009113	
SELENIUM																0.0000151	
SILVER																0.0006982	
THALLIUM							0.0006359			-0.000251						-0.000582	
TIN										0.0011632							
URANIUM																	
VANADIUM																	

ICPTrace2 Run Log -- 11/17/2011

Instrument ID: ICPTrace2
File Name: 111117A.
AnalRunID: IT111117-2A1
CalibRefID: IT111117-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		MIXBHIGH	1	11/17/2011	13:43
		MIXBHIGH	1	11/17/2011	14:07
		MIXAHIGH	1	11/17/2011	14:12
		MIXCHIGH	1	11/17/2011	14:13
		ICV	1	11/17/2011	14:28
		ZZZ	1	11/17/2011	14:29
		ICB	1	11/17/2011	14:32
		CRI1	1	11/17/2011	14:35
		ICSA1	1	11/17/2011	14:37
		ICSAB1	1	11/17/2011	14:44
		CCV1	1	11/17/2011	14:46
		CCB1	1	11/17/2011	14:48
		F111115-1MB	1	11/17/2011	14:50
		F111115-1	1	11/17/2011	14:52
		F111115-1LCS	1	11/17/2011	14:53
		1111119-1	1	11/17/2011	14:55
- S		1111150-1	1	11/17/2011	14:57
- S		1111150-1DUP	1	11/17/2011	14:59
- S		1111150-1SER	5	11/17/2011	15:01
- S		1111150-1MS	1	11/17/2011	15:02
- S		1111150-1MSD	1	11/17/2011	15:04
- Na		1111179-1	1	11/17/2011	15:06
		CCV2	1	11/17/2011	15:09
		CCB2	1	11/17/2011	15:10
		1111184-1	1	11/17/2011	15:12
+ Na		1111179-1	5	11/17/2011	15:14
		CCV3	1	11/17/2011	15:16
		CCB3	1	11/17/2011	15:20
		IP111116-3MB	1	11/17/2011	15:21
		IP111116-3	1	11/17/2011	15:23
		IP111116-3LCS	1	11/17/2011	15:25
		1111185-2	1	11/17/2011	15:27
		1111185-3	1	11/17/2011	15:28
- Na,S		1111185-4	1	11/17/2011	15:30
- Na,S		1111185-5	1	11/17/2011	15:32

Data Package ID: IT1111162-1

ICPTrace2 Run Log -- 11/17/2011

Instrument ID: ICPTrace2
File Name: 111117A.
AnalRunID: IT111117-2A1
CalibRefID: IT111117-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1111185-6	1	11/17/2011	15:34
		1111185-7	1	11/17/2011	15:36
		1111185-8	1	11/17/2011	15:37
		CCV4	1	11/17/2011	15:40
		CCB4	1	11/17/2011	15:42
		1111185-9	1	11/17/2011	15:44
		1111185-10	1	11/17/2011	15:46
		1111185-11	1	11/17/2011	15:47
		1111185-12	1	11/17/2011	15:49
		1111185-12DUP	1	11/17/2011	15:51
		1111185-12SER	5	11/17/2011	15:53
		1111185-12MS	1	11/17/2011	15:55
		1111185-12MSD	1	11/17/2011	15:56
		1111185-14	1	11/17/2011	15:58
		1111185-15	1	11/17/2011	16:00
		CCV5	1	11/17/2011	16:03
		CCB5	1	11/17/2011	16:05
		1111185-16	1	11/17/2011	16:06
		1111185-17	1	11/17/2011	16:08
		1111185-18	1	11/17/2011	16:10
		1111185-19	1	11/17/2011	16:12
		1111185-20	1	11/17/2011	16:14
		1111185-22	1	11/17/2011	16:16
		1111185-23	1	11/17/2011	16:17
		IP111116-4MB	1	11/17/2011	16:19
		IP111116-4	1	11/17/2011	16:21
		CCV6	1	11/17/2011	16:33
		CCB6	1	11/17/2011	16:35
		IP111116-4LCS	1	11/17/2011	16:36
		1111137-1	1	11/17/2011	16:38
		1111138-1	1	11/17/2011	16:40
		1111140-1	1	11/17/2011	16:42
- Si,Zr		1111160-1	1	11/17/2011	16:44
	ST1-01-111108	1111162-16	1	11/17/2011	16:46
		1111185-13	1	11/17/2011	16:47

Data Package ID: IT1111162-1

ICPTrace2 Run Log -- 11/17/2011

Instrument ID: ICPTrace2
File Name: 111117A.
AnalRunID: IT111117-2A1
CalibRefID: IT111117-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1111185-13DUP	1	11/17/2011	16:49
		1111185-13SER	5	11/17/2011	16:51
		1111185-13MS	1	11/17/2011	16:53
		CCV7	1	11/17/2011	16:55
		CCB7	1	11/17/2011	16:57
		1111185-13MSD	1	11/17/2011	16:59
		1111185-24	1	11/17/2011	17:01
		1111185-25	1	11/17/2011	17:03
		1111185-26	1	11/17/2011	17:05
		1111185-27	1	11/17/2011	17:07
		1111185-28	1	11/17/2011	17:09
		1111185-29	1	11/17/2011	17:11
		1111185-30	1	11/17/2011	17:12
		1111185-31	1	11/17/2011	17:14
		1111185-32	1	11/17/2011	17:16
		CCV8	1	11/17/2011	17:19
		CCB8	1	11/17/2011	17:21
		1111185-33	1	11/17/2011	17:22
		1111185-34	1	11/17/2011	17:24
		1111185-35	1	11/17/2011	17:26
- K,Mg,Na,S,Th		1111205-1	1	11/17/2011	17:28
- K,Mg,Na,S,Th		1111205-2	1	11/17/2011	17:30
+ Na,S		1111185-4	5	11/17/2011	17:34
+ Na,S		1111185-5	5	11/17/2011	17:36
		CRI2	1	11/17/2011	17:38
		ICSA2	1	11/17/2011	17:40
		ICSAB2	1	11/17/2011	17:41
		CCV9	1	11/17/2011	17:43
		CCB9	1	11/17/2011	17:46

Data Package ID: IT1111162-1

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		MIXBHIGH	1	11/18/2011	14:08
		MIXAHIGH	1	11/18/2011	14:10
		MIXCHIGH	1	11/18/2011	14:12
		ICV	1	11/18/2011	14:47
		ICB	1	11/18/2011	14:49
		CRI1	1	11/18/2011	14:51
		ICSA1	1	11/18/2011	14:53
		ICSAB1	1	11/18/2011	14:55
		CCV1	1	11/18/2011	15:00
		CCB1	1	11/18/2011	15:02
		F111115-1LCS	1	11/18/2011	15:04
- Na		1111179-1	1	11/18/2011	15:06
		1111184-1	1	11/18/2011	15:08
		IP111116-5MB	1	11/18/2011	15:10
		IP111116-5LCS	1	11/18/2011	15:11
		1111037-3	1	11/18/2011	15:13
		1111037-3DUP	1	11/18/2011	15:15
		1111037-3SER	5	11/18/2011	15:17
		1111037-3MS	1	11/18/2011	15:19
		1111037-3MSD	1	11/18/2011	15:20
		CCV2	1	11/18/2011	15:23
		CCB2	1	11/18/2011	15:25
- Ca,Na,Sr		1111040-1	10	11/18/2011	15:27
- Ca,Na,Sr		1111040-3	10	11/18/2011	15:29
- Ba,Ca,Co,Na,Sr		1111040-4	10	11/18/2011	15:31
- Ba,Ca,Co,Na,Sr		1111040-5	10	11/18/2011	15:33
- Ca,Na,Sr		1111040-7	10	11/18/2011	15:35
- Ba,Ca,Co,Na,Sr		1111051-1	10	11/18/2011	15:37
- Ba,Ca,Co,Na,Sr		1111051-2	10	11/18/2011	15:38
		1111059-9	1	11/18/2011	15:42
		1111059-10	1	11/18/2011	15:44
		1111078-2	1	11/18/2011	15:46
		CCV3	1	11/18/2011	15:48
		CCB3	1	11/18/2011	15:50
		1111078-8	1	11/18/2011	15:52

Data Package ID: IT1111162-1

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1111078-14	1	11/18/2011	15:54
		1111078-19	1	11/18/2011	15:56
		1111078-35	1	11/18/2011	15:58
		IP111117-1MB	1	11/18/2011	15:59
		IP111117-1	1	11/18/2011	16:01
		ZZZ	1	11/18/2011	16:03
- Bi,Cu,Fe,Mn,Pb,Se,Tl,U,V,Zn		1110384-1	1	11/18/2011	16:05
- Bi,Cu,Fe,Pb,Se,Tl,U,V,Zn		1110384-2	1	11/18/2011	16:07
		1110384-3	1	11/18/2011	16:16
		CCV4	1	11/18/2011	16:17
		CCB4	1	11/18/2011	16:19
		1110384-4	1	11/18/2011	16:21
- Pb		1110384-5	1	11/18/2011	16:23
- Pb		1110384-6	1	11/18/2011	16:25
		1111160-2	1	11/18/2011	16:31
		1111160-2DUP	1	11/18/2011	16:33
		1111160-2SER	5	11/18/2011	16:34
		1111160-2MS	1	11/18/2011	16:36
		1111160-2MSD	1	11/18/2011	16:38
- Fe,Pb,Se,Tl,U,V		1111160-3	1	11/18/2011	16:40
- Fe,Pb,Se,Tl,U,V		1111160-4	1	11/18/2011	16:42
		CCV5	1	11/18/2011	16:44
		CCB5	1	11/18/2011	16:46
- Fe,Pb,Se,Tl,U,V		1111160-5	1	11/18/2011	16:48
		1111160-6	1	11/18/2011	16:50
		1111160-7	1	11/18/2011	16:52
		1111160-8	1	11/18/2011	16:54
		1111160-9	1	11/18/2011	16:55
		1111160-10	1	11/18/2011	16:57
		1111160-11	1	11/18/2011	16:59
		1111160-12	1	11/18/2011	17:01
		1111160-13	1	11/18/2011	17:03
- S		1111160-14	1	11/18/2011	17:04
		CCV6	1	11/18/2011	17:07
		CCB6	1	11/18/2011	17:09

Data Package ID: IT1111162-1

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1111160-15	1	11/18/2011	17:11
+ Ca,Sr		1111040-1	100	11/18/2011	17:13
+ Ca,Sr		1111040-3	100	11/18/2011	17:15
+ Ba,Ca,Co		1111040-4	100	11/18/2011	17:16
+ Ba,Ca,Co		1111040-5	100	11/18/2011	17:18
+ Ca,Sr		1111040-7	100	11/18/2011	17:20
+ Ba,Ca,Co		1111051-1	100	11/18/2011	17:22
+ Ba,Ca,Co		1111051-2	100	11/18/2011	17:24
		CCV7	1	11/18/2011	17:26
		CCB7	1	11/18/2011	17:28
		IP111117-1LCS	1	11/18/2011	17:49
+ Bi,Cu,Fe,Mn,Pb,Se,Tl,U,V,Zn		1110384-1	10	11/18/2011	17:51
+ Bi,Cu,Fe,Pb,Se,Tl,U,V,Zn		1110384-2	10	11/18/2011	17:53
+ Pb		1110384-5	10	11/18/2011	17:55
+ Pb		1110384-6	10	11/18/2011	17:56
+ Fe,Pb,Se,Tl,U,V		1111160-3	5	11/18/2011	17:58
+ Fe,Pb,Se,Tl,U,V		1111160-4	5	11/18/2011	18:00
+ Fe,Pb,Se,Tl,U,V		1111160-5	5	11/18/2011	18:02
+ Na		1111040-1	1000	11/18/2011	18:04
+ Na		1111040-3	1000	11/18/2011	18:06
		CCV8	1	11/18/2011	18:08
		CCB8	1	11/18/2011	18:10
+ Na,Sr		1111040-4	1000	11/18/2011	18:12
+ Na,Sr		1111040-5	1000	11/18/2011	18:14
+ Na		1111040-7	1000	11/18/2011	18:16
+ Na,Sr		1111051-1	1000	11/18/2011	18:17
+ Na,Sr		1111051-2	1000	11/18/2011	18:19
+ B,Ba,K,Li,Sb,Si,Ti,Zn,Zr		1111160-2A	1	11/18/2011	18:21
		IP111117-2MB	1	11/18/2011	18:23
		IP111117-2	1	11/18/2011	18:25
		IP111117-2LCS	1	11/18/2011	18:27
	DY2-11-31-111109	1111162-1	1	11/18/2011	18:32
		CCV9	1	11/18/2011	18:34
		CCB9	1	11/18/2011	18:36
	DY2-11-31-111109	1111162-1DUP	1	11/18/2011	18:38

Data Package ID: IT1111162-1

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
	DY2-11-31-111109	1111162-1SER	5	11/18/2011	18:40
	DY2-11-31-111109	1111162-1MS	1	11/18/2011	18:42
	DY2-11-31-111109	1111162-1MSD	1	11/18/2011	18:44
	DY2-17-31-111109	1111162-2	1	11/18/2011	18:46
	DY2-17-32-111109	1111162-3	1	11/18/2011	18:48
	DY2-32-31-111109	1111162-4	1	11/18/2011	18:49
	DY2-33-31-111109	1111162-5	1	11/18/2011	18:51
	DY2-41-31-111109	1111162-6	1	11/18/2011	18:53
	DY2-44-31-111109	1111162-7	1	11/18/2011	18:55
		CCV10	1	11/18/2011	18:57
		CCB10	1	11/18/2011	18:59
	DY2-48-31-111109	1111162-8	1	11/18/2011	19:01
	DY2-65-31-111109	1111162-9	1	11/18/2011	19:03
	DY2-77-31-111109	1111162-10	1	11/18/2011	19:05
	DY2-BKGD-E-31-111109	1111162-11	1	11/18/2011	19:07
	DY2-BKGD-N-31-111109	1111162-12	1	11/18/2011	19:09
	DY2-BKGD-S-31-111109	1111162-13	1	11/18/2011	19:11
	DY2-BKGD-W-31-111109	1111162-14	1	11/18/2011	19:12
	MD-01-31-111109	1111162-15	1	11/18/2011	19:14
		IP111118-2MB	1	11/18/2011	19:16
		IP111118-2	1	11/18/2011	19:18
		CCV11	1	11/18/2011	19:20
		CCB11	1	11/18/2011	19:22
		IP111118-2LCS	1	11/18/2011	19:24
		1111071-1	1	11/18/2011	19:26
		1111071-1DUP	1	11/18/2011	19:28
		1111071-1SER	5	11/18/2011	19:30
		1111071-1MS	1	11/18/2011	19:32
		1111071-1MSD	1	11/18/2011	19:34
- Na,Sr		1111104-1	10	11/18/2011	19:36
		1111170-1	1	11/18/2011	19:38
		1111171-1	1	11/18/2011	19:40
		1111173-1	1	11/18/2011	19:42
		CCV12	1	11/18/2011	19:44
		CCB12	1	11/18/2011	19:46

Data Package ID: IT1111162-1

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1111174-1	1	11/18/2011	19:48
		1111180-1	1	11/18/2011	19:50
		1111181-1	1	11/18/2011	19:52
		1111182-1	1	11/18/2011	19:54
		1111183-1	1	11/18/2011	19:56
		1111207-1	1	11/18/2011	19:58
		1111209-1	1	11/18/2011	20:00
		1111210-1	1	11/18/2011	20:02
- Na		1111232-1	1	11/18/2011	20:04
		1111233-1	1	11/18/2011	20:05
		CCV13	1	11/18/2011	20:08
		CCB13	1	11/18/2011	20:10
		1111234-1	1	11/18/2011	20:12
- Na		1111235-1	1	11/18/2011	20:14
- S		1111260-1	1	11/18/2011	20:15
		1111261-1	1	11/18/2011	20:17
+ Mn,Sb	DY2-11-31-111109	1111162-1A	1	11/18/2011	20:19
		IP111118-3MB	1	11/18/2011	20:21
		IP111118-3	1	11/18/2011	20:23
		IP111118-3LCS	1	11/18/2011	20:25
		1111092-9	1	11/18/2011	20:26
		1111092-10	1	11/18/2011	20:28
		CCV14	1	11/18/2011	20:31
		CCB14	1	11/18/2011	20:33
- Na,S		1111106-22	1	11/18/2011	20:35
- Na,S		1111106-22DUP	1	11/18/2011	20:37
- Na,S		1111106-22SER	5	11/18/2011	20:39
- Na,S		1111106-22MS	1	11/18/2011	20:41
- Na,S		1111106-22MSD	1	11/18/2011	20:43
		1111106-35	1	11/18/2011	20:45
		1111106-48	1	11/18/2011	20:46
- S		1111106-61	1	11/18/2011	20:48
		1111134-1	10	11/18/2011	20:50
		1111134-2	10	11/18/2011	20:52
		CCV15	1	11/18/2011	20:55

Data Package ID: IT1111162-1

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		CCB15	1	11/18/2011	20:57
		1111134-3	10	11/18/2011	20:59
		1111161-1	10	11/18/2011	21:01
		1111161-2	10	11/18/2011	21:02
		1111161-3	10	11/18/2011	21:04
		1111161-4	10	11/18/2011	21:06
- S		1111172-1	1	11/18/2011	21:08
- S		1111172-2	1	11/18/2011	21:10
- S		1111172-3	1	11/18/2011	21:12
- S		1111172-4	1	11/18/2011	21:14
- Ca,Na,S,Sr		1111172-5	1	11/18/2011	21:16
		CCV16	1	11/18/2011	21:18
		CCB16	1	11/18/2011	21:20
- Na,S,Sr		1111172-6	1	11/18/2011	21:22
- S		1111172-10	1	11/18/2011	21:24
+ Na,Sr		1111104-1	500	11/18/2011	21:26
+ Na		1111232-1	5	11/18/2011	21:28
+ Na		1111235-1	5	11/18/2011	21:30
- Na,S		1111238-1	5	11/18/2011	21:31
- Na,S		1111238-3	5	11/18/2011	21:33
- Na,S		1111238-3SER	25	11/18/2011	21:35
+ Ca,K,Mg		1111238-3A	5	11/18/2011	21:37
+ Na,S		1111106-22	5	11/18/2011	21:39
		CCV17	1	11/18/2011	21:41
		CCB17	1	11/18/2011	21:43
+ Na,S		1111106-22DUP	5	11/18/2011	21:45
+ Na,S		1111106-22SER	25	11/18/2011	21:47
+ Na,S		1111106-22MS	5	11/18/2011	21:49
+ Na,S		1111106-22MSD	5	11/18/2011	21:51
		1111134-1	1	11/18/2011	21:53
		1111134-2	1	11/18/2011	21:55
		1111134-3	1	11/18/2011	21:57
		1111161-3	1	11/18/2011	21:59
+ Ca,Na,Sr		1111172-5	10	11/18/2011	22:01
+ Na		1111238-1	25	11/18/2011	22:03

Data Package ID: IT1111162-1

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		CCV18	1	11/18/2011	22:06
		CCB18	1	11/18/2011	22:08
+ Na,S		1111238-3	25	11/18/2011	22:09
+ Na,S		1111238-3SER	125	11/18/2011	22:11
+ Na		1111238-3A	25	11/18/2011	22:13
+ Na,Sr		1111172-6	10	11/18/2011	22:15
+ K		1111106-22A	1	11/18/2011	22:17
		CRI2	1	11/18/2011	22:19
		ICSA2	1	11/18/2011	22:21
		ICSAB2	1	11/18/2011	22:23
		CCV19	1	11/18/2011	22:25
		CCB19	1	11/18/2011	22:27

Data Package ID: IT1111162-1

ICPMS Metals

Method SW6020A

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: IP111116-4MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 16-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3005 Rev A

Prep Batch: IP111116-4
QCBatchID: IP111116-4-3
Run ID: IM111118-10A1
Cleanup: NONE
Basis: N/A
File Name: 003SMPL_

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7440-61-1	URANIUM	10	0.1	0.1	U	

Data Package ID: *IM1111162-1*

ICPMS Metals

Method SW6020A
Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: IP111117-2MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 17-Nov-11
Date Analyzed: 21-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-3
Run ID: IM111121-10A1
Cleanup: NONE
Basis: N/A
File Name: 072SMPL.

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7440-61-1	URANIUM	10	10	10	U	

Data Package ID: *IM1111162-1*

ICPMS Metals

Method SW6020A

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: IM111116-4LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/16/2011
Date Analyzed: 11/18/2011
Prep Method: SW3005A

Prep Batch: IP111116-4
QCBatchID: IP111116-4-3
Run ID: IM111118-10A1
Cleanup: NONE
Basis: N/A
File Name: 005SMPL_

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7440-61-1	URANIUM	10	9.59	0.1		96	80 - 120%

Data Package ID: *IM1111162-1*

ICPMS Metals

Method SW6020

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: IM111117-2LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/17/2011
Date Analyzed: 11/21/2011
Prep Method: SW3050B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-3
Run ID: IM111121-10A1
Cleanup: NONE
Basis: N/A
File Name: 073SMPL.

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7440-61-1	URANIUM	1000	1010	10		101	80 - 120%

Data Package ID: *IM1111162-1*

ICPMS Metals

Method SW6020A

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
LabID: 1111162-1MS

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 21-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-3
Run ID: IM111121-10A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.017 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: 077SMPL.

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7440-61-1	URANIUM	14000		16200		10.7	1070	164	75 - 125%

Field ID: DY2-11-31-111109
LabID: 1111162-1MSD

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 21-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-3
Run ID: IM111121-10A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.014 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: 078SMPL.

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7440-61-1	URANIUM	16000		1070	147	10.7	20	1

Data Package ID: *IM1111162-1*

ICPMS Metals

Method SW6020

Duplicate Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
Lab ID: 1111162-1D

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 11/09/2011
Date Extracted: 11/17/2011
Date Analyzed: 11/21/2011

Prep Batch: IP111117-2
QCBatchID: IP111117-2-3
Run ID: IM111121-10A1
Cleanup: NONE
Basis: Dry Weight
File Name: 075SMPL.

Sample Aliquot: 1.022 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Sample Result	Samp Qual	Duplicate Result	Dup Qual	Reporting Limit	Dilution Factor	RPD	RPD Limit
7440-61-1	URANIUM	14000		14800		10.6	10	2	20

Data Package ID: *IM1111162-1*

ICPMS Metals

Method SW6020

Serial Dilution

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
Lab ID: 1111162-1L

Run ID: IM111121-10A1
Date Analyzed: 21-Nov-11
Result Units: ug/l

CASNO	Target Analyte	Sample Result	Samp Qual	SD Result	SD Qual	EPA Qualifier	%D
7440-61-1	URANIUM	13.4		13.5			1

Data Package ID: *IM1111162-1*

Prep Batch ID: IP111116-4

Start Date: 11/16/11
Start Time: 14:00
Prep Analyst: Brent A. Stanfield

End Date: 11/16/11
End Time: 18:00

Concentration Method: NONE
Extract Method: SW3005A
Initial Volume Units: g
Final Volume Units: g

Batch Created By: bas
Date Created: 11/16/11
Time Created: 13:58
Validated By: bas
Date Validated: 11/16/11
Time Validated: 14:31

Comments:

QC Batch ID: IP111116-4-3

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
IP111116-4	MB	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185
IM111116-4	LCS	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185
1111185-13	MS	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185
1111185-13	MSD	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185
1111185-13	DUP	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185
1111160-1	SMP	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111160
1111162-16	SMP	ST1-01-111108	WATER	11/8/2011	50	50	NONE	1	1111162
1111185-13	SMP	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1111185

QC Types

CAR	Carrier reference sample	DUP	Laboratory Duplicate
LCS	Laboratory Control Sample	LCSD	Laboratory Control Sample Duplicat
MB	Method Blank	MS	Laboratory Matrix Spike
MSD	Laboratory Matrix Spike Duplicate	REP	Sample replicate
RVS	Reporting Level Verification Standar	SMP	Field Sample
SYS	Sample Yield Spike		

Prep Batch ID: IP111117-2

Start Date: 11/17/11
Start Time: 9:00
Prep Analyst: Brent A. Stanfield

End Date: 11/17/11
End Time: 17:00

Concentration Method: NONE
Extract Method: SW3050B
Initial Volume Units: g
Final Volume Units: ml

Batch Created By: bas
Date Created: 11/17/11
Time Created: 8:26
Validated By: bas
Date Validated: 11/17/11
Time Validated: 9:16

Comments:

QC Batch ID: IP111117-2-3

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
IP111117-2	MB	XXXXXX	SOIL	XXXXXX	1	100	NONE	1	1111162
IM111117-2	LCS	XXXXXX	SOIL	XXXXXX	1	100	NONE	1	1111162
1111162-1	MS	DY2-11-31-111109	SOIL	11/9/2011	1.017	100	NONE	1	1111162
1111162-1	MSD	DY2-11-31-111109	SOIL	11/9/2011	1.014	100	NONE	1	1111162
1111162-1	DUP	DY2-11-31-111109	SOIL	11/9/2011	1.022	100	NONE	1	1111162
1111162-1	SMP	DY2-11-31-111109	SOIL	11/9/2011	1.008	100	NONE	1	1111162
1111162-10	SMP	DY2-77-31-111109	SOIL	11/9/2011	1.005	100	NONE	1	1111162
1111162-11	SMP	DY2-BKGD-E-31-111	SOIL	11/9/2011	1.043	100	NONE	1	1111162
1111162-12	SMP	DY2-BKGD-N-31-111	SOIL	11/9/2011	1.003	100	NONE	1	1111162
1111162-13	SMP	DY2-BKGD-S-31-111	SOIL	11/9/2011	1.028	100	NONE	1	1111162
1111162-14	SMP	DY2-BKGD-W-31-111	SOIL	11/9/2011	1.02	100	NONE	1	1111162
1111162-15	SMP	MD-01-31-111109	SOIL	11/9/2011	0.996	100	NONE	1	1111162
1111162-2	SMP	DY2-17-31-111109	SOIL	11/9/2011	1.029	100	NONE	1	1111162
1111162-3	SMP	DY2-17-32-111109	SOIL	11/9/2011	1.044	100	NONE	1	1111162
1111162-4	SMP	DY2-32-31-111109	SOIL	11/9/2011	1.029	100	NONE	1	1111162
1111162-5	SMP	DY2-33-31-111109	SOIL	11/9/2011	1.026	100	NONE	1	1111162
1111162-6	SMP	DY2-41-31-111109	SOIL	11/9/2011	1.014	100	NONE	1	1111162
1111162-7	SMP	DY2-44-31-111109	SOIL	11/9/2011	1.03	100	NONE	1	1111162
1111162-8	SMP	DY2-48-31-111109	SOIL	11/9/2011	1.01	100	NONE	1	1111162
1111162-9	SMP	DY2-65-31-111109	SOIL	11/9/2011	1.016	100	NONE	1	1111162

QC Types

CAR	Carrier reference sample		DUP	Laboratory Duplicate
LCS	Laboratory Control Sample		LCSD	Laboratory Control Sample Duplicat
MB	Method Blank		MS	Laboratory Matrix Spike
MSD	Laboratory Matrix Spike Duplicate		REP	Sample replicate
RVS	Reporting Level Verification Standar		SMP	Field Sample
SYS	Sample Yield Spike			

URANIUM

Method SW6020

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: IM111118-10A1
Result Units: MG/L

Lab ID	Verification Type	Date Analyzed	Time Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	11/18/2011	11:52	0.002	0.00207	0.00001	N/A	104	90 - 110
CCV1	Continuing Calibration	11/18/2011	12:30	0.001	0.000997	0.00001	N/A	100	90 - 110
CCV2	Continuing Calibration	11/18/2011	13:43	0.001	0.00102	0.00001	N/A	102	90 - 110
CCV3	Continuing Calibration	11/18/2011	14:21	0.001	0.000990	0.00001	N/A	99	90 - 110
CCV4	Continuing Calibration	11/18/2011	14:51	0.001	0.00102	0.00001	N/A	102	90 - 110
CCV5	Continuing Calibration	11/18/2011	15:27	0.001	0.00105	0.00001	N/A	105	90 - 110
CCV6	Continuing Calibration	11/18/2011	16:00	0.001	0.00104	0.00001	N/A	104	90 - 110
CCV7	Continuing Calibration	11/18/2011	16:34	0.001	0.00103	0.00001	N/A	103	90 - 110
CCV8	Continuing Calibration	11/18/2011	17:08	0.001	0.00131	0.00001	Z	131	90 - 110
CCV9	Continuing Calibration	11/18/2011	17:46	0.001	0.00106	0.00001	N/A	106	90 - 110
CCV10	Continuing Calibration	11/18/2011	18:20	0.001	0.00108	0.00001	N/A	108	90 - 110
CCV11	Continuing Calibration	11/18/2011	18:49	0.001	0.00105	0.00001	N/A	105	90 - 110
CCV12	Continuing Calibration	11/18/2011	19:27	0.001	0.00105	0.00001	N/A	105	90 - 110
CCV13	Continuing Calibration	11/18/2011	19:51	0.001	0.00106	0.00001	N/A	106	90 - 110

Data Package ID: *IM1111162-1*

URANIUM

Method SW6020

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: IM111121-10A1
Result Units: MG/L

Lab ID	Verification Type	Date Analyzed	Time Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	11/21/2011	11:08	0.002	0.00203	0.00001	N/A	102	90 - 110
CCV1	Continuing Calibration	11/21/2011	11:42	0.001	0.00101	0.00001	N/A	101	90 - 110
CCV2	Continuing Calibration	11/21/2011	12:08	0.001	0.00100	0.00001	N/A	100	90 - 110
CCV3	Continuing Calibration	11/21/2011	12:38	0.001	0.00101	0.00001	N/A	101	90 - 110
CCV4	Continuing Calibration	11/21/2011	13:05	0.001	0.000999	0.00001	N/A	100	90 - 110
CCV5	Continuing Calibration	11/21/2011	13:38	0.001	0.00102	0.00001	N/A	102	90 - 110
CCV6	Continuing Calibration	11/21/2011	14:08	0.001	0.00102	0.00001	N/A	102	90 - 110

Data Package ID: *IM1111162-1*

URANIUM

Method SW6020

Calibration Blanks

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: IM111118-10A1
Result Units: MG/L

Lab ID	Verification Type	Date Analyzed	Time Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	11/18/2011	11:58	0.00001	0.00001	U
CCB1	Continuing Calibration	11/18/2011	12:32	0.00001	0.00001	U
CCB2	Continuing Calibration	11/18/2011	13:45	0.00001	0.00001	U
CCB3	Continuing Calibration	11/18/2011	14:23	0.00001	0.00001	U
CCB4	Continuing Calibration	11/18/2011	14:53	0.00001	0.00001	U
CCB5	Continuing Calibration	11/18/2011	15:38	0.00001	0.00001	U
CCB6	Continuing Calibration	11/18/2011	16:03	0.00001	0.00001	U
CCB7	Continuing Calibration	11/18/2011	16:37	0.00001	0.00001	U
CCB8	Continuing Calibration	11/18/2011	17:10	0.00012	0.00001	
CCB9	Continuing Calibration	11/18/2011	17:48	0.00001	0.00001	U
CCB10	Continuing Calibration	11/18/2011	18:22	0.000024	0.00001	
CCB11	Continuing Calibration	11/18/2011	18:51	0.00001	0.00001	U
CCB12	Continuing Calibration	11/18/2011	19:29	0.00001	0.00001	U
CCB13	Continuing Calibration	11/18/2011	19:53	0.00001	0.00001	U

Data Package ID: *IM1111162-1*

URANIUM

Method SW6020

Calibration Blanks

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: IM111121-10A1
Result Units: MG/L

Lab ID	Verification Type	Date Analyzed	Time Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	11/21/2011	11:14	0.00001	0.00001	U
CCB1	Continuing Calibration	11/21/2011	11:44	0.00001	0.00001	U
CCB2	Continuing Calibration	11/21/2011	12:10	0.00001	0.00001	U
CCB3	Continuing Calibration	11/21/2011	12:40	0.00001	0.00001	U
CCB4	Continuing Calibration	11/21/2011	13:07	0.00001	0.00001	U
CCB5	Continuing Calibration	11/21/2011	13:40	0.00001	0.00001	U
CCB6	Continuing Calibration	11/21/2011	14:10	0.00001	0.00001	U

Data Package ID: *IM1111162-1*

ICPMS Metals

Method SW6020

ICP Interference Check Sample

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: IM111118-10A1
Date Analyzed: 11/18/2011
Result Units: MG/L

CASNO	Target Analyte	Spike Added		Results		% Rec.
		ICSA1	ICSAB1	ICSA1	ICSAB1	
7440-61-1	URANIUM		0.001		0.00106	106

Data Package ID: *IM1111162-1*

ICPMS Metals

Method SW6020

ICP Interference Check Sample

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: IM111121-10A1
Date Analyzed: 11/21/2011
Result Units: MG/L

CASNO	Target Analyte	Spike Added		Results		% Rec.
		ICSA1	ICSAB1	ICSA1	ICSAB1	
7440-61-1	URANIUM		0.001		0.00103	103

Data Package ID: *IM1111162-1*

Metals Linear Ranges

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Instrument ID: ICPMS2
Active Date: 04/01/2010
Expiration Date: 04/01/2015

CASNO	Target Analyte	Concentration (ppm)
7429-90-5	ALUMINUM	50
7440-36-0	ANTIMONY	0.3
7440-38-2	ARSENIC	1
7440-39-3	BARIUM	1
7440-41-7	BERYLLIUM	0.5
7440-43-9	CADMIUM	0.3
7440-70-2	CALCIUM	500
7440-47-3	CHROMIUM	5
7440-48-4	COBALT	1
7440-50-8	COPPER	10
7439-89-6	IRON	50
7439-92-1	LEAD	0.5
7439-95-4	MAGNESIUM	100
7439-96-5	MANGANESE	2
7439-98-7	MOLYBDENUM	1
7440-02-0	NICKEL	5
7440-09-7	POTASSIUM	500
7782-49-2	SELENIUM	1
7440-22-4	SILVER	0.1
7440-23-5	SODIUM	1000
7440-28-0	THALLIUM	0.02
7440-31-5	TIN	5
7440-61-1	URANIUM	0.1
7440-62-2	VANADIUM	1
7440-66-6	ZINC	20

ICPMS2 Run Log -- 11/18/2011

Instrument ID: ICPMS2
File Name: 003CALB_
AnalRunID: IM111118-10A1
CalibRefID: IM111118-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		blank	1	11/18/2011	11:36
		H/1000	1	11/18/2011	11:38
		H/100	1	11/18/2011	11:41
		H/10	1	11/18/2011	11:43
		HIGH	1	11/18/2011	11:46
		ICV	1	11/18/2011	11:52
		ICB	1	11/18/2011	11:58
		CRI1	1	11/18/2011	12:01
		CRI2	1	11/18/2011	12:03
		ICSA1	1	11/18/2011	12:06
		ICSAB1	1	11/18/2011	12:08
		IP111116-5MB	10	11/18/2011	12:15
		IM111116-5LCS	10	11/18/2011	12:17
		1111041-23	10	11/18/2011	12:20
		1111067-35	10	11/18/2011	12:22
		1111086-38	10	11/18/2011	12:25
		1111037-3	10	11/18/2011	12:27
		CCV1	1	11/18/2011	12:30
		CCB1	1	11/18/2011	12:32
		1111037-3DUP	10	11/18/2011	12:35
		1111037-3SER	50	11/18/2011	12:37
		1111037-3MS	10	11/18/2011	12:41
		1111037-3MSD	10	11/18/2011	12:43
		1111038-1	10	11/18/2011	12:46
		1111038-2	10	11/18/2011	12:48
		1111040-1	10	11/18/2011	12:51
		1111040-3	10	11/18/2011	12:53
		1111040-4	10	11/18/2011	12:56
		1111040-5	10	11/18/2011	12:58
		CCV2	1	11/18/2011	13:43
		CCB2	1	11/18/2011	13:45
		1111078-35	10	11/18/2011	13:48
		1111040-7	10	11/18/2011	13:50
		1111051-1	10	11/18/2011	13:53
		1111051-2	10	11/18/2011	13:55

Data Package ID: IM1111162-1

ICPMS2 Run Log -- 11/18/2011

Instrument ID: ICPMS2
File Name: 001SMPL_
AnalRunID: IM111118-10A1
CalibRefID: IM111118-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		CCV3	1	11/18/2011	14:21
		CCB3	1	11/18/2011	14:23
		IP111116-4MB	10	11/18/2011	14:26
		IM111116-4	10	11/18/2011	14:28
		IM111116-4LCS	10	11/18/2011	14:31
		1111137-1	10	11/18/2011	14:33
		1111138-1	10	11/18/2011	14:36
		1111140-1	10	11/18/2011	14:38
		1111160-1	10	11/18/2011	14:41
	ST1-01-111108	1111162-16	10	11/18/2011	14:43
		1111185-13	10	11/18/2011	14:46
		1111185-13DUP	10	11/18/2011	14:48
		CCV4	1	11/18/2011	14:51
		CCB4	1	11/18/2011	14:53
		1111185-13SER	50	11/18/2011	14:56
		1111185-13MS	10	11/18/2011	14:58
		1111185-13MSD	10	11/18/2011	15:01
		1111205-1	10	11/18/2011	15:03
		1111205-2	10	11/18/2011	15:06
		IP111117-3MB	10	11/18/2011	15:12
		IP111117-3LCS	10	11/18/2011	15:17
		1111005-1	10	11/18/2011	15:20
		1111005-2	10	11/18/2011	15:22
		1111005-2DUP	10	11/18/2011	15:25
		CCV5	1	11/18/2011	15:27
		CCB5	1	11/18/2011	15:38
		1111005-2SER	50	11/18/2011	15:41
		1111005-2MS	10	11/18/2011	15:43
		1111005-2MSD	10	11/18/2011	15:46
		1111005-3	10	11/18/2011	15:48
		1111005-4	10	11/18/2011	15:51
		1111005-5	10	11/18/2011	15:53
		1111005-6	10	11/18/2011	15:57
		CCV6	1	11/18/2011	16:00
		CCB6	1	11/18/2011	16:03

Data Package ID: IM1111162-1

ICPMS2 Run Log -- 11/18/2011

Instrument ID: ICPMS2
File Name: 011SMPL.
AnalRunID: IM111118-10A1
CalibRefID: IM111118-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		IP111117-1MB	10	11/18/2011	16:05
		IM111117-1	10	11/18/2011	16:08
		IM111117-1LCS	10	11/18/2011	16:10
		1111160-2	10	11/18/2011	16:13
		1111160-2DUP	10	11/18/2011	16:15
		1111160-2SER	50	11/18/2011	16:18
		1111160-2MS	10	11/18/2011	16:20
		1111160-2MSD	10	11/18/2011	16:23
		1111160-2A	10	11/18/2011	16:25
		1111160-3	10	11/18/2011	16:28
		CCV7	1	11/18/2011	16:34
		CCB7	1	11/18/2011	16:37
		ZZZZZZ	1	11/18/2011	16:39
		ZZZZZZ	1	11/18/2011	16:42
		ZZZZZZ	1	11/18/2011	16:44
		ZZZZZZ	1	11/18/2011	16:47
		ZZZZZZ	1	11/18/2011	16:49
		ZZZZZZ	1	11/18/2011	16:52
		ZZZZZZ	1	11/18/2011	16:54
		ZZZZZZ	1	11/18/2011	16:57
		ZZZZZZ	1	11/18/2011	16:59
		ZZZZZZ	1	11/18/2011	17:02
		CCV8	1	11/18/2011	17:08
		CCB8	1	11/18/2011	17:10
		ZZZZZZ	1	11/18/2011	17:13
		ZZZZZZ	1	11/18/2011	17:16
		ZZZZZZ	1	11/18/2011	17:22
		IM111117-2	10	11/18/2011	17:24
		IM111117-2LCS	10	11/18/2011	17:27
		ZZZZZZ	1	11/18/2011	17:29
		ZZZZZZ	1	11/18/2011	17:32
		ZZZZZZ	1	11/18/2011	17:34
		ZZZZZZ	1	11/18/2011	17:37
		ZZZZZZ	1	11/18/2011	17:39
		CCV9	1	11/18/2011	17:46

Data Package ID: IM1111162-1

ICPMS2 Run Log -- 11/18/2011

Instrument ID: ICPMS2
File Name: 046SMPL.
AnalRunID: IM111118-10A1
CalibRefID: IM111118-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		CCB9	1	11/18/2011	17:48
		ZZZZZZ	1	11/18/2011	17:51
	DY2-17-31-111109	1111162-2	10	11/18/2011	17:53
	DY2-17-32-111109	1111162-3	10	11/18/2011	17:56
	DY2-32-31-111109	1111162-4	10	11/18/2011	17:58
	DY2-33-31-111109	1111162-5	10	11/18/2011	18:01
	DY2-41-31-111109	1111162-6	10	11/18/2011	18:03
	DY2-44-31-111109	1111162-7	10	11/18/2011	18:06
	DY2-48-31-111109	1111162-8	10	11/18/2011	18:08
	DY2-65-31-111109	1111162-9	10	11/18/2011	18:11
	DY2-77-31-111109	1111162-10	10	11/18/2011	18:13
		CCV10	1	11/18/2011	18:20
		CCB10	1	11/18/2011	18:22
	DY2-BKGD-E-31-111109	1111162-11	10	11/18/2011	18:25
	DY2-BKGD-N-31-111109	1111162-12	10	11/18/2011	18:27
	DY2-BKGD-S-31-111109	1111162-13	10	11/18/2011	18:30
	DY2-BKGD-W-31-111109	1111162-14	10	11/18/2011	18:32
	MD-01-31-111109	1111162-15	10	11/18/2011	18:35
- As,Se		1110371-1	50	11/18/2011	18:37
- As,Se		1111008-1	50	11/18/2011	18:40
- As,Se		1111008-2	50	11/18/2011	18:43
		CCV11	1	11/18/2011	18:49
		CCB11	1	11/18/2011	18:51
Ag,Al,Ba,Cd,Cr,Cu,Mo,Pb,Sb,Th,Tl,U,V		1110371-1	50	11/18/2011	18:54
Ag,Al,Ba,Cd,Cr,Cu,Mo,Pb,Sb,Th,Tl,U,V		1111008-1	50	11/18/2011	18:56
Ag,Al,Ba,Cd,Cr,Cu,Mo,Pb,Sb,Th,Tl,U,V		1111008-2	50	11/18/2011	18:59
		EX111117-4MB	10	11/18/2011	19:05
		EX111117-4	10	11/18/2011	19:08
		EX111117-4LCS	10	11/18/2011	19:10
		1111165-21	200	11/18/2011	19:13
		1111165-21DUP	200	11/18/2011	19:15
		1111165-21SER	1000	11/18/2011	19:18
		1111165-21MS	200	11/18/2011	19:21
		CCV12	1	11/18/2011	19:27
		CCB12	1	11/18/2011	19:29

Data Package ID: IM1111162-1

ICPMS2 Run Log -- 11/18/2011

Instrument ID: ICPMS2
File Name: 081SMPL.
AnalRunID: IM111118-10A1
CalibRefID: IM111118-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1111165-21MSD	200	11/18/2011	19:32
		1111165-22	200	11/18/2011	19:34
		1111167-11	200	11/18/2011	19:37
		1111167-12	200	11/18/2011	19:40
		1111167-13	200	11/18/2011	19:42
		IP111117-2MB	10	11/18/2011	19:48
		CCV13	1	11/18/2011	19:51
		CCB13	1	11/18/2011	19:53

Data Package ID: IM1111162-1

ICPMS2 Run Log -- 11/21/2011

Instrument ID: ICPMS2
File Name: 003CALB.
AnalRunID: IM111121-10A1
CalibRefID: IM111121-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		blank	1	11/21/2011	10:54
		H/1000	1	11/21/2011	10:56
		H/100	1	11/21/2011	10:58
		H/10	1	11/21/2011	11:00
		HIGH	1	11/21/2011	11:03
		ICV	1	11/21/2011	11:08
		ICB	1	11/21/2011	11:14
		CRI1	1	11/21/2011	11:16
		CRI2	1	11/21/2011	11:19
		ICSA1	1	11/21/2011	11:21
		ICSAB1	1	11/21/2011	11:23
		IP111118-2MB	10	11/21/2011	11:29
		IM111118-2	10	11/21/2011	11:31
		IM111118-2LCS	10	11/21/2011	11:33
		1111071-1	10	11/21/2011	11:35
		1111071-1DUP	10	11/21/2011	11:38
		1111071-1SER	50	11/21/2011	11:40
		CCV1	1	11/21/2011	11:42
		CCB1	1	11/21/2011	11:44
		1111071-1MS	10	11/21/2011	11:46
		1111071-1MSD	10	11/21/2011	11:49
		1111260-1	10	11/21/2011	11:51
		1111170-1	10	11/21/2011	11:53
		1111171-1	10	11/21/2011	11:55
		1111173-1	10	11/21/2011	11:57
		1111174-1	10	11/21/2011	11:59
		1111180-1	10	11/21/2011	12:02
		1111181-1	10	11/21/2011	12:04
		1111182-1	10	11/21/2011	12:06
		CCV2	1	11/21/2011	12:08
		CCB2	1	11/21/2011	12:10
		1111183-1	10	11/21/2011	12:13
		1111207-1	10	11/21/2011	12:15
		1111209-1	10	11/21/2011	12:17
		1111210-1	10	11/21/2011	12:19

Data Package ID: IM1111162-1

ICPMS2 Run Log -- 11/21/2011

Instrument ID: ICPMS2
File Name: 038SMPL.
AnalRunID: IM111121-10A1
CalibRefID: IM111121-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1111232-1	10	11/21/2011	12:21
		1111233-1	10	11/21/2011	12:23
		1111234-1	10	11/21/2011	12:26
		1111235-1	10	11/21/2011	12:28
		1111261-1	10	11/21/2011	12:30
		1111104-1	10	11/21/2011	12:32
		CCV3	1	11/21/2011	12:38
		CCB3	1	11/21/2011	12:40
		IP111118-3MB	10	11/21/2011	12:43
		IM111118-3	10	11/21/2011	12:45
		IM111118-3LCS	10	11/21/2011	12:47
		1111106-22	10	11/21/2011	12:49
		1111106-22DUP	10	11/21/2011	12:51
		1111106-22SER	50	11/21/2011	12:53
		1111106-22MS	10	11/21/2011	12:56
		1111106-22MSD	10	11/21/2011	12:58
		1111172-1	10	11/21/2011	13:00
		1111172-2	10	11/21/2011	13:02
		CCV4	1	11/21/2011	13:05
		CCB4	1	11/21/2011	13:07
		1111172-3	10	11/21/2011	13:09
		1111172-4	10	11/21/2011	13:11
		1111172-6	10	11/21/2011	13:13
		1111172-10	10	11/21/2011	13:15
		1111172-5	10	11/21/2011	13:18
		1111134-1	10	11/21/2011	13:24
		1111134-2	10	11/21/2011	13:26
		1111134-3	10	11/21/2011	13:28
		1111161-1	10	11/21/2011	13:30
		1111161-2	10	11/21/2011	13:32
		CCV5	1	11/21/2011	13:38
		CCB5	1	11/21/2011	13:40
		1111161-3	10	11/21/2011	13:43
		1111161-4	10	11/21/2011	13:45
		IP111117-2MB	10	11/21/2011	13:51

Data Package ID: IM1111162-1

ICPMS2 Run Log -- 11/21/2011

Instrument ID: ICPMS2
File Name: 073SMPL.
AnalRunID: IM111121-10A1
CalibRefID: IM111121-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		IM111117-2LCS	10	11/21/2011	13:53
	DY2-11-31-111109	1111162-1	10	11/21/2011	13:55
	DY2-11-31-111109	1111162-1DUP	10	11/21/2011	13:57
	DY2-11-31-111109	1111162-1SER	50	11/21/2011	13:59
	DY2-11-31-111109	1111162-1MS	10	11/21/2011	14:02
	DY2-11-31-111109	1111162-1MSD	10	11/21/2011	14:04
		1111160-4	10	11/21/2011	14:06
		CCV6	1	11/21/2011	14:08
		CCB6	1	11/21/2011	14:10
		1111160-5	10	11/21/2011	14:13
		1111160-6	100	11/21/2011	14:15
		1111160-7	100	11/21/2011	14:17
		1111160-8	100	11/21/2011	14:19
		1111160-9	200	11/21/2011	14:21
		1111160-10	200	11/21/2011	14:23
		1111160-11	200	11/21/2011	14:26
		1111160-12	1000	11/21/2011	14:28
		1111160-13	100	11/21/2011	14:30
		1111160-14	100	11/21/2011	14:32
		CCV7	1	11/21/2011	14:34
		CCB7	1	11/21/2011	14:37
		1111160-15	100	11/21/2011	14:39
		1111136-1	10	11/21/2011	14:51
		1111136-1SER	50	11/21/2011	14:54
		1111136-1MS	10	11/21/2011	14:56
		1111136-1MSD	10	11/21/2011	14:58
		1111136-2	10	11/21/2011	15:00
		1111136-3	10	11/21/2011	15:02
		1111136-4	10	11/21/2011	15:04
		1111136-5	50	11/21/2011	15:07
		1111136-6	10	11/21/2011	15:09
		CCV8	1	11/21/2011	15:15
		CCB8	1	11/21/2011	15:17
		1111136-7	10	11/21/2011	15:19
		1111136-8	10	11/21/2011	15:21

Data Package ID: IM1111162-1

ICPMS2 Run Log -- 11/21/2011

Instrument ID: ICPMS2
File Name: 014SMPL_
AnalRunID: IM111121-10A1
CalibRefID: IM111121-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1111136-9	10	11/21/2011	15:23
		1111136-10	10	11/21/2011	15:26
		1111136-11	10	11/21/2011	15:28
		1111136-12	10	11/21/2011	15:30
		1111136-13	10	11/21/2011	15:32
		1111136-14	10	11/21/2011	15:34
		1111228-1	100	11/21/2011	15:37
		1111228-2	10	11/21/2011	15:39
		CCV9	1	11/21/2011	15:45
		CCB9	1	11/21/2011	15:48
		1111228-2SER	50	11/21/2011	15:50
		1111228-2MS	10	11/21/2011	15:53
		1111228-2MSD	10	11/21/2011	15:55
		1111228-3	10	11/21/2011	15:57
		1111228-4	200	11/21/2011	15:59
		1111228-5	100	11/21/2011	16:01
		1111228-6	10	11/21/2011	16:03
		1111228-7	10	11/21/2011	16:06
		1111228-8	50	11/21/2011	16:08
		1111228-9	200	11/21/2011	16:10
		CCV10	1	11/21/2011	16:16
		CCB10	1	11/21/2011	16:18
		1111228-10	10	11/21/2011	16:20
		1111228-11	10	11/21/2011	16:22
		1111228-12	10	11/21/2011	16:25
		1111228-13	100	11/21/2011	16:27
		1111228-14	200	11/21/2011	16:29
		CCV11	1	11/21/2011	16:35
		CCB11	1	11/21/2011	16:37

Data Package ID: IM1111162-1

Mercury

Method SW7470A

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: HG111115-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 15-Nov-11
Date Analyzed: 16-Nov-11
Prep Method: METHOD

Prep Batch: HG111115-1
QCBatchID: HG111115-1-1
Run ID: HG111116-2A1
Cleanup: NONE
Basis: N/A
File Name: HG111115-1

Sample Aliquot: 20 g
Final Volume: 20 g
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	0.0002	0.0002	U	

Data Package ID: *HG1111162-1*

Mercury

Method SW7471A

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1111162

Client Name: Weston Solutions, Inc.

ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: HG111118-2MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 18-Nov-11
Date Analyzed: 22-Nov-11
Prep Method: METHOD

Prep Batch: HG111118-1
QCBatchID: HG111118-1-2
Run ID: HG111122-1A1
Cleanup: NONE
Basis: N/A
File Name: HG111118-1

Sample Aliquot: 0.6 g
Final Volume: 100 g
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	0.033	0.033	U	

Data Package ID: *HG1111162-1*

Mercury

Method SW7470A

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: HG111115-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/15/2011
Date Analyzed: 11/16/2011
Prep Method: METHOD

Prep Batch: HG111115-1
QCBatchID: HG111115-1-1
Run ID: HG111116-2A1
Cleanup: NONE
Basis: N/A
File Name: HG111115-1

Sample Aliquot: 20 g
Final Volume: 20 g
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7439-97-6	MERCURY	0.001	0.001	0.0002		100	80 - 120%

Data Package ID: *HG1111162-1*

Mercury

Method SW7471

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Lab ID: HG111118-2LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/18/2011
Date Analyzed: 11/22/2011
Prep Method: METHOD

Prep Batch: HG111118-1
QCBatchID: HG111118-1-2
Run ID: HG111122-1A1
Cleanup: NONE
Basis: N/A
File Name: HG111118-1

Sample Aliquot: 0.6 g
Final Volume: 100 g
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7439-97-6	MERCURY	0.167	0.151	0.0333		91	80 - 120%

Data Package ID: *HG1111162-1*

Mercury

Method SW7471A

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
LabID: 1111162-1MS

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 09-Nov-11
Date Extracted: 18-Nov-11
Date Analyzed: 22-Nov-11
Prep Method: METHOD

Prep Batch: HG111118-1
QCBatchID: HG111118-1-2
Run ID: HG111122-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 0.605 g
Final Volume: 100 g
Result Units: MG/KG
File Name: HG111118-1

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7439-97-6	MERCURY	0.036	U	0.379		0.036	0.36	106	80 - 120%

Field ID: DY2-11-31-111109
LabID: 1111162-1MSD

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 09-Nov-11
Date Extracted: 18-Nov-11
Date Analyzed: 22-Nov-11
Prep Method: METHOD

Prep Batch: HG111118-1
QCBatchID: HG111118-1-2
Run ID: HG111122-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 0.604 g
Final Volume: 100 g
Result Units: MG/KG
File Name: HG111118-1

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7439-97-6	MERCURY	0.382		0.36	106	0.036	20	1

Data Package ID: *HG1111162-1*

Mercury

Method SW7471

Duplicate Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
Lab ID: 1111162-1D

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 11/09/2011
Date Extracted: 11/18/2011
Date Analyzed: 11/22/2011

Prep Batch: HG111118-1
QCBatchID: HG111118-1-2
Run ID: HG111122-1A1
Cleanup: NONE
Basis: Dry Weight
File Name: HG111118-1

Sample Aliquot: 0.607 g
Final Volume: 100 g
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Sample Result	Samp Qual	Duplicate Result	Dup Qual	Reporting Limit	Dilution Factor	RPD	RPD Limit
7439-97-6	MERCURY	0.036	U	0.0358	U	0.0358	1		20

Data Package ID: *HG1111162-1*

Prep Batch ID: HG111115-1

Start Date: 11/15/11
Start Time: 7:49
Prep Analyst: Sheri Lafferty

End Date: 11/15/11
End Time: 7:49

Concentration Method: NONE
Extract Method: METHOD
Initial Volume Units: g
Final Volume Units: g

Batch Created By: skl
Date Created: 11/15/11
Time Created: 7:49
Validated By: skl
Date Validated: 11/15/11
Time Validated: 9:56

Comments:

QC Batch ID: HG111115-1-1

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
HG111115-1	MB	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
HG111115-1	LCS	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
1111094-1	MS	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
1111094-1	MSD	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
1111094-1	DUP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
1111017-1	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111017
1111017-3	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111017
1111017-4	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111017
1111017-6	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111017
1111017-8	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111017
1111040-1	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111040
1111040-3	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111040
1111040-4	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111040
1111040-5	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111040
1111040-7	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111040
1111051-1	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111051
1111051-2	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111051
1111094-1	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
1111094-11	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
1111094-13	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
1111094-14	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
1111094-5	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
1111094-8	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111094
1111104-1	SMP	XXXXXX	WATER	XXXXXX	20	20	NONE	1	1111104
1111162-16	SMP	ST1-01-111108	WATER	11/8/2011	20	20	NONE	1	1111162

Prep Batch ID: HG111118-1

Start Date: 11/18/11
Start Time: 14:51
Prep Analyst: Sheri Lafferty

End Date: 11/18/11
End Time: 14:51

Concentration Method: NONE
Extract Method: METHOD
Initial Volume Units: g
Final Volume Units: g

Batch Created By: skl
Date Created: 11/17/11
Time Created: 14:52
Validated By: skl
Date Validated: 11/18/11
Time Validated: 9:15

Comments:

QC Batch ID: HG111118-1-2

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
HG111118-2	MB	XXXXXX	SOIL	XXXXXX	0.6	100	NONE	1	1111162
HG111118-2	LCS	XXXXXX	SOIL	XXXXXX	0.6	100	NONE	1	1111162
1111162-1	MS	DY2-11-31-111109	SOIL	11/9/2011	0.605	100	NONE	1	1111162
1111162-1	MSD	DY2-11-31-111109	SOIL	11/9/2011	0.604	100	NONE	1	1111162
1111162-1	DUP	DY2-11-31-111109	SOIL	11/9/2011	0.607	100	NONE	1	1111162
1111162-1	SMP	DY2-11-31-111109	SOIL	11/9/2011	0.609	100	NONE	1	1111162
1111162-10	SMP	DY2-77-31-111109	SOIL	11/9/2011	0.613	100	NONE	1	1111162
1111162-11	SMP	DY2-BKGD-E-31-111	SOIL	11/9/2011	0.607	100	NONE	1	1111162
1111162-12	SMP	DY2-BKGD-N-31-111	SOIL	11/9/2011	0.614	100	NONE	1	1111162
1111162-13	SMP	DY2-BKGD-S-31-111	SOIL	11/9/2011	0.609	100	NONE	1	1111162
1111162-14	SMP	DY2-BKGD-W-31-111	SOIL	11/9/2011	0.614	100	NONE	1	1111162
1111162-15	SMP	MD-01-31-111109	SOIL	11/9/2011	0.601	100	NONE	1	1111162
1111162-2	SMP	DY2-17-31-111109	SOIL	11/9/2011	0.604	100	NONE	1	1111162
1111162-3	SMP	DY2-17-32-111109	SOIL	11/9/2011	0.6	100	NONE	1	1111162
1111162-4	SMP	DY2-32-31-111109	SOIL	11/9/2011	0.613	100	NONE	1	1111162
1111162-5	SMP	DY2-33-31-111109	SOIL	11/9/2011	0.609	100	NONE	1	1111162
1111162-6	SMP	DY2-41-31-111109	SOIL	11/9/2011	0.614	100	NONE	1	1111162
1111162-7	SMP	DY2-44-31-111109	SOIL	11/9/2011	0.604	100	NONE	1	1111162
1111162-8	SMP	DY2-48-31-111109	SOIL	11/9/2011	0.602	100	NONE	1	1111162
1111162-9	SMP	DY2-65-31-111109	SOIL	11/9/2011	0.603	100	NONE	1	1111162

QC Types

CAR	Carrier reference sample		DUP	Laboratory Duplicate
LCS	Laboratory Control Sample		LCSD	Laboratory Control Sample Duplicat
MB	Method Blank		MS	Laboratory Matrix Spike
MSD	Laboratory Matrix Spike Duplicate		REP	Sample replicate
RVS	Reporting Level Verification Standar		SMP	Field Sample
SYS	Sample Yield Spike			

MERCURY

Method SW7470

Calibration Verifications

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: HG111116-2A1
Result Units: MG/L

Lab ID	Verification Type	Date Analyzed	Time Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	11/16/2011	12:35	0.001	0.00103	0.0002	N/A	103	90 - 110
CCV1	Continuing Calibration	11/16/2011	13:01	0.002	0.00208	0.0002	N/A	104	80 - 120
CCV2	Continuing Calibration	11/16/2011	13:27	0.002	0.00192	0.0002	N/A	96	80 - 120

Data Package ID: *HG1111162-1*

MERCURY

Method SW7471

Calibration Verifications

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: HG111122-1A1
Result Units: MG/L

Lab ID	Verification Type	Date Analyzed	Time Analyzed	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	11/22/2011	8:38	0.001	0.00101	0.0002	N/A	101	90 - 110
CCV1	Continuing Calibration	11/22/2011	9:04	0.002	0.00201	0.0002	N/A	100	80 - 120
CCV2	Continuing Calibration	11/22/2011	9:30	0.002	0.00201	0.0002	N/A	100	80 - 120
CCV3	Continuing Calibration	11/22/2011	9:55	0.002	0.00201	0.0002	N/A	100	80 - 120
CCV4	Continuing Calibration	11/22/2011	10:21	0.002	0.00200	0.0002	N/A	100	80 - 120
CCV5	Continuing Calibration	11/22/2011	10:32	0.002	0.00200	0.0002	N/A	100	80 - 120

Data Package ID: *HG1111162-1*

MERCURY

Method SW7470

Calibration Blanks

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: HG111116-2A1
Result Units: MG/L

Lab ID	Verification Type	Date Analyzed	Time Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	11/16/2011	12:37	0.0002	0.0002	U
CCB1	Continuing Calibration	11/16/2011	13:03	0.0002	0.0002	U
CCB2	Continuing Calibration	11/16/2011	13:29	0.0002	0.0002	U

Data Package ID: *HG1111162-1*

MERCURY

Method SW7471

Calibration Blanks

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Run ID: HG111122-1A1
Result Units: MG/L

Lab ID	Verification Type	Date Analyzed	Time Analyzed	Result	Reporting Limit	Flag
ICB	Initial Calibration	11/22/2011	8:41	0.0002	0.0002	U
CCB1	Continuing Calibration	11/22/2011	9:06	0.0002	0.0002	U
CCB2	Continuing Calibration	11/22/2011	9:32	0.0002	0.0002	U
CCB3	Continuing Calibration	11/22/2011	9:58	0.0002	0.0002	U
CCB4	Continuing Calibration	11/22/2011	10:23	0.0002	0.0002	U
CCB5	Continuing Calibration	11/22/2011	10:34	0.0002	0.0002	U

Data Package ID: *HG1111162-1*

Metals Linear Ranges

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Instrument ID: CETAC7500
Active Date: 07/19/2010
Expiration Date: 10/17/2020

CASNO	Target Analyte	Concentration (ppm)
7439-97-6	MERCURY	0.01

Mercury Run Log -- 11/16/2011

Instrument ID: CETAC7500
File Name: HG111115-1
AnalRunID: HG111116-2A1
CalibRefID: HG111116-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		STD0	1	11/16/2011	12:11
		STD1	1	11/16/2011	12:13
		STD2	1	11/16/2011	12:15
		STD3	1	11/16/2011	12:17
		STD4	1	11/16/2011	12:20
		STD5	1	11/16/2011	12:22
		STD6	1	11/16/2011	12:24
		ICV	1	11/16/2011	12:26
		ICV	1	11/16/2011	12:35
		ICB	1	11/16/2011	12:37
		CRA1	1	11/16/2011	12:39
		HG111115-1MB	1	11/16/2011	12:42
		HG111115-1LCS	1	11/16/2011	12:44
		1111094-1	1	11/16/2011	12:46
		1111094-1DUP	1	11/16/2011	12:48
		1111094-1L	5	11/16/2011	12:50
		1111094-1MS	1	11/16/2011	12:52
		1111094-1MSD	1	11/16/2011	12:54
		1111094-5	1	11/16/2011	12:57
		1111094-8	1	11/16/2011	12:59
		CCV1	1	11/16/2011	13:01
		CCB1	1	11/16/2011	13:03
		1111094-11	1	11/16/2011	13:05
		1111094-13	1	11/16/2011	13:07
		1111094-14	1	11/16/2011	13:09
	ST1-01-111108	1111162-16	1	11/16/2011	13:12
		1111017-1	1	11/16/2011	13:14
		1111017-3	1	11/16/2011	13:16
		1111017-4	1	11/16/2011	13:18
		1111017-6	1	11/16/2011	13:20
		1111017-8	1	11/16/2011	13:22
		1111040-1	1	11/16/2011	13:24
		CCV2	1	11/16/2011	13:27
		CCB2	1	11/16/2011	13:29
		1111040-3	1	11/16/2011	13:31

Data Package ID: HG1111162-1

Mercury Run Log -- 11/16/2011

Instrument ID: CETAC7500
File Name: HG111115-1
AnalRunID: HG111116-2A1
CalibRefID: HG111116-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1111040-4	1	11/16/2011	13:33
		1111040-5	1	11/16/2011	13:35
		1111040-7	1	11/16/2011	13:37
		1111051-1	1	11/16/2011	13:39
		1111051-2	1	11/16/2011	13:42
		1111104-1	1	11/16/2011	13:44
		CRA2	1	11/16/2011	13:46
		CCV3	1	11/16/2011	13:48
		CCB3	1	11/16/2011	13:50

Data Package ID: HG1111162-1

Mercury Run Log -- 11/22/2011

Instrument ID: CETAC7500
File Name: HG111118-1
AnalRunID: HG111122-1A1
CalibRefID: HG111122-1A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		STD0	1	11/22/2011	8:23
		STD1	1	11/22/2011	8:25
		STD2	1	11/22/2011	8:27
		STD3	1	11/22/2011	8:30
		STD4	1	11/22/2011	8:32
		STD5	1	11/22/2011	8:34
		STD6	1	11/22/2011	8:36
		ICV	1	11/22/2011	8:38
		ICB	1	11/22/2011	8:41
		CRA1	1	11/22/2011	8:43
		HG111118-1MB	1	11/22/2011	8:45
		HG111118-1LCS	1	11/22/2011	8:47
		HG111118-2MB	1	11/22/2011	8:49
		HG111118-2LCS	1	11/22/2011	8:51
		1111160-2	1	11/22/2011	8:53
		1111160-3	1	11/22/2011	8:55
		1111160-3DUP	1	11/22/2011	8:58
		1111160-3L	5	11/22/2011	9:00
		1111160-3MS	1	11/22/2011	9:02
		CCV1	1	11/22/2011	9:04
		CCB1	1	11/22/2011	9:06
		1111160-3MSD	1	11/22/2011	9:08
		1111160-4	1	11/22/2011	9:11
		1111160-5	1	11/22/2011	9:13
		1111160-6	1	11/22/2011	9:15
		1111160-7	1	11/22/2011	9:17
		1111160-8	1	11/22/2011	9:19
		1111160-9	1	11/22/2011	9:21
		1111160-10	1	11/22/2011	9:23
		1111160-11	1	11/22/2011	9:25
		1111160-12	1	11/22/2011	9:28
		CCV2	1	11/22/2011	9:30
		CCB2	1	11/22/2011	9:32
		1111160-13	1	11/22/2011	9:34
		1111160-14	1	11/22/2011	9:36

Data Package ID: HG1111162-1

ALS Environmental -- FC
LIMS Version: 6.543

Date Printed: Wednesday, November 30, 2011

Mercury Run Log -- 11/22/2011

Instrument ID: CETAC7500
File Name: HG111118-1
AnalRunID: HG111122-1A1
CalibRefID: HG111122-1A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1111160-15	1	11/22/2011	9:38
	DY2-11-31-111109	1111162-1	1	11/22/2011	9:40
	DY2-11-31-111109	1111162-1DUP	1	11/22/2011	9:43
		1111162-1L	5	11/22/2011	9:45
	DY2-11-31-111109	1111162-1MS	1	11/22/2011	9:47
	DY2-11-31-111109	1111162-1MSD	1	11/22/2011	9:49
	DY2-17-31-111109	1111162-2	1	11/22/2011	9:51
	DY2-17-32-111109	1111162-3	1	11/22/2011	9:53
		CCV3	1	11/22/2011	9:55
		CCB3	1	11/22/2011	9:58
	DY2-32-31-111109	1111162-4	1	11/22/2011	10:00
	DY2-33-31-111109	1111162-5	1	11/22/2011	10:02
	DY2-41-31-111109	1111162-6	1	11/22/2011	10:04
	DY2-44-31-111109	1111162-7	1	11/22/2011	10:06
	DY2-48-31-111109	1111162-8	1	11/22/2011	10:08
	DY2-65-31-111109	1111162-9	1	11/22/2011	10:10
	DY2-77-31-111109	1111162-10	1	11/22/2011	10:13
	DY2-BKGD-E-31-111109	1111162-11	1	11/22/2011	10:15
	DY2-BKGD-N-31-111109	1111162-12	1	11/22/2011	10:17
	DY2-BKGD-S-31-111109	1111162-13	1	11/22/2011	10:19
		CCV4	1	11/22/2011	10:21
		CCB4	1	11/22/2011	10:23
	DY2-BKGD-W-31-111109	1111162-14	1	11/22/2011	10:25
	MD-01-31-111109	1111162-15	1	11/22/2011	10:28
		CRA2	1	11/22/2011	10:30
		CCV5	1	11/22/2011	10:32
		CCB5	1	11/22/2011	10:34

Data Package ID: HG1111162-1

Raw Data

HEADER INFORMATION FOR ANALYTICAL SEQUENCE 111117A
Analyst: Michael Lundgreen

STANDARD SOLUTION CODES

Stock A (ST110701-1) Exp.6-30-2012

Element	ug/ml
Al, Ca, Mg	1000
K	500
Na	300
Fe	400
Li	20

Standard	Dilution	Procedure
A1	1/2 of Stock A	5ml of Stock A to 10ml final volume.
A2	1/2.5 of Stock A	2ml of Stock A to a 5ml final volume.
A3	1/5 of Stock A	1ml of Stock A to a 5ml final volume.
A4	1/10 of A1	1ml of Standard A1 up to a 10ml final volume.
A5	1/10 of A4	1ml of Standard A4 up to a 10ml final volume.

Stock B (ST100625-8) Exp. 2-28-15

Element	ug/ml
P, Si	100
B, Ba, Cr, Cu, Mn, Mo, Ni, Pb, Sn, Sr, Ti ,Zn	20
As, Cd, Co, Se, Tl, V	10
Sb	4
Be	2

Stock Ag- 1000 ug/ml (ST100407-4) Exp. 2-28-15
Stock Th – 1000 ug/ml (ST100407-5) Exp. 2-28-15

The following dilutions of Stock Ag and Stock Th are made to provide the daily calibration Standards.

Standard	Dilution	Procedure
B1	1/2 of Stock B 1/500 Ag and 1/500 Th	5ml of Stock B, 0.02ml of Stock Ag and 0.02ml of Stock Th up to a 10ml final volume.
B2	1/10 of B1	1.0ml of Standard B1 up to a 10ml final volume.
B3	1/10 of B2	1.0ml of Standard B2 up to a 10ml final volume.

Stock C (ST100625-9) Exp. 6-30-15

Element	ug/ml
S, U	100
Bi, Zr	10

Standard	Dilution	Procedure
C1	1/2 of Stock C	5ml of Stock C up to a 10ml final volume.
C2	1/10 of C1	1.0ml of Standard C1 up to a 10ml final volume.
C3	1/10 of C2	1.0ml of Standard C2 up to a 10ml final volume.

RL STD (Reporting Limit Standard) Intermediate.
(ST100301-54) Exp. 2-28-15

Element	ug/ml
K, Na	500
Ca, Mg	200
Al, U	100
B, Fe, P, S, Si	50
Li, Mo, Sn, Sr, Ti	10
Sb	8
Ni, As, Bi, Se, Tl, Zn, Zr	5
Pb	3
Ag, Ba, Co, Cr, Cu, Mn, V, Th	2
Be, Cd	1

RL STD (working standard) made daily by diluting the intermediate above 1000 fold. This working standard has concentration levels at the normal ALS-FC reporting limits for all elements except Ca, Mg and Na, K which are at 0.2ppm and 0.5ppm; this is below the normal ALS-FC reporting limit.

RL2 (working standard) made daily by diluting the intermediate above 333 fold.

Blank Solution

Double D.I. water, 3% HNO_3 and 5%HCl
Used for Std. Blank, ICB and CCB

CCV (ST110818-5) Exp. 6-20-12

Element	ug/ml
Al, Ca, Mg, K, Na	50
Fe	20
U, P, S, Si	5
B, Ba, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn, Zn, Zr	1
As, Be, Bi, Cd, Co, Li, Sb, Sr, Ti, Tl, V	0.5
Ag, Th	0.2

ICV (ST110815-5) Exp. 6-20-12
Prepared daily by diluting the CCV (described above) ½.
The 1/2 dilution is made by diluting 5ml of the CCV to a 10ml final volume.
The resulting concentrations are:

Element	ug/ml
Al, Ca, Mg, K, Na	25
Fe	10
U, P, S, Si	2.5
B, Ba, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn, Zn, Zr	0.5
As, Be, Bi, Cd, Co, Li, Sb, Sr, Ti, Tl, V	0.25
Ag, Th	0.1

CRI (ST110105-13) Exp. 6-20-12
Made By diluting
1.0ml of CRI Stock (ST110105-4) Exp. 6-20-12
to a 100ml final volume.

Element	ug/ml
Ca, Mg, K, Na	5.0
Al, B, Ba	0.4
Fe, U, P, S	0.2
Sb	0.12
Co, Si,, Sn, V, Th	0.1
Ni	0.08
Cu, Bi, Zr	0.05
Zn	0.04
Mn	0.03
Ag, Cr, Li, Mo, Sr, Ti, Tl	0.02
Be, Cd, As, Se,	0.01
Pb	0.006

ICSA (ST110105-7) Exp. 6-20-12

Element	ug/ml
Ca, Mg, Al	250
Fe	100

ICSAB (ST110105-8) Exp. 6-20-12

Element	ug/ml
Ca, Mg, Al	250
Fe	100
U	10

Sb	0.6
Ba, Be, Co, V, Cr, Cu, Mn, Bi, Zr	0.5
Ag	0.2
As, Tl	0.1
Se, Pb, Th	0.05

Pipette ID Numbers

1.0ml to 5.0ml --- M-55
0.1ml to 1.0ml --- M-61
0.01ml to 0.1ml --- M-57

Acid Lot Numbers

HCl – J35042
HNO_3 – J41037

Inter Element Correction Information

The following table summarizes spectral interferences that have been identified and for which IEC's are used. If a sample contains a concentration of an interfering element that exceeds the upper analytical range, and an affected element is being determined, it is necessary to dilute the sample to bring the interfering element into analytical range.

Interfering Element (ug/ml)	Affected Element
Al (500)	Pb
Mg (500)	Th
Fe (200)	Se, Tl, V, Pb, U
Si (50)	Zr
U (50)	Al, Cr, Cu, Bi, Pb, Mg, Se, Ag, Tl, Si
Ba (10)	Co
Cr (10)	Sb
Cu (10)	Bi
Mn (10)	Tl
Mo (10)	Al, Si, Pb,, Sb
Ti (10)	Co, Bi, Si, Sn, Tl, Pb, Zr
As (5)	Cd
V (5)	Al, Be, Tl
Zr (5)	Ag

The following table lists element concentrations (ug/ml) that no significant spectral interferences have been observed.

Element	Concentration	Element	Concentration	Element	Concentration
K	500	Se	10		
Na	500	Pb	10	Li	5
Ca	500	Zn	10	Cd	5
P	50	Sr	10	Co	5
S	50	Sn	10	Ag	2
Ni	10	Bi	5	Sb	2
B	10	Tl	5	Be	1

2X – Dilution made by diluting 2.5ml of sample up to a 5ml final volume.
3X - Dilution made by diluting 2.0ml of sample up to a 6ml final volume.
4X - Dilution made by diluting 2.0ml of sample up to a 8ml final volume.
5X - Dilution made by diluting 1.0ml of sample to a 5ml final volume.
10X - Dilution made by diluting 0.5ml of sample to a 5ml final volume.
20X – Dilution made by diluting 0.25ml of sample to a 5ml final volume.
25X – Dilution made by diluting 0.2ml of sample to a 5ml final volume.

100X – Dilution made by diluting 0.05ml of sample to a 5ml final volume.
500X – Dilution made by diluting 0.02ml of sample to a 10ml final volume.
1000X – Dilution made by diluting a 10X dilution 100X.

Analytical Spikes

Comments

1. Please see run log and work orders for elements of interest.

Daily Maintenance

1. Check/ Change Peristaltic pump tubing.
2. Check the torch for deposits, clean if necessary.
3. Check/ Empty drain water.

Daily Maintenance done by _____MTL_____.

Monthly Maintenance

1. Check/Clean nebulizer and spray chamber.
2. Clean air filters
3. Check/Clean entrance slit.
4. Fill water recirculating reservoir.

Monthly maintenance done by: MTL 11-01-2011.

Major problems / adjustments / repairs recorded in the ICP Maintenance Log (3716).

ICPTrace2 Run Log -- 11/17/2011

Instrument ID: ICPTrace2
File Name: 111117A.
AnalRunID: IT111117-2A1
CalibRefID: IT111117-2A1

Comment	Inst Sample Name	Lab ID	DF	Date Analyzed	Time Analyzed
	MIXBHIGH	MIXBHIGH	1	11/17/2011	13:43
	MIXBHIGH	MIXBHIGH	1	11/17/2011	14:07
	MIXAHIGH	MIXAHIGH	1	11/17/2011	14:12
	MIXCHIGH	MIXCHIGH	1	11/17/2011	14:13
	ICV	ICV	1	11/17/2011	14:28
	ZZZ	ZZZ	1	11/17/2011	14:29
	ICB	ICB	1	11/17/2011	14:32
	CRI	CRI1	1	11/17/2011	14:35
	ICSA	ICSA1	1	11/17/2011	14:37
	ICSAB	ICSAB1	1	11/17/2011	14:44
	CCV	CCV1	1	11/17/2011	14:46
	CCB	CCB1	1	11/17/2011	14:48
	F111115-1MB	F111115-1MB	1	11/17/2011	14:50
	F111115-1RVS	F111115-1	1	11/17/2011	14:52
	F111115-1LCS	F111115-1LCS	1	11/17/2011	14:53
	1111119-1	1111119-1	1	11/17/2011	14:55
- S	1111150-1	1111150-1	1	11/17/2011	14:57
- S	1111150-1D	1111150-1DUP	1	11/17/2011	14:59
- S	1111150-1L 5X	1111150-1SER	5	11/17/2011	15:01
- S	1111150-1MS	1111150-1MS	1	11/17/2011	15:02
- S	1111150-1MSD	1111150-1MSD	1	11/17/2011	15:04
- Na	1111179-1	1111179-1	1	11/17/2011	15:06
	CCV	CCV2	1	11/17/2011	15:09
	CCB	CCB2	1	11/17/2011	15:10
	1111184-1	1111184-1	1	11/17/2011	15:12
+ Na	1111179-1 5X	1111179-1	5	11/17/2011	15:14
	CCV	CCV3	1	11/17/2011	15:16
	CCB	CCB3	1	11/17/2011	15:20
	IP111116-3MB	IP111116-3MB	1	11/17/2011	15:21
	IP111116-3RVS	IP111116-3	1	11/17/2011	15:23
	IP111116-3LCS	IP111116-3LCS	1	11/17/2011	15:25
	1111185-2	1111185-2	1	11/17/2011	15:27
	1111185-3	1111185-3	1	11/17/2011	15:28
- Na,S	1111185-4	1111185-4	1	11/17/2011	15:30
- Na,S	1111185-5	1111185-5	1	11/17/2011	15:32

Data Package ID:

ALS Environmental -- FC
LIMS Version: 6.540

Date Printed: Friday, November 18, 2011

#Name?

ICPTrace2 Run Log -- 11/17/2011

Instrument ID: ICPTrace2
File Name: 111117A.
AnalRunID: IT111117-2A1
CalibRefID: IT111117-2A1

Comment	Inst Sample Name	Lab ID	DF	Date Analyzed	Time Analyzed
	1111185-6	1111185-6	1	11/17/2011	15:34
	1111185-7	1111185-7	1	11/17/2011	15:36
	1111185-8	1111185-8	1	11/17/2011	15:37
	CCV	CCV4	1	11/17/2011	15:40
	CCB	CCB4	1	11/17/2011	15:42
	1111185-9	1111185-9	1	11/17/2011	15:44
	1111185-10	1111185-10	1	11/17/2011	15:46
	1111185-11	1111185-11	1	11/17/2011	15:47
	1111185-12	1111185-12	1	11/17/2011	15:49
	1111185-12D	1111185-12DUP	1	11/17/2011	15:51
	1111185-12L 5X	1111185-12SER	5	11/17/2011	15:53
	1111185-12MS	1111185-12MS	1	11/17/2011	15:55
	1111185-12MSD	1111185-12MSD	1	11/17/2011	15:56
	1111185-14	1111185-14	1	11/17/2011	15:58
	1111185-15	1111185-15	1	11/17/2011	16:00
	CCV	CCV5	1	11/17/2011	16:03
	CCB	CCB5	1	11/17/2011	16:05
	1111185-16	1111185-16	1	11/17/2011	16:06
	1111185-17	1111185-17	1	11/17/2011	16:08
	1111185-18	1111185-18	1	11/17/2011	16:10
	1111185-19	1111185-19	1	11/17/2011	16:12
	1111185-20	1111185-20	1	11/17/2011	16:14
	1111185-22	1111185-22	1	11/17/2011	16:16
	1111185-23	1111185-23	1	11/17/2011	16:17
	IP111116-4MB	IP111116-4MB	1	11/17/2011	16:19
	IP111116-4RVS	IP111116-4	1	11/17/2011	16:21
	CCV	CCV6	1	11/17/2011	16:33
	CCB	CCB6	1	11/17/2011	16:35
	IP111116-4LCS	IP111116-4LCS	1	11/17/2011	16:36
	1111137-1	1111137-1	1	11/17/2011	16:38
	1111138-1	1111138-1	1	11/17/2011	16:40
	1111140-1	1111140-1	1	11/17/2011	16:42
- Si,Zr	1111160-1	1111160-1	1	11/17/2011	16:44
	1111162-16	1111162-16	1	11/17/2011	16:46
	1111185-13	1111185-13	1	11/17/2011	16:47

Data Package ID:

ICPTrace2 Run Log -- 11/17/2011

Instrument ID: ICPTrace2
File Name: 111117A.
AnalRunID: IT111117-2A1
CalibRefID: IT111117-2A1

Comment	Inst Sample Name	Lab ID	DF	Date Analyzed	Time Analyzed
	1111185-13D	1111185-13DUP	1	11/17/2011	16:49
	1111185-13L 5X	1111185-13SER	5	11/17/2011	16:51
	1111185-13MS	1111185-13MS	1	11/17/2011	16:53
	CCV	CCV7	1	11/17/2011	16:55
	CCB	CCB7	1	11/17/2011	16:57
	1111185-13MSD	1111185-13MSD	1	11/17/2011	16:59
	1111185-24	1111185-24	1	11/17/2011	17:01
	1111185-25	1111185-25	1	11/17/2011	17:03
	1111185-26	1111185-26	1	11/17/2011	17:05
	1111185-27	1111185-27	1	11/17/2011	17:07
	1111185-28	1111185-28	1	11/17/2011	17:09
	1111185-29	1111185-29	1	11/17/2011	17:11
	1111185-30	1111185-30	1	11/17/2011	17:12
	1111185-31	1111185-31	1	11/17/2011	17:14
	1111185-32	1111185-32	1	11/17/2011	17:16
	CCV	CCV8	1	11/17/2011	17:19
	CCB	CCB8	1	11/17/2011	17:21
	1111185-33	1111185-33	1	11/17/2011	17:22
	1111185-34	1111185-34	1	11/17/2011	17:24
	1111185-35	1111185-35	1	11/17/2011	17:26
- K,Mg,Na,S,Th	1111205-1	1111205-1	1	11/17/2011	17:28
- K,Mg,Na,S,Th	1111205-2	1111205-2	1	11/17/2011	17:30
+ Na,S	1111185-4 5X	1111185-4	5	11/17/2011	17:34
+ Na,S	1111185-5 5X	1111185-5	5	11/17/2011	17:36
	CRI	CRI2	1	11/17/2011	17:38
	ICSA	ICSA2	1	11/17/2011	17:40
	ICSAB	ICSAB2	1	11/17/2011	17:41
	CCV	CCV9	1	11/17/2011	17:43
	CCB	CCB9	1	11/17/2011	17:46

Data Package ID:

Sample Id1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
ZZZ	1.97422	0.10055	4.85093	9.68315	9.63828	0.93814	0.00118	-0.06397	4.90651	4.75113	9.47108	9.90724
MIXBHIGH	H2.00465	-0.04542	4.80578	9.58937	9.72450	0.96938	0.00163	-0.05793	4.89980	4.81674	9.67732	9.76861
MIXAHIGH	0.00089	497.48419	0.00599	0.01269	0.00122	0.00105	0.00698	491.32468	0.00005	0.00115	0.00287	-0.00614
MIXCHIGH	-0.00326	0.20223	-0.00451	0.02027	-0.00022	0.00479	4.88058	-0.00223	-0.00097	0.00570	-0.00496	-0.00254
ICV	0.10224	25.59304	0.25051	0.50352	0.49779	0.24146	0.25224	24.95668	0.25951	0.25044	0.50109	0.49237
ZZZ	-0.00061	-0.01780	0.00184	0.00150	-0.00112	-0.00026	-0.00547	-0.06472	-0.00106	-0.00094	-0.00182	-0.00228
ICB	-0.00051	-0.00953	-0.00065	0.00051	-0.00110	-0.00026	-0.00256	-0.06684	-0.00010	-0.00102	-0.00095	-0.00252
CRI	0.02081	0.44033	0.01340	0.40883	0.40921	0.01154	0.04833	5.18660	0.01242	0.10266	0.02075	0.04950
ICSA	-0.00055	264.67603	0.00282	-0.00151	-0.00068	0.00053	0.00610	262.34171	0.00091	0.00050	-0.00154	-0.00570
ICSAB	0.20313	213.71334	0.10061	1.01514	0.50935	0.47790	0.53352	266.64554	1.03668	0.48380	0.47986	0.51796
CCV	0.21654	51.56166	0.51098	1.02234	1.01224	0.49127	0.52520	51.08660	0.53063	0.50518	1.01780	1.00896
CCB	-0.00085	0.07594	-0.00010	0.00047	-0.00060	0.00028	-0.00277	0.01861	0.00102	-0.00094	-0.00103	-0.00186
F111115-1MB	-0.00134	0.04501	0.00154	-0.00124	-0.00096	0.00007	-0.00374	-0.03453	0.00036	-0.00155	-0.00161	-0.00215
F111115-1RVS	0.01018	1.03858	0.05069	0.04851	0.04712	0.00961	0.10188	4.88950	0.02145	0.01894	0.04791	0.04569
F111115-1LCS	0.09591	2.05111	1.90614	0.48412	1.93906	0.04650	-0.00427	37.66709	0.05062	0.47917	0.19233	0.23887
1111119-1	-0.00082	0.04634	-0.00083	0.02924	0.01644	0.00003	-0.00356	9.01841	-0.00002	-0.00054	0.00173	0.02595
1111150-1	-0.00085	0.01846	0.00367	0.02933	0.02242	0.00013	-0.00017	349.15666	-0.00011	-0.00090	-0.00134	-0.00097
1111150-1D	-0.00103	0.02428	0.00312	0.02933	0.02198	0.00010	-0.00600	335.83248	0.00045	-0.00079	-0.00142	-0.00098
1111150-1L 5X	-0.00009	0.00891	0.00573	0.00429	0.00369	-0.00009	-0.00536	64.46820	0.00037	-0.00067	-0.00103	-0.00198
1111150-1MS	0.09797	2.11191	1.95764	0.52827	1.96455	0.04607	0.00049	376.91494	0.05075	0.47397	0.18722	0.24637
1111150-1MSD	0.09839	2.11900	1.97132	0.53583	1.97490	0.04647	0.00104	380.59278	0.05126	0.47779	0.18899	0.24822
1111179-1	-0.00038	0.05139	0.00537	0.03437	0.09792	0.00025	-0.00190	6.28794	0.00022	-0.00073	-0.00102	-0.00150
CCV	0.21920	52.05255	0.52378	1.03601	1.02587	0.49141	0.53162	51.12843	0.53521	0.50813	1.01984	1.02797
CCB	-0.00104	0.04709	0.00105	-0.00102	-0.00091	0.00026	-0.00029	-0.04163	0.00021	-0.00117	-0.00072	-0.00257
1111184-1	-0.00071	0.03110	0.00184	0.02046	0.06892	0.00024	-0.00655	56.45425	0.00046	-0.00122	-0.00140	-0.00179
1111179-1 5X	-0.00058	0.02146	0.00142	0.00420	0.01845	0.00004	-0.00050	1.16882	-0.00008	-0.00145	-0.00138	-0.00233
CCV	0.21360	50.78668	0.50333	0.99805	0.99683	0.47645	0.51953	49.53625	0.52191	0.49198	0.98983	1.00003
CCB	-0.00086	0.02550	0.00026	-0.00196	-0.00070	0.00021	-0.00352	-0.02668	0.00011	-0.00067	-0.00078	-0.00198
IP111116-3MB	-0.00055	-0.00665	-0.00260	-0.00214	-0.00099	-0.00001	0.00079	-0.01038	-0.00033	-0.00121	-0.00113	-0.00276
IP111116-3RVS	0.01007	0.99860	0.05312	0.04784	0.04707	0.00974	0.09886	4.83106	0.02064	0.01848	0.04742	0.04592
IP111116-3LCS	0.09766	2.05104	1.95541	0.49551	1.93996	0.04876	-0.00210	38.35521	0.05103	0.48522	0.19320	0.24104
1111185-2	-0.00088	0.02061	0.00075	0.06999	0.09522	0.00166	-0.00525	70.07498	0.00014	-0.00115	-0.00160	-0.00095
1111185-3	-0.00053	0.01776	-0.00010	0.07098	0.09386	0.00168	-0.00060	69.72893	0.00001	-0.00073	-0.00100	-0.00098
1111185-4	-0.00055	0.05206	0.00239	0.00916	0.02250	0.00030	-0.00158	39.07279	0.00038	0.00035	-0.00063	-0.00204
1111185-5	-0.00110	0.00903	-0.00236	0.00844	0.02245	0.00041	-0.00418	39.88136	0.00016	-0.00022	-0.00184	-0.00220
1111185-6	-0.00101	0.06702	-0.00102	0.15238	0.20359	0.00036	-0.00287	63.14557	-0.00014	0.00022	-0.00091	-0.00107
1111185-7	-0.00070	0.00824	-0.00454	0.15702	0.20500	0.00031	-0.00482	64.56961	-0.00008	-0.00008	-0.00167	-0.00173
1111185-8	-0.00055	0.08799	0.00032	0.05175	0.20019	0.00026	-0.00439	67.15858	0.00024	-0.00028	-0.00102	-0.00198
CCV	0.21241	50.51746	0.49592	0.99198	0.98991	0.47054	0.51768	49.18581	0.52034	0.48754	0.97947	1.00041
CCB	-0.00059	0.01196	-0.00199	-0.00142	-0.00083	-0.00004	-0.00158	-0.03619	-0.00049	-0.00098	-0.00098	-0.00174
1111185-9	-0.00109	0.03441	-0.00144	0.05211	0.20390	-0.00011	0.00144	70.29636	0.00059	-0.00073	-0.00128	-0.00119
1111185-10	-0.00055	-0.02972	0.00312	0.02064	0.15514	-0.00022	-0.00428	106.45214	0.00030	-0.00061	-0.00113	-0.00132
1111185-11	-0.00098	-0.04209	0.00148	0.01974	0.22868	-0.00021	0.00144	122.86211	0.00014	-0.00050	-0.00048	-0.00162
1111185-12	-0.00087	0.01800	0.00245	0.01938	0.03970	-0.00014	-0.00180	27.05872	-0.00004	-0.00088	-0.00104	-0.00125
1111185-12D	-0.00055	0.01423	-0.00284	0.01938	0.04051	-0.00001	-0.00061	27.71844	0.00030	-0.00008	-0.00086	-0.00095
1111185-12L 5X	-0.00041	-0.01224	0.00324	0.00132	0.00724	-0.00004	0.00155	5.54394	0.00016	-0.00100	-0.00150	-0.00149
1111185-12MS	0.09742	2.11457	1.97898	0.52327	2.01596	0.04972	-0.00164	66.89617	0.05152	0.49181	0.19649	0.24716
1111185-12MSD	0.09763	2.13043	1.99212	0.52399	2.02578	0.04988	-0.00530	67.12167	0.05188	0.49354	0.19636	0.24830
1111185-14	-0.00062	0.03740	-0.00303	0.01947	0.04103	0.00021	-0.00503	27.95151	0.00006	-0.00058	-0.00080	-0.00138
1111185-15	-0.00062	-0.01509	-0.00023	0.01848	0.04059	0.00003	0.00015	28.60251	0.00028	-0.00069	-0.00132	-0.00168

Sample Id1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
CCV	0.21283	50.85296	0.49592	0.99310	0.99362	0.47866	0.51458	49.48423	0.51480	0.49312	0.99412	0.99791
CCB	-0.00065	0.00973	0.00196	-0.00196	-0.00075	0.00006	-0.00298	-0.02729	0.00057	-0.00056	-0.00093	-0.00174
1111185-16	-0.00102	-0.01219	0.00172	0.02186	0.08900	0.00030	-0.00439	28.16971	0.00047	-0.00062	-0.00130	-0.00204
1111185-17	-0.00043	-0.00519	-0.00309	0.02023	0.08785	0.00023	0.00112	27.63987	0.00051	-0.00078	-0.00102	-0.00139
1111185-18	-0.00069	0.18424	0.00446	0.03802	3.27866	0.00001	-0.00361	437.00660	0.00006	0.00129	0.00024	0.00644
1111185-19	-0.00062	0.08976	0.00154	0.01735	0.04639	-0.00016	0.00221	23.17805	0.00004	-0.00092	-0.00092	-0.00174
1111185-20	0.00012	-0.01796	0.00172	0.01533	0.04532	-0.00010	0.00123	22.92401	0.00031	-0.00107	-0.00123	-0.00203
1111185-22	-0.00138	1.81585	-0.00029	0.00573	0.05120	0.00014	-0.00323	22.93376	0.00018	-0.00082	0.00038	-0.00005
1111185-23	-0.00071	0.10187	0.00324	0.00677	0.04417	0.00008	-0.00349	22.21520	-0.00028	0.00025	-0.00071	0.00060
IP111116-4MB	-0.00078	-0.00276	-0.00546	-0.00498	-0.00107	0.00015	-0.00061	-0.06005	0.00015	-0.00060	-0.00166	-0.00228
IP111116-4RVS	0.01064	1.02158	0.05549	0.04676	0.04814	0.01031	0.10372	4.98240	0.02080	0.01932	0.04962	0.04706
CCV	0.21275	50.69064	0.50048	0.98856	0.98912	0.47701	0.51521	49.28076	0.51521	0.49057	0.98904	0.99794
CCB	-0.00016	-0.00848	-0.00248	-0.00287	-0.00107	-0.00009	-0.00547	-0.05944	0.00050	-0.00060	-0.00088	-0.00222
IP111116-4LCS	0.09662	2.03472	1.92972	0.48682	1.92072	0.04838	-0.00405	37.93420	0.05080	0.48105	0.19275	0.24044
1111137-1	-0.00085	-0.00092	0.00203	0.13253	0.18569	0.00018	-0.00029	131.11004	0.00053	-0.00072	-0.00103	-0.00215
1111138-1	-0.00072	0.00166	0.02295	0.09673	0.41405	0.00020	-0.00168	120.98567	0.00014	-0.00063	-0.00123	0.00168
1111140-1	-0.00102	0.00627	0.00056	0.00537	0.05083	0.00026	-0.00063	44.42292	0.00009	-0.00121	-0.00122	0.02991
1111160-1	-0.00146	76.76008	0.05190	0.16445	1.07047	0.00921	0.00438	230.24692	0.00221	0.06081	0.06117	0.13836
1111162-16	-0.00058	2.56957	-0.00150	0.02636	0.08691	0.00047	0.00011	44.77517	0.00020	0.00063	0.00072	0.00079
1111185-13	-0.00044	0.01132	0.00056	0.01924	0.04111	0.00029	-0.00353	28.99141	0.00013	-0.00122	-0.00182	-0.00227
1111185-13D	-0.00144	0.00438	-0.00187	0.01843	0.03991	0.00022	-0.00158	28.29656	0.00021	-0.00111	-0.00165	-0.00203
1111185-13L 5X	-0.00122	-0.00095	-0.00071	-0.00039	0.00724	0.00008	-0.00709	5.74690	-0.00018	-0.00089	-0.00077	-0.00265
1111185-13MS	0.09626	2.01366	1.90331	0.50343	1.95062	0.04745	-0.00504	65.55828	0.05007	0.47214	0.18903	0.24152
CCV	0.21337	50.63634	0.50011	0.98775	0.98862	0.47221	0.51780	48.98542	0.51397	0.48730	0.98321	1.00105
CCB	-0.00136	0.00900	-0.00047	-0.00192	-0.00096	0.00001	-0.00136	-0.05446	0.00019	-0.00102	-0.00092	-0.00235
1111185-13MSD	0.09599	1.99952	1.88823	0.50068	1.92734	0.04729	0.00024	65.67371	0.05029	0.46929	0.18779	0.23791
1111185-24	-0.00075	0.54915	0.00160	0.02348	0.05669	0.00010	-0.00696	48.46239	-0.00009	0.00003	-0.00037	-0.00167
1111185-25	-0.00078	0.00784	0.00233	0.01686	0.04584	0.00018	-0.00191	40.88025	0.00043	-0.00068	-0.00128	-0.00312
1111185-26	-0.00152	0.04929	0.00142	0.01398	0.02914	0.00024	-0.00223	32.63006	-0.00012	-0.00120	-0.00090	-0.00234
1111185-27	-0.00058	0.01604	-0.00035	0.01375	0.02898	0.00031	0.00047	32.79677	-0.00002	-0.00014	-0.00061	-0.00251
1111185-28	-0.00105	0.06382	-0.00083	0.01272	0.02849	0.00038	-0.00137	30.34549	-0.00013	-0.00098	-0.00103	-0.00228
1111185-29	-0.00045	0.01793	0.00209	0.01276	0.02867	0.00035	-0.00396	29.81039	0.00017	-0.00117	-0.00111	-0.00252
1111185-30	-0.00117	0.13997	0.00190	0.01132	0.02616	0.00026	-0.00676	30.62758	0.00017	-0.00148	-0.00116	-0.00209
1111185-31	-0.00104	0.00761	0.00215	0.01231	0.02428	0.00017	-0.00429	29.91299	0.00036	-0.00060	-0.00099	-0.00251
1111185-32	-0.00075	0.03088	0.00245	0.01168	0.02483	0.00021	-0.00482	30.29837	0.00021	-0.00159	-0.00107	-0.00234
CCV	0.21333	50.54642	0.49617	0.98600	0.98473	0.46870	0.51261	48.78078	0.51500	0.48495	0.97517	1.00174
CCB	-0.00041	0.01748	0.00008	-0.00327	-0.00089	0.00017	-0.00331	-0.05008	0.00077	-0.00098	-0.00091	-0.00293
1111185-33	-0.00062	0.00168	-0.00169	0.01272	0.02465	0.00011	-0.00385	29.77344	0.00027	-0.00132	-0.00112	-0.00258
1111185-34	-0.00038	0.00082	0.00123	-0.00386	-0.00123	0.00000	-0.00104	-0.06488	0.00020	-0.00075	-0.00098	-0.00288
1111185-35	-0.00094	0.01175	-0.00096	-0.00309	-0.00094	0.00015	-0.00828	-0.06382	0.00001	-0.00124	-0.00126	-0.00275
1111205-1	-0.00023	-0.03293	0.00890	3.19278	0.01197	-0.00042	0.00079	257.89016	-0.00013	-0.00020	-0.00098	-0.00264
1111205-2	-0.00076	-0.02378	0.00519	3.15222	0.01226	-0.00033	-0.00320	256.62971	0.00001	-0.00058	-0.00145	-0.00270
1111185-4 5X	-0.00081	0.03104	0.00075	0.00141	0.00369	0.00037	-0.00331	8.06835	0.00010	-0.00078	-0.00132	-0.00294
1111185-5 5X	-0.00028	0.02232	-0.00138	0.00110	0.00364	0.00036	-0.00320	8.07520	0.00024	-0.00074	-0.00164	-0.00306
CCV	0.02072	0.46748	0.00945	0.41058	0.40868	0.01212	0.04962	5.24551	0.01295	0.10270	0.02050	0.04908
ICSA	-0.00090	264.23238	-0.00394	-0.00332	-0.00089	0.00093	0.00447	264.21337	0.00095	0.00016	-0.00196	-0.00664
ICSAB	0.20494	211.03780	0.09861	1.00197	0.49811	0.47110	0.52760	264.21558	1.03604	0.48019	0.47507	0.51998
CCV	0.21378	50.66048	0.49617	0.98829	0.98286	0.47686	0.50917	49.37414	0.51245	0.49124	0.99042	0.99580
CCB	-0.00125	0.00504	0.00069	-0.00075	-0.00078	0.00011	-0.00331	-0.04465	0.00031	-0.00136	-0.00111	-0.00222
Pb/Ba 1 11/16/11 10X	-0.00060	0.04927	0.00470	0.22455	0.02572	-0.00059	-0.00093	0.06948	-0.00041	0.00062	-0.00006	-0.00385

Sample Id1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
Pb/Ba 2 11/16/11 10X	-0.00053	0.03968	0.00245	0.11272	0.07271	-0.00071	-0.00094	0.20628	0.00001	0.00106	0.00233	-0.00438
Pb/Ba 3 11/16/11 10X	-0.00036	0.05787	0.00087	0.10349	0.14392	-0.00042	-0.00536	0.12550	0.00004	0.00132	0.00056	-0.00354

Sample Id1	Fe	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Pb I	Pb II
ZZZ	-0.02147	-0.30542	-0.00309	-0.10442	9.37878	9.56521	0.17230	9.75579	47.41005	9.40859	9.48143	9.37222
MIXBHIGH	-0.02107	-0.27499	-0.00284	-0.09043	9.53913	9.67638	0.17564	9.65598	47.79062	9.57946	9.43721	9.65048
MIXAHIGH	195.48943	246.65386	9.73628	495.19904	-0.00962	0.00090	148.74904	0.00174	0.00781	-0.00307	0.00110	L-0.00515
MIXCHIGH	0.00035	-0.25090	-0.00253	-0.37548	0.00475	0.00033	0.17662	0.00030	0.01587	0.00374	L-0.01161	0.01140
ICV	10.19890	24.71438	0.24896	25.30639	0.49623	0.49776	23.75279	0.47785	2.45580	0.49546	0.49185	0.49726
ZZZ	-0.01252	-0.25554	-0.00279	-0.05611	-0.00092	-0.00199	0.12194	-0.00226	-0.01517	0.00014	-0.00231	0.00137
ICB	-0.01398	-0.22526	-0.00273	-0.05506	-0.00097	-0.00300	0.12022	-0.00272	-0.01262	-0.00286	L-0.00354	-0.00252
CRI	0.20053	3.87523	0.01575	5.17407	0.03137	0.01853	4.29130	0.07879	0.18643	0.00665	0.00654	0.00671
ICSA	107.70821	-0.31736	-0.00251	267.22938	0.00269	-0.00465	0.13484	0.00001	0.00176	-0.00266	L-0.00420	-0.00190
ICSAB	109.68636	-0.34162	1.14469	270.63593	0.49030	0.99919	0.13585	0.95015	0.98913	0.04768	0.04216	0.05044
CCV	20.79953	51.94536	0.54804	51.14166	0.99689	1.01914	48.99134	0.98555	5.01802	1.00888	1.00271	1.01195
CCB	0.01846	-0.19608	-0.00248	0.02651	-0.00043	-0.00305	0.13645	-0.00290	-0.01396	0.00100	-0.00217	0.00257
F111115-1MB	-0.00390	-0.21031	-0.00290	-0.03447	-0.00092	-0.00332	0.14159	-0.00167	-0.01463	-0.00049	L-0.00472	0.00162
F111115-1RVS	0.99471	8.53681	0.03854	4.90627	0.04764	0.09403	8.28204	0.04700	0.95048	0.04879	0.04895	0.04871
F111115-1LCS	0.97272	39.84491	0.48695	37.26227	0.47795	0.96295	36.48765	0.46700	-0.00388	0.48053	0.47841	0.48160
1111119-1	0.06548	0.90023	-0.00093	2.21679	0.00733	0.00054	125.08900	-0.00049	-0.05198	0.00752	0.00602	0.00828
1111150-1	-0.00516	5.92845	0.00302	57.47843	0.44591	1.73553	78.69767	-0.00158	0.01197	-0.00013	-0.00290	0.00126
1111150-1D	-0.00370	5.73623	0.00279	55.84489	0.43283	1.68631	76.99689	-0.00136	0.00593	-0.00141	L-0.00347	-0.00038
1111150-1L 5X	-0.01232	0.59364	-0.00202	11.22368	0.08971	0.35151	13.96709	-0.00133	-0.00294	-0.00133	-0.00213	-0.00093
1111150-1MS	0.96373	54.43644	0.59369	93.44680	0.89803	2.64755	114.23687	0.45997	0.01372	0.48298	0.47360	0.48766
1111150-1MSD	0.96919	54.63737	0.59824	94.26523	0.90279	2.67084	114.47842	0.46731	0.02729	0.48116	0.48355	0.47997
1111179-1	-0.00814	2.05744	0.00261	1.38936	0.00401	0.00416	H166.21898	-0.00202	-0.00442	0.00104	0.00112	0.00100
CCV	20.81672	52.60359	0.55612	51.34990	0.99640	1.02958	49.34993	1.00130	5.05885	1.00541	1.00971	1.00326
CCB	-0.00436	-0.27523	-0.00280	-0.03447	-0.00073	-0.00254	0.12921	-0.00235	-0.01221	-0.00090	-0.00264	-0.00002
1111184-1	-0.00940	1.90351	-0.00002	14.36954	0.21352	-0.00277	22.80198	-0.00131	-0.00845	0.00261	-0.00078	0.00430
1111179-1 5X	-0.01152	0.46871	-0.00103	0.21524	0.00001	-0.00263	36.39867	-0.00103	-0.01141	0.00019	-0.00175	0.00116
CCV	20.19083	51.52252	0.53049	49.92586	0.96866	0.99422	48.41219	0.95979	4.85913	0.97815	0.97669	0.97888
CCB	-0.00045	-0.24003	-0.00277	-0.02154	-0.00058	-0.00204	0.13768	-0.00206	-0.01504	-0.00066	-0.00240	0.00021
IP111116-3MB	-0.01232	-0.23019	-0.00297	-0.05770	-0.00097	-0.00442	0.12615	-0.00193	-0.01813	-0.00036	-0.00161	0.00026
IP111116-3RVS	0.99098	7.91983	0.03971	4.84415	0.04695	0.09467	8.21883	0.04689	0.92542	0.04746	0.04572	0.04833
IP111116-3LCS	0.97652	37.84089	0.49795	37.68110	0.48031	0.97845	36.57931	0.47635	-0.01504	0.48402	0.48516	0.48345
1111185-2	0.02409	12.68254	-0.00213	8.16283	0.01784	0.00825	57.15490	-0.00049	0.02487	-0.00007	L-0.00455	0.00217
1111185-3	-0.01192	12.59536	-0.00222	8.11917	-0.00097	0.00692	56.85876	-0.00144	0.02178	-0.00136	-0.00031	-0.00188
1111185-4	0.13502	78.94448	-0.00032	5.50297	0.15195	0.02859	H230.31017	-0.00105	-0.01947	-0.00132	0.00001	-0.00198
1111185-5	0.04240	78.44440	-0.00027	5.62565	0.15703	0.02836	H230.46678	-0.00142	-0.02686	0.00034	L-0.00565	0.00332
1111185-6	0.88679	58.60130	0.00339	6.39993	0.51123	-0.00066	35.21832	0.00115	0.02232	-0.00092	-0.00212	-0.00032
1111185-7	0.80808	59.57768	0.00337	6.48747	0.50628	-0.00273	35.94406	0.00078	0.00835	-0.00081	L-0.00344	0.00050
1111185-8	0.00141	12.08399	-0.00078	14.93241	0.04075	-0.00222	20.03213	-0.00028	-0.01154	-0.00070	-0.00281	0.00035
CCV	19.96444	51.38358	0.52889	49.47390	0.95647	0.98281	48.27535	0.95723	4.86743	0.96946	0.96596	0.97121
CCB	-0.00158	-0.22234	-0.00279	-0.02919	-0.00073	-0.00227	0.13316	-0.00228	-0.01087	0.00038	-0.00219	0.00166
1111185-9	0.00963	11.94776	-0.00083	15.74201	0.01974	-0.00236	20.50629	-0.00197	-0.01221	-0.00007	-0.00256	0.00117
1111185-10	0.00068	3.12893	-0.00263	14.92658	0.00670	-0.00360	16.17908	-0.00197	-0.01436	-0.00017	-0.00046	-0.00002
1111185-11	0.04837	4.05943	-0.00250	18.00773	-0.00024	-0.00231	32.90235	-0.00354	-0.01450	-0.00040	-0.00237	0.00058
1111185-12	0.03192	3.32426	-0.00279	3.24445	0.00685	0.00228	3.94789	-0.00136	0.01587	-0.00087	-0.00164	-0.00048
1111185-12D	0.03537	3.39265	-0.00275	3.31314	0.00714	0.00292	4.00125	-0.00144	0.02998	-0.00187	-0.00271	-0.00144
1111185-12L 5X	-0.00675	0.39776	-0.00297	0.61572	0.00059	-0.00195	0.83127	-0.00116	-0.00375	0.00048	0.00118	0.00013
1111185-12MS	1.04669	43.11621	0.51801	41.54965	0.49643	0.99597	42.00604	0.47650	0.02447	0.49131	0.49091	0.49152
1111185-12MSD	1.04450	43.29691	0.51996	41.57317	0.49785	0.99799	42.14899	0.48255	0.01977	0.49021	0.49034	0.49015
1111185-14	0.03822	3.40050	-0.00261	3.32107	0.00743	0.00283	4.00186	-0.00070	0.02998	0.00017	L-0.00358	0.00205
1111185-15	-0.01378	3.36603	-0.00274	3.40985	-0.00097	0.00288	4.09329	-0.00162	0.01936	-0.00085	-0.00214	-0.00020

Sample Id1	Fe	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Pb I	Pb II
CCV	20.22729	51.21473	0.53086	50.06572	0.97265	0.98856	48.44345	0.94938	4.93027	0.98264	0.98151	0.98320
CCB	-0.00018	-0.24058	-0.00282	-0.02127	-0.00053	-0.00080	0.13630	-0.00224	-0.01020	-0.00133	L-0.00359	-0.00020
1111185-16	-0.00071	3.58671	-0.00270	5.13441	0.01627	-0.00025	4.35607	-0.00134	-0.01289	0.00025	-0.00290	0.00182
1111185-17	-0.01305	3.55096	-0.00282	5.07308	-0.00009	-0.00158	4.35531	-0.00080	-0.00912	0.00017	0.00111	-0.00030
1111185-18	0.58225	20.01085	0.30789	88.99708	0.22100	0.00058	37.64440	0.00093	0.33729	-0.00095	0.00013	-0.00149
1111185-19	0.12619	1.59200	0.00099	11.84059	0.00177	-0.00282	1.88901	-0.00224	-0.01208	-0.00106	-0.00210	-0.00054
1111185-20	-0.01020	1.51869	0.00066	11.79715	-0.00107	-0.00282	1.88540	-0.00199	0.00055	-0.00033	-0.00226	0.00063
1111185-22	1.11236	22.85282	-0.00213	3.91061	0.14686	0.00885	4.56818	-0.00213	0.03374	-0.00024	L-0.00447	0.00187
1111185-23	0.21673	22.44123	-0.00302	3.68096	0.10966	0.00940	4.50735	-0.00144	-0.00805	-0.00031	-0.00136	0.00022
IP111116-4MB	-0.01431	-0.27450	-0.00306	-0.05902	-0.00107	-0.00254	0.12130	-0.00160	-0.00993	-0.00146	-0.00035	-0.00201
IP111116-4RVS	1.01077	7.96451	0.04045	4.97183	0.04852	0.09940	8.33081	0.04825	0.96974	0.04894	0.04965	0.04858
CCV	20.11438	51.08180	0.52852	49.93738	0.96714	0.98521	48.35033	0.94827	4.89110	0.97692	0.97296	0.97889
CCB	-0.01026	-0.25809	-0.00301	-0.04529	-0.00092	-0.00254	0.12276	-0.00199	-0.01880	0.00041	-0.00106	0.00115
IP111116-4LCS	0.97139	37.38520	0.49427	37.46061	0.47702	0.96562	36.37002	0.46778	-0.01463	0.47939	0.48088	0.47865
1111137-1	0.88086	2.04650	-0.00061	58.38453	0.03611	-0.00135	71.48219	-0.00294	0.07285	0.00007	-0.00213	0.00116
1111138-1	3.63003	1.30785	-0.00075	51.73134	0.03757	-0.00181	26.20074	-0.00261	0.49561	0.00102	0.00108	0.00100
1111140-1	0.00904	-0.02555	0.00312	17.16096	0.00006	-0.00378	28.74720	-0.00235	-0.00711	-0.00055	-0.00039	-0.00063
1111160-1	141.50488	42.24131	0.11179	47.33469	1.86710	0.00269	18.05235	0.10212	4.47169	0.16058	0.15501	0.16336
1111162-16	3.11991	10.22123	0.00226	7.01515	0.05008	-0.00172	1.86639	0.00072	0.09623	0.00192	-0.00023	0.00300
1111185-13	-0.01278	3.38390	-0.00279	3.43759	-0.00102	0.00178	4.13462	-0.00120	0.02366	-0.00094	L-0.00501	0.00110
1111185-13D	-0.01152	3.30930	-0.00276	3.35436	-0.00097	0.00196	4.04093	-0.00177	0.01721	0.00065	-0.00053	0.00124
1111185-13L 5X	-0.01384	0.39649	-0.00302	0.64159	-0.00102	-0.00185	0.85024	-0.00025	-0.00442	-0.00079	L-0.00567	0.00165
1111185-13MS	0.95240	42.02031	0.50182	40.06988	0.46702	0.95945	41.14497	0.46312	0.02635	0.47002	0.47155	0.46925
CCV	19.96886	51.11134	0.52904	49.67857	0.95849	0.98686	48.33063	0.95019	4.88158	0.96728	0.96897	0.96644
CCB	-0.00834	-0.29803	-0.00308	-0.04133	-0.00082	-0.00176	0.12488	-0.00222	-0.01396	-0.00041	-0.00243	0.00060
1111185-13MSD	0.94714	41.83431	0.49897	40.16685	0.46482	0.95444	41.00152	0.45790	0.02245	0.46994	0.46927	0.47027
1111185-24	1.73473	2.74830	0.00303	13.07607	0.39599	-0.00139	1.90397	-0.00131	0.02501	0.00128	0.00035	0.00174
1111185-25	0.50718	2.45886	0.00159	11.89331	0.25285	-0.00328	1.86601	-0.00239	-0.01235	-0.00014	-0.00033	-0.00005
1111185-26	0.02051	2.15301	0.00075	11.37333	0.00020	-0.00093	2.28242	-0.00312	0.00122	-0.00028	-0.00169	0.00043
1111185-27	-0.01026	2.15848	0.00077	11.42445	-0.00024	-0.00116	2.26589	-0.00252	-0.01383	-0.00134	-0.00259	-0.00072
1111185-28	0.05082	2.18037	0.00095	11.77013	0.00103	-0.00052	2.20844	-0.00314	-0.00953	-0.00058	-0.00209	0.00018
1111185-29	-0.00986	2.14553	0.00084	11.58417	-0.00033	-0.00227	2.18225	-0.00197	-0.01141	-0.00161	L-0.00398	-0.00043
1111185-30	0.18772	2.09246	0.00045	11.89569	0.00914	-0.00277	2.21209	-0.00261	0.00499	0.00056	L-0.00411	0.00289
1111185-31	-0.00463	2.06291	0.00031	11.68245	-0.00024	-0.00208	2.21179	-0.00237	-0.01020	0.00022	-0.00209	0.00137
1111185-32	0.00738	2.10741	0.00043	11.73490	0.00010	-0.00162	2.18119	-0.00217	-0.01275	0.00123	-0.00110	0.00239
CCV	19.84420	51.03695	0.52757	49.43533	0.95077	0.97716	48.26753	0.95112	4.82622	0.96008	0.96249	0.95888
CCB	-0.00741	-0.30460	-0.00308	-0.04080	-0.00077	-0.00227	0.12652	-0.00299	-0.00791	-0.00063	L-0.00330	0.00070
1111185-33	-0.00847	2.07987	0.00039	11.63980	-0.00024	-0.00213	2.18161	-0.00118	-0.01530	-0.00047	L-0.00358	0.00108
1111185-34	-0.01464	-0.31846	-0.00324	-0.05875	-0.00107	-0.00130	0.11571	-0.00131	-0.01947	-0.00055	0.00009	-0.00086
1111185-35	-0.01006	-0.28855	-0.00314	-0.06166	-0.00112	-0.00195	0.12022	-0.00232	-0.01221	-0.00033	-0.00119	0.00011
1111205-1	-0.01298	H399.22227	0.16891	H891.05343	0.00719	0.00416	H446.18816	-0.00059	0.07554	-0.00074	0.00084	-0.00152
1111205-2	-0.00967	H393.82520	0.16591	H880.76269	0.01188	0.00549	H445.43789	0.00019	0.08239	-0.00258	-0.00219	-0.00278
1111185-4 5X	0.01408	12.75640	-0.00246	1.43055	0.03030	0.00311	48.98243	-0.00202	-0.00348	-0.00058	L-0.00323	0.00075
1111185-5 5X	-0.00436	12.54284	-0.00257	1.22537	0.03117	0.00375	47.60564	-0.00120	-0.01463	-0.00168	L-0.00341	-0.00081
CH	0.19973	3.85389	0.01519	5.20341	0.03108	0.01899	4.33012	0.08236	0.18966	0.00619	0.00510	0.00674
ICSA	107.01942	-0.32211	-0.00271	268.14599	0.00196	-0.00332	0.14704	-0.00016	-0.00160	-0.00091	L-0.00429	0.00077
ICSAB	107.42587	-0.30496	1.10295	268.47271	0.48031	0.98277	0.19662	0.94724	0.97957	0.05005	0.04505	0.05255
CCV	20.12307	50.81140	0.52639	50.06679	0.96591	0.98180	48.15329	0.94561	4.87859	0.97733	0.97374	0.97912
CCB	-0.00575	-0.27450	-0.00296	-0.03684	-0.00073	-0.00245	0.13742	-0.00274	-0.01195	-0.00270	L-0.00640	-0.00086
Pb/Ba 1 11/16/11 10X	0.01282	0.55571	-0.00261	-0.05004	-0.00019	0.00233	H521.70435	-0.00118	0.03038	-0.00103	0.00132	-0.00221

Sample Id1	Fe	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Pb I	Pb II
Pb/Ba 2 11/16/11 10X	0.22383	1.03336	-0.00261	-0.04160	0.00079	-0.00286	H478.97148	0.00021	0.04745	0.00949	0.01097	0.00874
Pb/Ba 3 11/16/11 10X	0.03126	1.23344	-0.00230	-0.03948	0.00040	0.01068	H497.29756	-0.00127	0.04355	-0.00037	0.00168	-0.00140

Sample Id1	S	Sb	Se	Se I	Se II	Si	Sn	Sr	Th	Ti	Tl	U
ZZZ	-0.01566	1.93842	4.72124	4.75466	4.70456	46.88828	9.63851	9.68130	1.87096	9.35318	4.91030	-0.09853
MIXBHIGH	-0.00983	1.96188	4.88574	4.79834	4.92937	48.73637	9.55422	9.72803	1.94922	9.73257	4.77355	-0.08478
MIXAHIGH	-0.00011	0.01220	-0.00514	L-0.01872	0.00164	-0.00710	0.00184	0.00899	-0.03935	-0.00041	0.00677	0.12066
MIXCHIGH	H50.11387	0.00226	-0.00047	L-0.00963	0.00410	-0.03833	0.02103	-0.00037	L-0.44471	0.00775	0.00056	49.58772
ICV	2.58139	0.25550	0.50001	0.49961	0.50021	2.49181	0.49507	0.26162	0.15406	0.24405	0.24540	2.45621
ZZZ	-0.02926	-0.00076	0.00063	L-0.00691	0.00439	-0.02162	-0.00496	-0.00339	-0.00671	-0.00225	0.00469	-0.03553
ICB	-0.02149	-0.00015	-0.00284	L-0.00800	-0.00027	-0.02206	-0.00069	-0.00343	-0.00836	-0.00239	0.00051	-0.03597
CRI	0.20008	0.12829	0.00835	0.00367	0.01069	0.09847	0.09818	0.01954	0.00001	0.01921	0.02150	0.18930
ICSA	0.03293	-0.00423	-0.00336	L-0.02015	0.00502	-0.02327	-0.00176	-0.00185	L-0.05832	-0.00071	0.00675	0.03623
ICSAB	1.10358	0.56295	0.04800	0.02483	0.05957	0.96046	1.00101	1.06322	-0.00114	0.95339	0.10712	10.06038
CCV	5.22958	0.48066	1.03149	1.04360	1.02543	5.03037	1.01712	0.53385	0.34267	0.49293	0.50862	4.94364
CCB	-0.02537	-0.00377	-0.00005	-0.00435	0.00209	-0.01565	-0.00475	-0.00296	-0.00797	-0.00189	0.00337	-0.03067
F111115-1MB	-0.02149	-0.00355	-0.00127	L-0.00980	0.00299	-0.01738	-0.00240	-0.00341	-0.01049	-0.00249	-0.00320	-0.04530
F111115-1RVS	1.00062	0.08717	0.04930	0.04525	0.05132	0.26291	0.09046	0.04782	-0.01437	0.04542	0.09675	0.45407
F111115-1LCS	-0.01371	0.45183	1.93642	1.95991	1.92470	1.95960	0.48264	0.51311	-0.04182	0.46938	1.89739	-0.04241
1111119-1	7.88609	-0.00018	0.00243	0.00420	0.00155	3.97861	0.00892	0.07381	-0.01393	-0.00110	0.00664	-0.03736
1111150-1	H297.51827	0.00060	-0.00149	L-0.01095	0.00324	10.85743	-0.00475	2.50681	L-0.05463	-0.00372	0.00101	-0.02178
1111150-1D	H290.28078	0.00018	-0.00038	L-0.00883	0.00384	10.58062	-0.00048	2.44587	L-0.05725	-0.00355	0.00514	-0.00358
1111150-1L 5X	H66.09664	-0.00020	-0.00411	L-0.01150	-0.00042	2.12910	-0.00176	0.49917	-0.02364	-0.00250	0.00059	-0.02798
1111150-1MS	H289.07390	0.46359	2.09129	2.11553	2.07919	12.43884	0.49012	2.94372	L-0.06418	0.46155	1.92416	-0.04107
1111150-1MSD	H291.73862	0.46651	2.10274	2.12806	2.09009	12.53362	0.49781	2.97018	L-0.06091	0.46239	1.94793	-0.01845
1111179-1	42.17804	0.00100	0.00149	L-0.00613	0.00529	4.52644	0.00059	0.29958	-0.00519	-0.00169	0.00151	-0.02976
CCV	5.32070	0.48705	1.03719	1.05761	1.02700	5.04873	1.01584	0.54064	0.32724	0.49047	0.52082	5.01092
CCB	-0.01760	-0.00377	-0.00184	L-0.00902	0.00174	-0.01709	-0.00539	-0.00323	-0.00386	-0.00210	0.00214	-0.04175
1111184-1	3.41403	-0.00095	0.00021	L-0.00785	0.00424	4.07394	-0.00368	1.16791	-0.02129	-0.00242	0.00200	-0.04219
1111179-1 5X	8.17073	-0.00264	-0.00073	L-0.01057	0.00419	0.85502	-0.00368	0.05743	-0.00509	-0.00217	0.00365	-0.03997
CCV	5.13845	0.47125	1.00947	1.02003	1.00420	4.91348	0.98514	0.52434	0.30817	0.47855	0.50103	4.86833
CCB	-0.01566	-0.00264	-0.00244	L-0.00971	0.00119	-0.02141	-0.00496	-0.00306	-0.00534	-0.00209	0.00180	-0.02710
IP111116-3MB	-0.01566	-0.00062	-0.00435	L-0.01866	0.00279	-0.02346	-0.00411	-0.00337	-0.00467	-0.00221	0.00510	-0.03420
IP111116-3RVS	1.00256	0.08894	0.04946	0.04705	0.05067	0.25925	0.09751	0.04778	-0.01252	0.04492	0.10099	0.46428
IP111116-3LCS	-0.01371	0.46130	2.04486	2.07459	2.03001	1.98242	0.48820	0.51384	-0.04264	0.46843	1.94801	-0.05262
1111185-2	29.32169	-0.00065	0.00371	L-0.00529	0.00820	2.22530	-0.00048	0.34956	-0.01043	-0.00191	0.00169	-0.03688
1111185-3	29.33128	0.00046	-0.00021	-0.00331	0.00133	2.19255	0.00102	0.34805	-0.01594	-0.00239	0.00175	-0.00624
1111185-4	H149.46943	-0.00189	0.00105	-0.00148	0.00232	4.81046	0.00187	0.08977	-0.01504	-0.00142	0.00658	-0.03297
1111185-5	H150.77058	-0.00412	-0.00259	L-0.01619	0.00420	4.81731	-0.00304	0.09137	-0.00358	-0.00214	-0.00292	-0.05154
1111185-6	10.41551	-0.00241	-0.00124	L-0.00625	0.00127	8.15325	-0.00133	0.21215	-0.01207	-0.00119	0.00092	-0.04235
1111185-7	10.58957	-0.00439	0.00093	L-0.00694	0.00486	8.16958	-0.00155	0.21547	-0.01123	-0.00253	0.00187	-0.04274
1111185-8	6.47977	-0.00123	0.00091	-0.00294	0.00284	3.27559	-0.00325	0.30460	-0.02052	-0.00234	-0.00150	-0.02755
CCV	5.09579	0.46536	0.99737	1.01162	0.99025	4.86420	0.98131	0.52179	0.30749	0.47150	0.48877	4.83882
CCB	-0.02537	0.00010	0.00032	-0.00263	0.00179	-0.01695	-0.00240	-0.00320	-0.00727	-0.00220	0.00238	-0.03154
1111185-9	6.53790	-0.00292	0.00104	L-0.00607	0.00460	3.21579	-0.00304	0.31577	-0.03056	-0.00256	0.00389	-0.04531
1111185-10	4.89995	-0.00230	0.00060	L-0.00520	0.00349	1.75638	-0.00304	0.82816	-0.03231	-0.00259	0.00487	-0.03243
1111185-11	4.99496	-0.00103	-0.00026	-0.00319	0.00120	2.18385	-0.00325	0.93092	-0.03076	-0.00255	0.00414	-0.03601
1111185-12	3.51882	0.00021	0.00229	-0.00133	0.00410	1.32650	-0.00026	0.11532	-0.01552	-0.00179	0.00499	-0.04843
1111185-12D	3.57897	-0.00119	0.00075	-0.00475	0.00350	1.35748	-0.00112	0.11742	-0.01473	-0.00168	0.00262	-0.04044
1111185-12L 5X	0.69559	-0.00115	-0.00422	L-0.00972	-0.00147	0.25550	-0.00325	0.02082	-0.01019	-0.00229	0.00173	-0.03953
1111185-12MS	3.61390	0.45896	2.06892	2.09910	2.05385	3.40966	0.49267	0.64210	-0.04565	0.47810	1.96565	-0.04246
1111185-12MSD	3.66046	0.46305	2.07222	2.10047	2.05811	3.41948	0.49821	0.64646	-0.04544	0.47931	1.98837	-0.04645
1111185-14	3.57897	-0.00245	0.00375	-0.00287	0.00706	1.36419	-0.00155	0.11821	-0.01164	-0.00149	0.00628	-0.02802
1111185-15	3.58479	-0.00154	0.00455	-0.00014	0.00689	1.36083	-0.00646	0.12040	-0.01630	-0.00229	0.00046	-0.02754

Sample Id1	S	Sb	Se	Se I	Se II	Si	Sn	Sr	Th	Ti	Tl	U
CCV	5.20825	0.46378	1.01515	1.01819	1.01363	4.95193	0.98578	0.52165	0.31403	0.48090	0.48879	4.89222
CCB	-0.01954	-0.00136	0.00212	-0.00302	0.00469	-0.01608	-0.00390	-0.00311	-0.00986	-0.00217	0.00157	-0.02977
1111185-16	4.88249	-0.00107	0.00424	L-0.00520	0.00895	1.64958	-0.00667	0.11732	-0.01841	-0.00235	0.00487	-0.03775
1111185-17	4.84371	0.00060	0.00221	-0.00045	0.00354	1.61884	-0.00475	0.11589	-0.01453	-0.00213	0.00307	-0.02222
1111185-18	2.04554	-0.00101	-0.00072	L-0.00559	0.00171	4.07249	-0.00796	5.56188	L-0.06667	0.00094	0.00254	-0.04436
1111185-19	4.42480	-0.00503	0.00033	-0.00435	0.00266	4.97791	-0.00369	0.17640	-0.02755	0.00101	0.00470	-0.02542
1111185-20	4.40928	-0.00158	-0.00350	L-0.00917	-0.00067	4.79714	-0.00261	0.17576	-0.02838	-0.00251	0.00254	-0.04041
1111185-22	4.01745	-0.00340	0.00097	L-0.00504	0.00397	2.40637	-0.00500	0.07523	-0.01138	0.02874	0.00060	0.04003
1111185-23	4.09310	-0.00086	-0.00068	-0.00329	0.00063	0.49301	-0.00283	0.07228	-0.01062	0.00316	0.00068	0.05306
IP111116-4MB	-0.02149	-0.00088	-0.00120	-0.00317	-0.00022	-0.01017	0.00102	-0.00353	0.01004	-0.00173	-0.00018	-0.02754
IP111116-4RVS	1.03364	0.09106	0.05146	0.04860	0.05288	0.27408	0.10072	0.04880	-0.01307	0.04597	0.10071	0.47048
CCV	5.16365	0.46388	1.00338	1.01640	0.99688	4.92402	0.98535	0.51982	0.30722	0.47811	0.48745	4.86042
CCB	-0.02926	-0.00376	-0.00005	L-0.01134	0.00559	-0.02390	-0.00325	-0.00339	-0.01125	-0.00234	0.00133	-0.02799
IP111116-4LCS	-0.01954	0.44791	2.03368	2.07910	2.01100	1.97154	0.48158	0.50824	-0.04548	0.46577	1.92995	-0.04685
1111137-1	4.59160	-0.00052	0.00260	-0.00033	0.00407	11.04369	-0.00219	0.70401	L-0.05709	-0.00252	0.00396	-0.04324
1111138-1	2.32319	-0.00073	-0.00133	L-0.01255	0.00428	8.73434	-0.00133	0.76532	L-0.05074	-0.00251	0.00622	-0.03268
1111140-1	17.89509	-0.00286	-0.00226	L-0.00956	0.00139	9.40166	0.00059	0.07046	-0.02895	-0.00243	0.00360	-0.03111
1111160-1	24.26478	0.00161	0.00426	L-0.01850	0.01562	H81.78869	0.00527	1.24787	0.03342	0.19908	0.00273	0.05359
1111162-16	13.41129	-0.00146	-0.00273	L-0.00993	0.00087	6.71824	-0.00372	0.25221	-0.01134	0.03261	0.00323	-0.03544
1111185-13	3.61002	0.00064	0.00268	0.00016	0.00394	1.36823	-0.00603	0.12225	-0.00944	-0.00240	0.00231	-0.04263
1111185-13D	3.50135	-0.00196	0.00371	-0.00397	0.00755	1.33512	-0.00411	0.11921	-0.00895	-0.00238	0.00364	-0.04574
1111185-13L 5X	0.69171	-0.00460	-0.00068	L-0.01134	0.00464	0.25409	-0.00283	0.02152	-0.00538	-0.00226	-0.00290	-0.02399
1111185-13MS	3.52270	0.45135	1.97445	2.00714	1.95813	3.27720	0.47796	0.62790	-0.04323	0.45542	1.90290	-0.04595
CCV	5.10743	0.46177	1.00284	1.01272	0.99791	4.89044	0.97960	0.51984	0.30836	0.47342	0.50018	4.86361
CCB	-0.01954	-0.00502	-0.00242	L-0.01064	0.00169	-0.02419	-0.00411	-0.00337	-0.00660	-0.00227	-0.00232	-0.02532
1111185-13MSD	3.48971	0.44443	1.97177	1.99461	1.96036	3.26253	0.47327	0.62077	-0.04348	0.45366	1.90405	-0.04284
1111185-24	2.90750	0.00010	0.00331	-0.00035	0.00514	5.48739	-0.00198	0.27993	-0.02632	0.00844	0.00044	-0.03982
1111185-25	3.58479	-0.00391	0.00104	-0.00456	0.00384	4.63874	-0.00155	0.25397	-0.02179	-0.00250	0.00194	-0.03632
1111185-26	5.06283	-0.00003	-0.00052	-0.00466	0.00154	3.57851	-0.00155	0.21854	-0.02324	-0.00157	0.00273	-0.03333
1111185-27	5.01435	-0.00249	-0.00309	L-0.00925	-0.00002	3.53794	-0.00432	0.21939	-0.01992	-0.00251	0.00057	-0.03863
1111185-28	5.20437	-0.00192	-0.00323	L-0.00980	0.00004	3.35176	0.00123	0.22141	-0.01661	-0.00175	0.00141	-0.03424
1111185-29	5.10936	-0.00299	-0.00054	L-0.01212	0.00524	3.23796	-0.00496	0.21771	-0.01453	-0.00232	-0.00354	-0.03242
1111185-30	5.43509	-0.00412	-0.00025	L-0.01185	0.00553	3.12499	-0.00112	0.21153	-0.02090	0.00228	0.00013	-0.04631
1111185-31	5.34978	-0.00516	-0.00343	L-0.01369	0.00169	2.95317	-0.00176	0.20820	-0.01891	-0.00224	0.00678	-0.04441
1111185-32	5.32652	-0.00425	-0.00054	L-0.00582	0.00209	3.01640	-0.00496	0.20900	-0.01885	-0.00168	-0.00139	-0.02844
CCV	5.09579	0.46262	0.99958	1.02821	0.98529	4.85378	0.97470	0.51872	0.30445	0.46785	0.49161	4.83226
CCB	-0.02926	-0.00250	0.00255	-0.00225	0.00494	-0.02651	-0.00219	-0.00334	-0.00051	-0.00216	-0.00366	-0.03864
1111185-33	5.32264	-0.00249	-0.00196	L-0.00816	0.00114	2.96735	-0.00475	0.20772	-0.02226	-0.00234	0.00307	-0.03198
1111185-34	-0.02149	-0.00087	-0.00288	-0.00411	-0.00227	-0.02527	-0.00155	-0.00356	-0.00706	-0.00230	0.00359	-0.03242
1111185-35	-0.02343	-0.00095	0.00296	0.00219	0.00334	-0.02417	-0.00304	-0.00353	-0.00411	-0.00224	0.00365	-0.03908
1111205-1	H499.75141	0.00107	-0.00412	L-0.01135	-0.00052	1.80898	0.00230	5.11157	L-0.06586	-0.00377	0.00945	-0.03242
1111205-2	H496.00718	-0.00222	-0.00220	-0.00427	-0.00117	1.90025	-0.00475	5.04494	L-0.05853	-0.00344	0.00493	-0.03154
1111185-4 5X	32.04752	-0.00210	-0.00223	L-0.00746	0.00039	0.95066	-0.00496	0.01741	-0.00360	-0.00248	-0.00016	-0.03288
1111185-5 5X	31.92500	-0.00110	0.00225	-0.00395	0.00534	0.94628	-0.00496	0.01635	-0.00441	-0.00236	0.00169	-0.02799
CCV	0.21368	0.11310	0.00813	-0.00062	0.01249	0.09645	0.10096	0.01971	0.00761	0.01853	0.02074	0.18131
ICSA	0.04848	0.00017	-0.00252	L-0.01985	0.00613	-0.02929	-0.00155	-0.00187	-0.04851	-0.00066	0.00785	0.01451
ICSAB	1.10164	0.55281	0.05102	0.03722	0.05791	0.93341	0.99913	1.04415	-0.00244	0.92312	0.10310	9.85340
CCV	5.16753	0.46404	1.01432	1.02987	1.00655	4.90945	0.98727	0.51748	0.30751	0.47719	0.49687	4.83296
CCB	-0.02537	0.00017	0.00092	L-0.00684	0.00479	-0.02381	-0.00219	-0.00329	-0.00829	-0.00217	0.00429	-0.03464
Pb/Ba 1 11/16/11 10X	H986.12590	-0.00205	0.00769	0.00896	0.00705	1.65278	0.01939	-0.00261	-0.01020	-0.00121	0.00430	-0.02356

Sample Id1	S	Sb	Se	Se I	Se II	Si	Sn	Sr	Th	Ti	Tl	U
Pb/Ba 2 11/16/11 10X	H997.65839	-0.00106	0.00226	0.00061	0.00309	1.16940	0.03220	-0.00154	-0.01258	-0.00110	0.00589	-0.03036
Pb/Ba 3 11/16/11 10X	H986.31742	-0.00072	0.01464	0.02140	0.01126	0.97597	0.03071	-0.00320	-0.01203	-0.00139	0.00286	-0.03156

Sample Id1	V	Zn	Zr
ZZZ	4.78117	9.10390	L-0.07529
MIXBHIGH	4.81092	9.62547	L-0.07846
MIXAHIGH	-0.00714	-0.00538	0.00764
MIXCHIGH	-0.00896	-0.00022	4.93900
ICV	0.24885	0.48282	0.49698
ZZZ	-0.00088	-0.00295	0.00040
ICB	-0.00114	-0.00174	0.00022
CRI	0.10400	0.04760	0.05218
ICSA	-0.00533	-0.00235	0.00640
ICSAB	0.48869	0.91478	0.49503
CCV	0.50258	0.98302	0.99617
CCB	-0.00060	-0.00189	0.00106
F111115-1MB	-0.00165	0.00266	0.00017
F111115-1RVS	0.04888	0.04472	0.04868
F111115-1LCS	0.48932	0.46824	0.00587
1111119-1	-0.00031	0.07295	0.00120
1111150-1	0.00014	0.00524	-0.00043
1111150-1D	-0.00037	0.00464	-0.00017
1111150-1L 5X	-0.00032	-0.00052	0.00068
1111150-1MS	0.48359	0.45791	0.00026
1111150-1MSD	0.48713	0.46778	-0.00004
1111179-1	-0.00023	0.03804	-0.00093
CCV	0.50614	0.97146	1.00367
CCB	-0.00055	-0.00235	0.00056
1111184-1	-0.00107	0.00236	0.00099
1111179-1 5X	-0.00126	0.00661	0.00006
CCV	0.49167	0.93757	0.97647
CCB	-0.00046	-0.00189	0.00077
IP111116-3MB	-0.00098	-0.00128	-0.00001
IP111116-3RVS	0.04814	0.04532	0.04924
IP111116-3LCS	0.49146	0.47614	0.00482
1111185-2	0.00092	0.00160	-0.00023
1111185-3	0.00140	0.00023	0.00037
1111185-4	-0.00034	0.00631	-0.00017
1111185-5	-0.00113	0.00843	-0.00155
1111185-6	-0.00099	0.02635	-0.00094
1111185-7	-0.00138	0.02635	-0.00142
1111185-8	-0.00048	-0.00083	0.00062
CCV	0.48700	0.91857	0.96969
CCB	-0.00030	-0.00250	0.00080
1111185-9	-0.00076	0.00084	0.00319
1111185-10	-0.00055	0.00539	0.00138
1111185-11	-0.00066	0.00327	0.00107
1111185-12	0.00269	0.00115	0.00083
1111185-12D	0.00269	-0.00007	0.00079
1111185-12L 5X	-0.00021	-0.00204	0.00030
1111185-12MS	0.50175	0.48555	0.00305
1111185-12MSD	0.50338	0.48358	0.00180
1111185-14	0.00283	0.00115	0.00004
1111185-15	0.00252	-0.00098	0.00036

Sample Id1	V	Zn	Zr
CCV	0.49151	0.94730	0.97331
CCB	-0.00114	-0.00250	0.00098
1111185-16	-0.00065	0.00145	0.00251
1111185-17	-0.00007	0.00008	0.00119
1111185-18	0.00054	0.04380	0.00330
1111185-19	-0.00044	-0.00113	0.00043
1111185-20	-0.00098	-0.00174	0.00058
1111185-22	0.00336	0.00099	0.00415
1111185-23	0.00207	-0.00083	0.00156
IP111116-4MB	-0.00077	0.00115	-0.00114
IP111116-4RVS	0.04984	0.04714	0.04738
CCV	0.48998	0.94092	0.97179
CCB	-0.00084	-0.00280	0.00109
IP111116-4LCS	0.48750	0.46733	0.00477
1111137-1	-0.00064	0.00160	0.00154
1111138-1	-0.00055	0.06794	0.00243
1111140-1	-0.00048	0.00737	-0.00041
1111160-1	0.19037	0.41933	-0.00441
1111162-16	0.00438	0.00646	0.00040
1111185-13	0.00235	-0.00128	0.00006
1111185-13D	0.00231	-0.00098	-0.00014
1111185-13L 5X	-0.00039	-0.00128	-0.00029
1111185-13MS	0.48413	0.45609	0.00231
CCV	0.48807	0.92800	0.96799
CCB	-0.00060	-0.00265	0.00040
1111185-13MSD	0.48117	0.45107	0.00357
1111185-24	0.00062	0.00160	0.00031
1111185-25	-0.00053	-0.00220	0.00001
1111185-26	-0.00036	-0.00204	0.00043
1111185-27	-0.00039	-0.00098	0.00020
1111185-28	-0.00027	-0.00022	0.00011
1111185-29	-0.00067	-0.00250	-0.00031
1111185-30	0.00002	0.01086	-0.00002
1111185-31	-0.00046	0.00266	0.00045
1111185-32	-0.00037	0.00160	0.00009
CCV	0.48516	0.91614	0.96624
CCB	-0.00102	-0.00326	0.00043
1111185-33	-0.00044	-0.00052	0.00131
1111185-34	-0.00126	-0.00204	0.00007
1111185-35	-0.00065	-0.00189	-0.00006
1111205-1	0.00317	-0.00007	0.00424
1111205-2	0.00333	0.00084	0.00316
1111185-4 5X	-0.00116	0.00054	-0.00021
1111185-5 5X	-0.00053	0.00145	-0.00027
CCV	0.10439	0.04699	0.05042
ICSA	-0.00516	-0.00356	0.00566
ICSAB	0.48271	0.89699	0.48685
CCV	0.48921	0.94836	0.97156
CCB	-0.00121	-0.00265	0.00085
Pb/Ba 1 11/16/11 10X	-0.00083	0.00069	0.00390

Sample Id1	V	Zn	Zr
Pb/Ba 2 11/16/11 10X	-0.00077	0.01010	0.00244
Pb/Ba 3 11/16/11 10X	-0.00057	0.00266	0.00235

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:00
SampleId1 : RL **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:23:26
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE2

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.110	0.187	0.185	0.144	0.027	0.479	0.138	0.136	0.109
#2	0.111	0.186	0.183	0.144	0.027	0.478	0.140	0.135	0.112
Mean	**0.111**	**0.186**	**0.184**	**0.144**	**0.027**	**0.478**	**0.139**	**0.136**	**0.110**
%RSD	0.447	0.228	0.808	0.098	0.796	0.133	1.223	0.574	1.602

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.100	0.194	0.062	0.094	1.004	0.384	0.159	0.014	0.080
#2	0.101	0.193	0.062	0.094	1.007	0.385	0.157	0.014	0.081
Mean	**0.100**	**0.193**	**0.062**	**0.094**	**1.005**	**0.384**	**0.158**	**0.014**	**0.080**
%RSD	0.564	0.403	0.000	0.376	0.197	0.074	0.671	0.000	0.970

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	1.055	0.219	0.099	2.060	0.605	0.011	0.175	0.375	0.251
#2	1.056	0.222	0.098	2.059	0.610	0.010	0.175	0.375	0.253
Mean	**1.056**	**0.221**	**0.099**	**2.060**	**0.608**	**0.011**	**0.175**	**0.375**	**0.252**
%RSD	0.074	0.994	0.573	0.024	0.547	2.668	0.000	0.038	0.562

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.303	0.070	0.157	0.544	0.319	0.223	0.166	0.134	0.023
#2	0.303	0.070	0.156	0.546	0.317	0.222	0.167	0.134	0.022
Mean	**0.303**	**0.070**	**0.156**	**0.545**	**0.318**	**0.222**	**0.167**	**0.134**	**0.022**
%RSD	0.000	0.406	0.045	0.208	0.422	0.350	0.297	0.000	1.263

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.288		
#2	0.289		
Mean	**0.289**	**0.000**	**0.000**
%RSD	0.245	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:00
SampleId1 : RL2 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:25:50
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE3

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.117	0.232	0.196	0.287	0.037	0.630	0.145	0.298	0.125
#2	0.118	0.234	0.197	0.285	0.037	0.630	0.144	0.301	0.126
Mean	**0.117**	**0.233**	**0.196**	**0.286**	**0.037**	**0.630**	**0.144**	**0.299**	**0.125**
%RSD	0.302	0.395	0.432	0.470	0.000	0.011	0.637	0.614	0.451

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.107	0.208	0.066	0.182	1.358	0.874	0.256	0.019	0.108
#2	0.106	0.208	0.066	0.184	1.361	0.875	0.258	0.019	0.110
Mean	**0.106**	**0.208**	**0.066**	**0.183**	**1.360**	**0.875**	**0.257**	**0.019**	**0.109**
%RSD	0.199	0.034	0.107	0.888	0.114	0.049	0.440	0.000	1.039

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	2.665	0.260	0.145	2.080	0.625	0.014	0.188	0.384	0.264
#2	2.671	0.258	0.141	2.089	0.622	0.014	0.190	0.380	0.267
Mean	**2.668**	**0.259**	**0.143**	**2.084**	**0.623**	**0.014**	**0.189**	**0.382**	**0.265**
%RSD	0.156	0.628	1.830	0.309	0.340	1.554	0.524	0.685	0.666

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.387	0.076	0.348	0.573	0.528	0.236	0.192	0.144	0.027
#2	0.389	0.077	0.349	0.573	0.529	0.238	0.194	0.143	0.027
Mean	**0.388**	**0.076**	**0.348**	**0.573**	**0.528**	**0.237**	**0.193**	**0.143**	**0.027**
%RSD	0.456	0.185	0.183	0.012	0.174	0.626	0.661	0.296	0.530

	Zr	Pb	Se
	Reading	Reading	Reading
#1	0.368		
#2	0.369		
Mean	**0.368**	**0.000**	**0.000**
%RSD	0.211	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:01
SampleId1 : B3 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:28:12
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE4

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.141	0.165	0.228	0.198	0.238	0.992	0.137	0.041	0.393
#2	0.139	0.166	0.224	0.197	0.239	0.994	0.135	0.043	0.393
Mean	**0.140**	**0.165**	**0.226**	**0.198**	**0.239**	**0.993**	**0.136**	**0.042**	**0.393**
%RSD	0.757	0.385	1.314	0.143	0.356	0.178	0.937	2.859	0.090

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.169	0.502	0.150	0.043	0.715	0.102	0.102	0.117	0.192
#2	0.169	0.500	0.150	0.045	0.712	0.102	0.104	0.117	0.190
Mean	**0.169**	**0.501**	**0.150**	**0.044**	**0.714**	**0.102**	**0.103**	**0.117**	**0.191**
%RSD	0.167	0.296	0.141	2.560	0.327	0.485	0.962	0.241	0.555

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.106	0.531	0.272	2.496	0.839	0.009	0.188	0.414	0.302
#2	0.107	0.534	0.274	2.494	0.840	0.009	0.187	0.412	0.303
Mean	**0.106**	**0.533**	**0.273**	**2.495**	**0.840**	**0.009**	**0.188**	**0.413**	**0.302**
%RSD	0.266	0.305	0.700	0.045	0.067	2.344	0.302	0.308	0.234

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.612	0.093	0.863	0.551	1.160	0.266	0.150	0.244	0.057
#2	0.616	0.094	0.868	0.549	1.161	0.264	0.149	0.244	0.057
Mean	**0.614**	**0.093**	**0.866**	**0.550**	**1.161**	**0.265**	**0.150**	**0.244**	**0.057**
%RSD	0.495	0.531	0.376	0.257	0.097	0.454	0.566	0.087	0.000

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.263		
#2	0.259		
Mean	**0.261**	**0.000**	**0.000**
%RSD	1.219	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:01
SampleId1 : B2 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:30:37
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE5

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.444	0.171	0.620	1.337	2.165	6.084	0.138	0.044	2.923
#2	0.445	0.171	0.621	1.340	2.178	6.115	0.136	0.044	2.943
Mean	**0.445**	**0.171**	**0.620**	**1.339**	**2.172**	**6.099**	**0.137**	**0.044**	**2.933**
%RSD	0.111	0.041	0.182	0.169	0.397	0.363	0.932	0.161	0.470

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.786	3.264	0.957	0.045	0.696	0.100	0.102	1.046	1.272
#2	0.787	3.280	0.960	0.046	0.693	0.099	0.101	1.051	1.276
Mean	**0.786**	**3.272**	**0.959**	**0.045**	**0.695**	**0.099**	**0.101**	**1.048**	**1.274**
%RSD	0.162	0.361	0.258	0.623	0.316	0.213	0.279	0.331	0.255

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading

#1	0.116	3.469	1.951	6.310	2.905	0.009	0.335	0.700	0.763
#2	0.116	3.465	1.966	6.308	2.904	0.009	0.334	0.707	0.763
Mean	**0.116**	**3.467**	**1.959**	**6.309**	**2.904**	**0.009**	**0.334**	**0.704**	**0.763**
%RSD	0.122	0.078	0.538	0.018	0.024	3.074	0.085	0.633	0.019

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	3.730	0.299	8.247	0.707	9.555	0.681	0.146	1.252	0.380
#2	3.756	0.301	8.288	0.709	9.598	0.688	0.146	1.258	0.382
Mean	**3.743**	**0.300**	**8.267**	**0.708**	**9.576**	**0.684**	**0.146**	**1.255**	**0.381**
%RSD	0.484	0.613	0.348	0.190	0.323	0.744	0.048	0.349	0.371

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.301		
#2	0.296		
Mean	**0.298**	**0.000**	**0.000**
%RSD	1.304	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:01
SampleId1 : B1 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:32:59
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE6

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	3.529	0.238	4.572	12.734	20.848	57.176	0.186	0.056	27.778
#2	3.531	0.240	4.601	12.780	20.950	57.255	0.187	0.057	27.805
Mean	**3.530**	**0.239**	**4.586**	**12.757**	**20.899**	**57.215**	**0.187**	**0.057**	**27.791**
%RSD	0.042	0.385	0.449	0.259	0.342	0.098	0.379	1.375	0.071

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	7.019	31.057	9.098	0.067	0.720	0.109	0.114	10.071	12.027
#2	7.023	31.102	9.136	0.068	0.715	0.109	0.115	10.088	12.034
Mean	**7.021**	**31.079**	**9.117**	**0.068**	**0.718**	**0.109**	**0.114**	**10.080**	**12.030**
%RSD	0.038	0.102	0.296	1.252	0.483	0.259	0.247	0.123	0.046

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.188	32.936	17.912	45.135	23.691	0.012	1.832	3.746	5.335
#2	0.188	32.960	17.927	45.093	23.793	0.011	1.841	3.746	5.381
Mean	**0.188**	**32.948**	**17.920**	**45.114**	**23.742**	**0.012**	**1.836**	**3.746**	**5.358**
%RSD	0.188	0.052	0.062	0.067	0.301	2.460	0.312	0.011	0.612

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	34.268	2.405	77.702	2.461	93.813	4.896	0.165	11.448	3.610

#2	34.420	2.407	78.094	2.468	94.174	4.913	0.163	11.470	3.611
Mean	**34.344**	**2.406**	**77.898**	**2.464**	**93.993**	**4.905**	**0.164**	**11.459**	**3.611**
%RSD	0.314	0.044	0.355	0.215	0.272	0.249	0.603	0.135	0.027

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.712		
#2	0.709		
Mean	**0.710**	**0.000**	**0.000**
%RSD	0.309	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:02
SampleId1 : A5 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:35:18
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE7

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.104	1.076	0.183	0.087	0.023	0.418	0.135	1.798	0.103
#2	0.105	1.076	0.187	0.085	0.024	0.420	0.131	1.797	0.106
Mean	**0.104**	**1.076**	**0.185**	**0.086**	**0.023**	**0.419**	**0.133**	**1.798**	**0.105**
%RSD	0.203	0.026	1.450	1.150	2.737	0.354	1.966	0.047	2.436

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.096	0.187	0.060	1.596	1.588	2.294	1.139	0.012	0.073
#2	0.097	0.188	0.060	1.595	1.588	2.286	1.137	0.013	0.073
Mean	**0.097**	**0.188**	**0.060**	**1.595**	**1.588**	**2.290**	**1.138**	**0.012**	**0.073**
%RSD	0.731	0.490	0.000	0.022	0.004	0.253	0.118	2.840	0.679

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	2.339	0.199	0.080	2.040	0.606	0.009	0.171	0.374	0.254
#2	2.330	0.200	0.080	2.051	0.604	0.009	0.171	0.375	0.251
Mean	**2.334**	**0.199**	**0.080**	**2.046**	**0.605**	**0.009**	**0.171**	**0.375**	**0.253**
%RSD	0.273	0.319	0.178	0.384	0.304	0.764	0.041	0.208	0.839

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.279	0.068	0.062	0.575	0.226	0.224	0.152	0.128	0.021
#2	0.274	0.070	0.066	0.572	0.228	0.224	0.151	0.129	0.021
Mean	**0.276**	**0.069**	**0.064**	**0.574**	**0.227**	**0.224**	**0.152**	**0.129**	**0.021**
%RSD	1.202	1.437	4.104	0.382	0.530	0.063	0.140	0.659	1.688

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.242		
#2	0.243		

Mean	**0.242**	**0.000**	**0.000UNDGREEN**
%RSD	0.438	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:02
SampleId1 : A4 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:37:39
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE8

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.110	8.775	0.203	0.083	0.021	0.421	0.137	16.906	0.106
#2	0.109	8.794	0.206	0.082	0.022	0.423	0.135	16.916	0.108
Mean	**0.109**	**8.784**	**0.205**	**0.082**	**0.021**	**0.422**	**0.136**	**16.911**	**0.107**
%RSD	0.453	0.152	1.070	0.601	3.660	0.268	0.676	0.045	1.121

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.100	0.206	0.060	14.743	7.496	20.743	10.066	0.013	0.079
#2	0.100	0.207	0.061	14.756	7.517	20.804	10.074	0.014	0.080
Mean	**0.100**	**0.207**	**0.061**	**14.749**	**7.507**	**20.773**	**10.070**	**0.014**	**0.079**
%RSD	0.142	0.411	0.468	0.062	0.202	0.208	0.051	3.143	0.267

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	19.208	0.203	0.085	2.295	0.682	0.010	0.203	0.424	0.292
#2	19.261	0.204	0.085	2.286	0.682	0.010	0.203	0.421	0.288
Mean	**19.235**	**0.203**	**0.085**	**2.290**	**0.682**	**0.010**	**0.203**	**0.423**	**0.290**
%RSD	0.194	0.348	0.083	0.269	0.021	1.473	0.000	0.452	0.805

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.290	0.076	0.046	0.877	0.235	0.250	0.183	0.145	0.024
#2	0.290	0.076	0.050	0.874	0.240	0.249	0.182	0.144	0.024
Mean	**0.290**	**0.076**	**0.048**	**0.876**	**0.237**	**0.250**	**0.183**	**0.145**	**0.024**
%RSD	0.073	0.373	5.880	0.250	1.521	0.340	0.348	0.294	0.893

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.259		
#2	0.257		
Mean	**0.258**	**0.000**	**0.000**
%RSD	0.302	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:03
SampleId1 : A3 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:39:57
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE9

Raw intensities1 12:17:05 **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.109	17.234	0.220	0.084	0.023	0.431	0.136	32.392	0.111
#2	0.109	17.270	0.221	0.084	0.022	0.429	0.134	32.418	0.111
Mean	**0.109**	**17.252**	**0.220**	**0.084**	**0.023**	**0.430**	**0.135**	**32.405**	**0.111**
%RSD	0.065	0.149	0.321	0.084	1.252	0.395	0.734	0.057	0.192

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.100	0.215	0.061	28.031	15.188	44.731	19.562	0.016	0.090
#2	0.100	0.214	0.061	28.041	15.218	44.793	19.559	0.015	0.091
Mean	**0.100**	**0.215**	**0.061**	**28.036**	**15.203**	**44.762**	**19.560**	**0.015**	**0.090**
%RSD	0.353	0.296	0.349	0.024	0.138	0.098	0.012	1.837	0.470

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	39.438	0.205	0.090	2.489	0.740	0.010	0.236	0.465	0.317
#2	39.534	0.204	0.090	2.493	0.740	0.010	0.233	0.468	0.316
Mean	**39.486**	**0.204**	**0.090**	**2.491**	**0.740**	**0.010**	**0.234**	**0.467**	**0.316**
%RSD	0.172	0.381	0.236	0.114	0.000	0.718	0.935	0.440	0.268

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.303	0.082	0.065	1.036	0.250	0.265	0.196	0.152	0.027
#2	0.301	0.082	0.062	1.037	0.249	0.269	0.197	0.153	0.027
Mean	**0.302**	**0.082**	**0.063**	**1.036**	**0.250**	**0.267**	**0.197**	**0.153**	**0.027**
%RSD	0.445	0.173	2.677	0.041	0.311	1.033	0.539	0.510	0.526

	Zr	Pb	Se
	Reading	Reading	Reading
#1	0.260		
#2	0.259		
Mean	**0.260**	**0.000**	**0.000**
%RSD	0.218	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:03
SampleId1 : A2 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:42:17
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE10

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.110	33.583	0.258	0.091	0.022	0.437	0.138	61.819	0.113
#2	0.110	33.592	0.257	0.090	0.021	0.436	0.137	61.797	0.114
Mean	**0.110**	**33.588**	**0.257**	**0.090**	**0.021**	**0.436**	**0.138**	**61.808**	**0.114**
%RSD	0.257	0.018	0.303	0.939	0.989	0.211	0.463	0.025	0.623

ted: 11/18/2011 12:17:05 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.104	0.227	0.061	52.411	30.427	95.112	38.050	0.018	0.111
#2	0.104	0.226	0.061	52.417	30.430	95.130	38.055	0.017	0.110
Mean	**0.104**	**0.226**	**0.061**	**52.414**	**30.428**	**95.121**	**38.052**	**0.017**	**0.110**
%RSD	0.068	0.406	0.696	0.007	0.008	0.014	0.009	0.405	0.769

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	76.958	0.210	0.097	2.955	0.885	0.011	0.295	0.559	0.388
#2	76.969	0.211	0.100	2.952	0.877	0.011	0.297	0.565	0.382
Mean	**76.963**	**0.210**	**0.098**	**2.953**	**0.881**	**0.011**	**0.296**	**0.562**	**0.385**
%RSD	0.010	0.303	2.016	0.077	0.658	0.000	0.406	0.743	1.140

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.320	0.095	0.077	1.244	0.261	0.321	0.225	0.167	0.034
#2	0.319	0.095	0.076	1.249	0.258	0.320	0.226	0.168	0.033
Mean	**0.319**	**0.095**	**0.076**	**1.246**	**0.259**	**0.320**	**0.225**	**0.168**	**0.033**
%RSD	0.177	0.372	1.017	0.267	0.900	0.110	0.157	0.422	0.211

	Zr	Pb	Se
	Reading	Reading	Reading
#1	0.270		
#2	0.270		
Mean	**0.270**	**0.000**	**0.000**
%RSD	0.026	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:03
SampleId1 : A1 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:44:35
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE11

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.117	79.298	0.373	0.117	0.023	0.475	0.149	142.585	0.133
#2	0.118	79.360	0.367	0.117	0.023	0.475	0.153	142.671	0.133
Mean	**0.117**	**79.329**	**0.370**	**0.117**	**0.023**	**0.475**	**0.151**	**142.628**	**0.133**
%RSD	0.544	0.056	1.052	0.363	0.307	0.119	1.873	0.043	0.053

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.119	0.263	0.065	113.912	71.874	251.193	91.744	0.026	0.177
#2	0.119	0.264	0.065	114.014	71.936	251.390	91.979	0.026	0.176
Mean	**0.119**	**0.264**	**0.065**	**113.963**	**71.905**	**251.292**	**91.861**	**0.026**	**0.177**
%RSD	0.000	0.188	0.546	0.063	0.061	0.056	0.181	0.275	0.400

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	166.589	0.235	0.122	4.424	1.339	0.014	0.497	0.858	0.599
#2	166.571	0.239	0.120	4.401	1.335	0.014	0.496	0.857	0.596
Mean	**166.580**	**0.237**	**0.121**	**4.412**	**1.337**	**0.014**	**0.497**	**0.857**	**0.598**
%RSD	0.008	1.044	1.341	0.357	0.238	0.503	0.199	0.058	0.320

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.369	0.137	0.131	1.632	0.303	0.478	0.306	0.211	0.056
#2	0.369	0.135	0.130	1.632	0.303	0.479	0.304	0.209	0.056
Mean	**0.369**	**0.136**	**0.131**	**1.632**	**0.303**	**0.478**	**0.305**	**0.210**	**0.056**
%RSD	0.000	0.781	0.217	0.004	0.163	0.148	0.556	0.606	0.381

	Zr	Pb	Se
	Reading	Reading	Reading
#1	0.300		
#2	0.299		
Mean	**0.299**	**0.000**	**0.000**
%RSD	0.378	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:03
SampleId1 : C3 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:46:58
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE12

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.106	0.165	0.181	0.070	0.019	0.409	0.162	0.048	0.102
#2	0.105	0.168	0.180	0.070	0.019	0.411	0.158	0.051	0.101
Mean	**0.105**	**0.166**	**0.181**	**0.070**	**0.019**	**0.410**	**0.160**	**0.049**	**0.102**
%RSD	0.469	1.191	0.313	0.808	0.369	0.242	2.032	3.435	0.417

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.096	0.184	0.058	0.050	0.716	0.106	0.108	0.011	0.066
#2	0.096	0.184	0.059	0.051	0.711	0.108	0.109	0.011	0.066
Mean	**0.096**	**0.184**	**0.059**	**0.051**	**0.713**	**0.107**	**0.109**	**0.011**	**0.066**
%RSD	0.074	0.115	0.845	1.815	0.505	1.583	0.912	0.000	0.536

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.113	0.198	0.077	2.013	0.592	0.022	0.167	0.364	0.247
#2	0.115	0.197	0.078	2.018	0.593	0.023	0.165	0.368	0.248
Mean	**0.114**	**0.198**	**0.077**	**2.015**	**0.592**	**0.023**	**0.166**	**0.366**	**0.248**
%RSD	1.487	0.322	0.366	0.151	0.096	2.514	0.811	0.870	0.257

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.253	0.067	0.032	0.564	0.203	0.213	0.209	0.126	0.021
#2	0.252	0.067	0.032	0.564	0.203	0.217	0.207	0.125	0.021
Mean	**0.252**	**0.067**	**0.032**	**0.564**	**0.203**	**0.215**	**0.208**	**0.126**	**0.021**
%RSD	0.028	0.634	0.443	0.025	0.035	1.446	0.713	0.675	0.339

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.529		
#2	0.538		
Mean	**0.534**	**0.000**	**0.000**
%RSD	1.179	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:04
SampleId1 : C2 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:49:22
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE13

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.124	0.178	0.184	0.073	0.019	0.438	0.405	0.049	0.102
#2	0.125	0.179	0.181	0.073	0.020	0.441	0.406	0.052	0.103
Mean	**0.124**	**0.178**	**0.182**	**0.073**	**0.020**	**0.440**	**0.406**	**0.051**	**0.103**
%RSD	0.057	0.476	1.280	0.580	1.085	0.386	0.244	3.921	0.827

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.099	0.223	0.065	0.051	0.715	0.105	0.136	0.013	0.066
#2	0.099	0.224	0.065	0.052	0.715	0.106	0.138	0.013	0.067
Mean	**0.099**	**0.224**	**0.065**	**0.051**	**0.715**	**0.105**	**0.137**	**0.013**	**0.067**
%RSD	0.215	0.569	0.326	2.070	0.020	1.008	0.978	0.000	0.531

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.136	0.203	0.078	2.092	0.617	0.140	0.169	0.374	0.252
#2	0.138	0.203	0.079	2.092	0.618	0.141	0.170	0.374	0.248
Mean	**0.137**	**0.203**	**0.078**	**2.092**	**0.617**	**0.140**	**0.169**	**0.374**	**0.250**
%RSD	1.032	0.140	0.271	0.017	0.103	0.555	0.459	0.057	0.877

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.282	0.068	0.034	0.942	0.228	0.221	0.746	0.140	0.020
#2	0.282	0.068	0.034	0.945	0.227	0.216	0.745	0.140	0.020
Mean	**0.282**	**0.068**	**0.034**	**0.944**	**0.227**	**0.219**	**0.745**	**0.140**	**0.020**
%RSD	0.151	0.104	0.210	0.255	0.312	1.424	0.142	0.252	1.400

	Zr	**Pb**	**Se**
	Reading	Reading	Reading

#1	3.596		UNDGREEN
#2	3.622		
Mean	**3.609**	**0.000**	**0.000**
%RSD	0.515	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:04
SampleId1 : C1 **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:51:43
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE14

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.306	0.307	0.199	0.122	0.021	0.690	2.890	0.108	0.121
#2	0.308	0.307	0.202	0.120	0.021	0.692	2.878	0.110	0.121
Mean	**0.307**	**0.307**	**0.200**	**0.121**	**0.021**	**0.691**	**2.884**	**0.109**	**0.121**
%RSD	0.345	0.092	1.060	1.114	0.664	0.276	0.292	1.752	0.117

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.124	0.607	0.128	0.102	0.727	0.111	0.443	0.025	0.071
#2	0.124	0.609	0.128	0.105	0.723	0.113	0.445	0.025	0.071
Mean	**0.124**	**0.608**	**0.128**	**0.103**	**0.725**	**0.112**	**0.444**	**0.025**	**0.071**
%RSD	0.228	0.198	0.055	2.327	0.390	1.394	0.319	0.847	0.498

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.168	0.251	0.091	2.658	0.826	1.331	0.185	0.415	0.269
#2	0.171	0.252	0.092	2.656	0.826	1.335	0.186	0.412	0.274
Mean	**0.170**	**0.251**	**0.092**	**2.657**	**0.826**	**1.333**	**0.186**	**0.413**	**0.271**
%RSD	1.252	0.309	1.391	0.037	0.077	0.191	0.267	0.547	1.354

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.570	0.079	0.050	4.778	0.458	0.243	6.125	0.264	0.023
#2	0.569	0.077	0.050	4.775	0.458	0.243	6.152	0.264	0.023
Mean	**0.569**	**0.078**	**0.050**	**4.776**	**0.458**	**0.243**	**6.138**	**0.264**	**0.023**
%RSD	0.075	1.089	0.708	0.046	0.062	0.233	0.311	0.214	0.000

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	34.937		
#2	35.022		
Mean	**34.979**	**0.000**	**0.000**
%RSD	0.172	0.000	0.000

Method : Paragon File : 111117A Printed : 11/18/2011 12:17:04
SampleId1 : BLANK **SampleId2 :** **[STD]**
Analysis commenced : 11/17/2011 12:59:29

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE1

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.104	0.166	0.181	0.067	0.019	0.422	0.134	0.042	0.101
#2	0.104	0.165	0.182	0.067	0.019	0.423	0.133	0.041	0.101
Mean	**0.104**	**0.166**	**0.182**	**0.067**	**0.019**	**0.422**	**0.133**	**0.041**	**0.101**
%RSD	0.477	0.512	0.545	0.106	0.737	0.050	0.690	0.171	0.491

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.096	0.180	0.058	0.044	0.701	0.100	0.102	0.011	0.066
#2	0.096	0.181	0.058	0.044	0.706	0.101	0.102	0.011	0.066
Mean	**0.096**	**0.180**	**0.058**	**0.044**	**0.704**	**0.101**	**0.102**	**0.011**	**0.066**
%RSD	0.442	0.196	0.122	0.162	0.533	0.211	0.486	0.646	0.430

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.110	0.195	0.080	2.016	0.598	0.009	0.169	0.375	0.248
#2	0.110	0.197	0.078	2.018	0.593	0.009	0.169	0.370	0.248
Mean	**0.110**	**0.196**	**0.079**	**2.017**	**0.595**	**0.009**	**0.169**	**0.372**	**0.248**
%RSD	0.064	0.722	1.979	0.081	0.499	0.773	0.126	0.931	0.029

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.253	0.067	0.031	0.527	0.198	0.214	0.148	0.125	0.019
#2	0.251	0.068	0.031	0.528	0.199	0.219	0.147	0.127	0.020
Mean	**0.252**	**0.068**	**0.031**	**0.528**	**0.198**	**0.216**	**0.147**	**0.126**	**0.020**
%RSD	0.421	0.628	0.452	0.214	0.428	1.503	0.240	0.899	1.443

	Zr	Pb	Se
	Reading	Reading	Reading
#1	0.251		
#2	0.251		
Mean	**0.251**	**0.000**	**0.000**
%RSD	0.113	0.000	0.000

Line calibration information

Analyte	Reporting name	C0	C1	C2	C3	Correlation coefficient	Low limit	High limit	Date of last regression
Ag 328.068	Ag	0.0000308	0.6210948	-0.0000108	0	1.0000	-0.001	3.220	11/17/2011 13:42:53
Al 308.215	Al	-0.2533873	5.8483873	0.0099993	0	1.0000	0.046	76.248	11/17/2011 13:42:54
As 189.042/2	As	0.0097504	1.2466252	-0.0033598	0	1.0000	-0.008	4.047	11/17/2011 13:42:55
B 249.678/2	B	-0.0099218	0.9005768	-0.0004601	0	1.0000	0.002	11.179	11/17/2011 13:42:55
Ba 493.409	Ba	-0.0012515	0.522595	0.0009096	0	1.0000	0.000	18.539	11/17/2011 13:42:56
Be 313.042	Be	-0.0076341	0.0176508	-0.0000007	0	1.0000	0.422	57.215	11/17/2011 13:42:57
Bi 223.061	Bi	-0.0004821	2.1599012	-0.0112097	0	1.0000	0.000	2.344	11/17/2011 13:42:58
Ca 317.933	Ca	-0.0810279	3.0190269	0.005096	0	0.99979	0.005	136.431	11/17/2011 13:42:59
Cd 228.502/2	Cd	-0.0011984	0.2105753	0.0001955	0	1.0000	0.002	23.248	11/17/2011 13:43:00
Co 228.616	Co	0.0001226	0.7413046	-0.0002441	0	1.0000	-0.002	6.760	11/17/2011 13:43:01
Cr 267.716	Cr	-0.0014857	0.3290832	0.000007	0	1.0000	0.001	30.372	11/17/2011 13:43:01
Cu 324.753	Cu	-0.0135955	1.2312161	-0.0013898	0	1.0000	0.010	8.208	11/17/2011 13:43:04
Fe 259.94	Fe	-0.0182197	1.3262566	0.0042327	0	1.0000	0.003	1'1.851	11/17/2011 13:43:04
K 766.491	K	-2.7903196	3.5177162	-0.0000323	0	0.99997	0.704	71.505	11/17/2011 13:43:04
Li 670.784	Li	-0.0080455	0.0489805	-0.0000309	0	1.0000	0.101	251.292	11/17/2011 13:43:05
Mg 279.078	Mg	-0.0616561	5.2790895	0.0042234	0	0.99964	0.001	88.897	11/17/2011 13:43:05
Mn 257.61	Mn	-0.0012136	0.9768914	0.0032628	0	1.0000	0.000	9.510	11/17/2011 13:43:05
Mo 202.03/2	Mo	-0.0034597	0.8982992	0.0006555	0	1.0000	0.002	11.047	11/17/2011 13:43:05
Na 588.995	Na	0.0455927	0.8957698	0.0012225	0	0.99993	0.110	166.560	11/17/2011 13:43:05
Ni 231.604	Ni	-0.0033589	0.3682798	-0.0000793	0	1.0000	0.004	27.323	11/17/2011 13:43:05
P 178.287/2	P	-0.0130201	2.6873075	0.0091234	0	1.0000	0.001	17.564	11/17/2011 13:43:05
Pb 220.351	Pb I	0.0007639	0.2404463	-0.0000068	0	1.0000	-0.009	41.635	11/17/2011 13:43:05
Pb 220.352/2	Pb II	-0.0041301	0.4575773	0.0000266	0	1.0000	0.007	21.832	11/17/2011 13:43:05
S 182.04/2	S	-0.0720216	38.8735098	-0.352883	0	1.0000	0.001	1.304	11/17/2011 13:43:06
Sb 206.836/2	Sb	-0.0031859	1.4549444	0.000574	0	1.0000	0.001	1.376	11/17/2011 13:43:06
Se 196.021	Se I	-0.0043965	1.5561176	-0.0106452	0	1.0000	-0.001	3.290	11/17/2011 13:43:06
Se 196.021/2	Se II	-0.000767	1.0016968	0.0030322	0	1.0000	0.000	4.519	11/17/2011 13:43:06
Si 288.158	Si	-0.1334825	1.45968	0.0010468	0	1.0000	0.079	33.539	11/17/2011 13:43:06
Sn 189.989	Sn	-0.0009072	4.4424017	-0.0140064	0	1.0000	-0.001	2.267	11/17/2011 13:43:06
Sr 421.552	Sr	-0.0035922	0.1404717	0.0001146	0	1.0000	0.000	67.496	11/17/2011 13:43:06

Method report Paragon

Th 283.732	Th	-0.0617728	1.2600022	-0.0505107	0	0.99994	0.043	1.761	11/17/2011 13:43:06
Ti 334.941	Ti	-0.0016121	0.110512	-0.0000027	0	1.0000	-0.006	90.701	11/17/2011 13:43:06
Tl 190.864/2	Tl	0.0107469	1.2196544	-0.0027112	0	1.0000	-0.009	4.129	11/17/2011 13:43:06
U 385.958	U	-0.0279926	8.8748598	-0.017169	0	1.0000	0.000	5.700	11/17/2011 13:43:07
V 292.402	V	-0.0009036	0.4554574	-0.0001285	0	1.0000	0.001	11.014	11/17/2011 13:43:07
Zn 206.2	Zn	-0.0031058	3.0361285	0.0056465	0	1.0000	0.000	3.275	11/17/2011 13:43:07
Zr 339.198	Zr	-0.0006957	0.1546433	-0.0001632	0	1.0000	0.013	33.476	11/17/2011 13:43:07

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:39
SampleId1 : MIXBHIGH **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 14:07:30
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.00839	-0.04831	4.79891	9.58536	9.73159	0.97047	0.00018	-0.05808	4.90376
#2	2.00091	-0.04253	4.81264	9.59338	9.71741	0.96828	0.00308	-0.05778	4.89584
Mean	**2.00465**	**-0.04542**	**4.80578**	**9.58937**	**9.72450**	**0.96938**	**0.00163**	**-0.05793**	**4.89980**
%RSD	0.26366	8.99860	0.20206	0.05909	0.10314	0.15990	125.95745	0.36851	0.11428

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.82245	9.68336	9.78314	-0.02100	-0.27552	-0.00284	-0.09227	9.54671	9.68258
#2	4.81103	9.67129	9.75409	-0.02114	-0.27446	-0.00284	-0.08858	9.53155	9.67017
Mean	**4.81674**	**9.67732**	**9.76862**	**-0.02107**	**-0.27499**	**-0.00284**	**-0.09043**	**9.53913**	**9.67638**
%RSD	0.16767	0.08823	0.21035	0.44506	0.27136	0.11703	2.88962	0.11241	0.09065

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.17588	9.64789	47.79317	9.44750	9.67646	-0.01371	1.96893	4.79272	4.93720
#2	0.17540	9.66407	47.78808	9.42692	9.62450	-0.00594	1.95484	4.80397	4.92154
Mean	**0.17564**	**9.65598**	**47.79062**	**9.43721**	**9.65048**	**-0.00982**	**1.96188**	**4.79834**	**4.92937**
%RSD	0.19621	0.11849	0.00753	0.15420	0.38067	55.95363	0.50773	0.16568	0.22454

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.77519	9.56414	9.73218	1.95019	9.74381	4.76419	-0.08034	4.81649	9.63300
#2	48.69755	9.54431	9.72388	1.94825	9.72133	4.78292	-0.08922	4.80534	9.61795
Mean	**48.73637**	**9.55423**	**9.72803**	**1.94922**	**9.73257**	**4.77355**	**-0.08478**	**4.81092**	**9.62547**
%RSD	0.11265	0.14678	0.06034	0.07018	0.16334	0.27746	7.40235	0.16395	0.11057

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.07832	9.60021	4.88909
#2	-0.07860	9.55871	4.88239
Mean	**-0.07846**	**9.57946**	**4.88574**
%RSD	0.25159	0.30637	0.09692

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:39
SampleId1 : MIXAHIGH **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 14:12:02
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE11

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00178	497.20641	0.00651	0.01250	0.00092	0.00099	0.00774	490.12687	-0.00009
#2	-0.00001	497.76197	0.00547	0.01288	0.00152	0.00110	0.00623	492.52248	0.00019
Mean	**0.00089**	**497.48419**	**0.00599**	**0.01269**	**0.00122**	**0.00105**	**0.00698**	**491.32468**	**0.00005**
%RSD	143.14520	0.07897	12.24499	2.07393	34.67113	7.98018	15.33643	0.34477	414.97037

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00142	0.00258	-0.00628	195.01955	246.61591	9.73765	494.46464	-0.00991	0.00033
#2	0.00089	0.00316	-0.00601	195.95931	246.69180	9.73492	495.93343	-0.00932	0.00147
Mean	**0.00115**	**0.00287**	**-0.00614**	**195.48943**	**246.65386**	**9.73628**	**495.19904**	**-0.00961**	**0.00090**
%RSD	32.67184	14.28584	3.13655	0.33992	0.02175	0.01981	0.20973	4.31048	89.16144

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	148.85266	0.00160	0.00042	0.00234	-0.00595	0.00184	0.01588	-0.01565	0.00307
#2	148.64542	0.00188	0.01520	-0.00014	-0.00436	-0.00205	0.00853	-0.02180	0.00020
Mean	**148.74904**	**0.00174**	**0.00781**	**0.00110**	**-0.00515**	**-0.00011**	**0.01220**	**-0.01872**	**0.00164**
%RSD	0.09851	11.56450	133.87407	159.09995	21.86570	2573.22774	42.59998	23.22580	124.08354

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00799	0.00321	0.00864	-0.03948	-0.00056	0.00315	0.12852	-0.00681	-0.00553
#2	-0.00621	0.00046	0.00934	-0.03922	-0.00026	0.01039	0.11280	-0.00747	-0.00523
Mean	**-0.00710**	**0.00184**	**0.00899**	**-0.03935**	**-0.00041**	**0.00677**	**0.12066**	**-0.00714**	**-0.00538**
%RSD	17.72596	105.63217	5.52838	0.46476	51.08591	75.61935	9.21567	6.49162	3.98832

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00773	-0.00319	-0.00316
#2	0.00756	-0.00295	-0.00713
Mean	**0.00764**	**-0.00307**	**-0.00514**
%RSD	1.58874	5.50338	54.51591

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:39
SampleId1 : MIXCHIGH **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 14:13:56
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE14

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00329	0.19748	-0.00516	0.02032	-0.00017	0.00476	4.86961	-0.00042	-0.00137
#2	-0.00324	0.20697	-0.00386	0.02023	-0.00027	0.00481	4.89156	-0.00404	-0.00057
Mean	**-0.00326**	**0.20223**	**-0.00451**	**0.02027**	**-0.00022**	**0.00478**	**4.88058**	**-0.00223**	**-0.00097**
%RSD	1.09255	3.32054	20.31745	0.32454	34.78342	0.69787	0.31803	114.99867	57.90405

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00589	-0.00526	-0.00277	0.00101	-0.24808	-0.00249	-0.38155	0.00465	0.00043
#2	0.00551	-0.00466	-0.00230	-0.00031	-0.25371	-0.00256	-0.36941	0.00484	0.00024
Mean	**0.00570**	**-0.00496**	**-0.00254**	**0.00035**	**-0.25090**	**-0.00253**	**-0.37548**	**0.00475**	**0.00033**
%RSD	4.72907	8.58954	13.04351	268.95031	1.58623	2.10410	2.28634	2.91133	40.21349

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.17776	-0.00060	0.01600	-0.01357	0.01178	50.01899	0.00219	-0.01037	0.00502
#2	0.17547	0.00119	0.01574	-0.00965	0.01103	50.20874	0.00234	-0.00889	0.00318
Mean	**0.17661**	**0.00030**	**0.01587**	**-0.01161**	**0.01140**	**50.11387**	**0.00226**	**-0.00963**	**0.00410**
%RSD	0.91987	426.13325	1.19749	23.88537	4.63464	0.26775	4.64409	10.89097	31.70953

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.03908	0.02286	-0.00032	-0.44493	0.00763	0.00226	49.55386	-0.00882	-0.00037
#2	-0.03757	0.01920	-0.00042	-0.44448	0.00787	-0.00113	49.62158	-0.00910	-0.00007
Mean	**-0.03832**	**0.02103**	**-0.00037**	**-0.44471**	**0.00775**	**0.00056**	**49.58772**	**-0.00896**	**-0.00022**
%RSD	2.77257	12.29931	19.94269	0.07214	2.21876	424.68653	0.09655	2.20703	96.94749

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	4.93439	0.00334	-0.00010
#2	4.94361	0.00414	-0.00084
Mean	**4.93900**	**0.00374**	**-0.00047**
%RSD	0.13205	15.25672	110.68906

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:40
SampleId1 : ICV **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 14:28:02
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD1

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10215	25.60587	0.24857	0.50505	0.49729	0.24141	0.25277	24.96863	0.25967
#2	0.10233	25.58021	0.25245	0.50199	0.49829	0.24151	0.25170	24.94474	0.25934
Mean	**0.10224**	**25.59304**	**0.25051**	**0.50352**	**0.49779**	**0.24146**	**0.25224**	**24.95668**	**0.25951**
%RSD	0.12858	0.07090	1.09772	0.42975	0.14151	0.03072	0.30043	0.06768	0.09044

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.25060	0.50108	0.49225	10.19681	24.73899	0.24907	25.29708	0.49638	0.50006
#2	0.25029	0.50111	0.49248	10.20098	24.68976	0.24885	25.31570	0.49609	0.49546
Mean	**0.25044**	**0.50109**	**0.49237**	**10.19890**	**24.71438**	**0.24896**	**25.30639**	**0.49623**	**0.49776**
%RSD	0.08633	0.00361	0.03279	0.02891	0.14087	0.06188	0.05202	0.04190	0.65277

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	23.78542	0.47823	2.45783	0.49507	0.49612	2.59692	0.25583	0.50286	0.49443
#2	23.72016	0.47747	2.45377	0.48863	0.49839	2.56586	0.25517	0.49636	0.50598
Mean	**23.75279**	**0.47785**	**2.45580**	**0.49185**	**0.49726**	**2.58139**	**0.25550**	**0.49961**	**0.50021**
%RSD	0.19427	0.11376	0.11679	0.92671	0.32270	0.85082	0.18415	0.91926	1.63343

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.49395	0.49806	0.26148	0.15403	0.24341	0.24360	2.44868	0.24815	0.48008
#2	2.48966	0.49208	0.26175	0.15410	0.24469	0.24720	2.46375	0.24955	0.48555
Mean	**2.49181**	**0.49507**	**0.26162**	**0.15407**	**0.24405**	**0.24540**	**2.45621**	**0.24885**	**0.48282**
%RSD	0.12164	0.85387	0.07292	0.03114	0.37138	1.03773	0.43379	0.39690	0.80085

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.49646	0.49577	0.49723
#2	0.49749	0.49514	0.50278
Mean	**0.49698**	**0.49546**	**0.50001**
%RSD	0.14608	0.09032	0.78406

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:40
SampleId1 : ZZZ **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 14:29:58
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00094	-0.01713	0.00026	0.00096	-0.00120	-0.00027	-0.00893	-0.06563	-0.00105
#2	-0.00028	-0.01847	0.00342	0.00204	-0.00104	-0.00025	-0.00201	-0.06382	-0.00107
Mean	**-0.00061**	**-0.01780**	**0.00184**	**0.00150**	**-0.00112**	**-0.00026**	**-0.00547**	**-0.06472**	**-0.00106**
%RSD	75.96106	5.32570	121.42237	50.85295	9.89026	4.85727	89.42708	1.97897	1.45009

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	-0.00180	-0.00251	-0.01331	-0.26210	-0.00281	-0.05849	-0.00102	-0.00153
#2	-0.00086	-0.00184	-0.00204	-0.01172	-0.24897	-0.00277	-0.05374	-0.00082	-0.00245
Mean	**-0.00094**	**-0.00182**	**-0.00228**	**-0.01252**	**-0.25554**	**-0.00279**	**-0.05611**	**-0.00092**	**-0.00199**
%RSD	11.39748	1.58190	14.60230	8.99115	3.63372	0.77521	5.98719	15.00798	32.62295

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.12175	-0.00189	-0.01598	-0.00193	0.00245	-0.02926	-0.00209	-0.00956	0.00414
#2	0.12212	-0.00263	-0.01436	-0.00270	0.00028	-0.02926	0.00056	-0.00426	0.00464
Mean	**0.12194**	**-0.00226**	**-0.01517**	**-0.00231**	**0.00137**	**-0.02926**	**-0.00076**	**-0.00691**	**0.00439**
%RSD	0.21631	22.90967	7.51566	23.53410	111.95102	0.00000	246.09447	54.22255	8.06983

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02234	-0.00219	-0.00343	-0.00916	-0.00247	0.00550	-0.04218	-0.00105	-0.00341

#2	-0.02090	-0.00774	-0.00335	-0.00426	-0.00202	0.00388	-0.02887	-0.00072	-0.00250
Mean	**-0.02162**	**-0.00496**	**-0.00339**	**-0.00671**	**-0.00225**	**0.00469**	**-0.03553**	**-0.00088**	**-0.00295**
%RSD	4.69552	79.13431	1.55871	51.68832	14.25534	24.34937	26.49334	26.12432	21.80322

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00053	0.00099	-0.00042
#2	0.00026	-0.00071	0.00168
Mean	**0.00040**	**0.00014**	**0.00063**
%RSD	47.81163	854.36208	237.23905

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:40
SampleId1 : ICB **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 14:32:23
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00008	-0.01126	0.00184	0.00042	-0.00104	-0.00024	-0.00093	-0.06684	0.00003
#2	-0.00095	-0.00779	-0.00315	0.00060	-0.00115	-0.00028	-0.00417	-0.06684	-0.00024
Mean	**-0.00051**	**-0.00953**	**-0.00065**	**0.00051**	**-0.00109**	**-0.00026**	**-0.00255**	**-0.06684**	**-0.00010**
%RSD	119.78229	25.73117	540.99016	24.87226	6.75088	9.73725	89.67705	0.00000	182.28646

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	-0.00110	-0.00240	-0.01398	-0.22198	-0.00272	-0.05479	-0.00092	-0.00475
#2	-0.00102	-0.00079	-0.00264	-0.01398	-0.22854	-0.00273	-0.05532	-0.00102	-0.00126
Mean	**-0.00102**	**-0.00095**	**-0.00252**	**-0.01398**	**-0.22526**	**-0.00273**	**-0.05506**	**-0.00097**	**-0.00300**
%RSD	0.01181	22.54896	6.78914	0.00000	2.06105	0.39666	0.67800	7.12588	82.23391

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.12033	-0.00310	-0.00872	-0.00131	-0.00177	-0.01760	-0.00275	-0.00676	-0.00107
#2	0.12011	-0.00233	-0.01651	-0.00578	-0.00328	-0.02537	0.00244	-0.00925	0.00053
Mean	**0.12022**	**-0.00272**	**-0.01262**	**-0.00354**	**-0.00252**	**-0.02149**	**-0.00015**	**-0.00800**	**-0.00027**
%RSD	0.13164	20.00438	43.67617	89.10996	42.28443	25.58527	2384.32989	21.98648	422.16224

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02134	0.00209	-0.00341	-0.00767	-0.00240	0.00075	-0.03686	-0.00095	-0.00159
#2	-0.02278	-0.00347	-0.00344	-0.00906	-0.00239	0.00028	-0.03508	-0.00133	-0.00189
Mean	**-0.02206**	**-0.00069**	**-0.00343**	**-0.00836**	**-0.00239**	**0.00051**	**-0.03597**	**-0.00114**	**-0.00174**
%RSD	4.64243	568.50646	0.61669	11.71702	0.32680	63.52876	3.48925	23.11666	12.34177

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00031	-0.00162	-0.00296
#2	0.00012	-0.00411	-0.00272

Mean	**0.00021**	**-0.00286**	**-0.00284UNDGREEN**
%RSD	62.59187	61.58868	5.97566

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:41
SampleId1 : CRI **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/17/2011 14:35:43
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD3

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.02041	0.43529	0.01316	0.40793	0.40892	0.01153	0.05005	5.18143	0.01190
#2	0.02120	0.44537	0.01364	0.40973	0.40949	0.01156	0.04660	5.19176	0.01294
Mean	**0.02081**	**0.44033**	**0.01340**	**0.40883**	**0.40921**	**0.01154**	**0.04833**	**5.18660**	**0.01242**
%RSD	2.67499	1.62008	2.56792	0.31138	0.09961	0.20586	5.04871	0.14076	5.92804

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10236	0.02057	0.04932	0.20020	3.87468	0.01577	5.18041	0.03132	0.01766
#2	0.10297	0.02093	0.04967	0.20086	3.87578	0.01574	5.16772	0.03142	0.01941
Mean	**0.10267**	**0.02075**	**0.04950**	**0.20053**	**3.87523**	**0.01575**	**5.17407**	**0.03137**	**0.01853**
%RSD	0.42024	1.23424	0.49899	0.23408	0.01997	0.11435	0.17342	0.22025	6.65687

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.29062	0.07725	0.18723	0.00556	0.00729	0.19230	0.13024	-0.00256	0.01059
#2	4.29199	0.08033	0.18562	0.00751	0.00613	0.20785	0.12634	0.00990	0.01079
Mean	**4.29130**	**0.07879**	**0.18643**	**0.00654**	**0.00671**	**0.20008**	**0.12829**	**0.00367**	**0.01069**
%RSD	0.02253	2.76089	0.61187	21.08836	12.16510	5.49477	2.15048	240.15056	1.32468

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09826	0.09605	0.01949	0.00226	0.01930	0.02155	0.18220	0.10367	0.04730
#2	0.09869	0.10032	0.01959	-0.00223	0.01913	0.02144	0.19639	0.10432	0.04790
Mean	**0.09848**	**0.09818**	**0.01954**	**0.00001**	**0.01921**	**0.02150**	**0.18929**	**0.10400**	**0.04760**
%RSD	0.30432	3.07664	0.37870	21414.14806	0.61005	0.35482	5.30363	0.44311	0.90212

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.05158	0.00671	0.00621
#2	0.05278	0.00659	0.01049
Mean	**0.05218**	**0.00665**	**0.00835**
%RSD	1.62502	1.28683	36.25685

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:41
SampleId1 : ICSA **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/17/2011 14:37:38
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD4

Final concentrations**19:02** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00008	264.25569	0.00233	-0.00156	-0.00078	0.00052	0.00599	262.03118	0.00083
#2	-0.00103	265.09637	0.00330	-0.00147	-0.00057	0.00054	0.00621	262.65223	0.00098
Mean	**-0.00055**	**264.67603**	**0.00282**	**-0.00151**	**-0.00068**	**0.00053**	**0.00610**	**262.34171**	**0.00090**
%RSD	120.62980	0.22459	24.44484	4.20544	21.84362	2.87423	2.58018	0.16740	11.38118

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00073	-0.00123	-0.00605	107.56870	-0.32010	-0.00253	266.90558	0.00269	-0.00658
#2	0.00028	-0.00185	-0.00534	107.84771	-0.31463	-0.00249	267.55319	0.00269	-0.00273
Mean	**0.00050**	**-0.00154**	**-0.00570**	**107.70821**	**-0.31736**	**-0.00251**	**267.22938**	**0.00269**	**-0.00465**
%RSD	64.14742	28.18913	8.79537	0.18317	1.21909	1.29140	0.17136	0.00000	58.60550

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.13354	0.00067	0.00364	-0.00423	-0.00007	0.03293	-0.00136	-0.02200	0.00289
#2	0.13615	-0.00065	-0.00012	-0.00417	-0.00373	0.03293	-0.00711	-0.01829	0.00715
Mean	**0.13484**	**0.00001**	**0.00176**	**-0.00420**	**-0.00190**	**0.03293**	**-0.00423**	**-0.02015**	**0.00502**
%RSD	1.36932	9431.05385	151.12875	1.11658	136.22125	0.00000	96.12404	13.03842	60.04611

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02553	-0.00219	-0.00189	-0.06077	-0.00084	0.01191	0.02833	-0.00538	-0.00219
#2	-0.02101	-0.00133	-0.00181	-0.05587	-0.00058	0.00160	0.04412	-0.00528	-0.00250
Mean	**-0.02327**	**-0.00176**	**-0.00185**	**-0.05832**	**-0.00071**	**0.00675**	**0.03623**	**-0.00533**	**-0.00235**
%RSD	13.72473	34.30125	2.85536	5.94039	25.26476	107.96832	30.80970	1.33567	9.14830

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00654	-0.00146	-0.00540
#2	0.00627	-0.00387	-0.00132
Mean	**0.00640**	**-0.00266**	**-0.00336**
%RSD	2.95349	64.12999	85.86752

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:41
SampleId1 : ICSAB **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/17/2011 14:44:12
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD5

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.20260	213.98344	0.10682	1.01451	0.50951	0.47806	0.52868	266.88128	1.03482
#2	0.20366	213.44323	0.09441	1.01577	0.50920	0.47774	0.53837	266.40979	1.03854
Mean	**0.20313**	**213.71334**	**0.10061**	**1.01514**	**0.50935**	**0.47790**	**0.53352**	**266.64554**	**1.03668**
%RSD	0.37059	0.17874	8.71780	0.08772	0.04368	0.04682	1.28502	0.12503	0.25425

ted: 11/18/2011 12:19:02 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48399	0.48008	0.51826	109.74502	-0.34089	1.14635	270.87316	0.49011	1.00084
#2	0.48360	0.47964	0.51766	109.62769	-0.34235	1.14302	270.39870	0.49050	0.99753
Mean	**0.48379**	**0.47986**	**0.51796**	**109.68636**	**-0.34162**	**1.14469**	**270.63593**	**0.49030**	**0.99918**
%RSD	0.05562	0.06522	0.08304	0.07564	0.30201	0.20574	0.12396	0.05654	0.23432

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.13548	0.95176	0.98523	0.04111	0.05191	1.09775	0.56458	0.01758	0.05968
#2	0.13622	0.94854	0.99304	0.04320	0.04898	1.10941	0.56132	0.03207	0.05945
Mean	**0.13585**	**0.95015**	**0.98913**	**0.04215**	**0.05044**	**1.10358**	**0.56295**	**0.02483**	**0.05957**
%RSD	0.38833	0.23961	0.55852	3.49087	4.11610	0.74682	0.40906	41.26792	0.26628

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.96289	1.00506	1.06401	-0.00367	0.95348	0.10970	10.05504	0.48812	0.91462
#2	0.95804	0.99696	1.06244	0.00138	0.95330	0.10455	10.06572	0.48926	0.91493
Mean	**0.96046**	**1.00101**	**1.06322**	**-0.00114**	**0.95339**	**0.10712**	**10.06038**	**0.48869**	**0.91478**
%RSD	0.35718	0.57252	0.10451	312.38691	0.01311	3.39611	0.07508	0.16499	0.02350

	Zr	Pb	Se
	ppm	calc	calc
#1	0.49542	0.04832	0.04566
#2	0.49463	0.04705	0.05034
Mean	**0.49502**	**0.04768**	**0.04800**
%RSD	0.11411	1.87670	6.88809

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:42
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 14:46:06
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.21889	51.74161	0.52026	1.03151	1.01443	0.49473	0.53212	51.49519	0.53476
#2	0.21419	51.38172	0.50169	1.01316	1.01006	0.48781	0.51829	50.67802	0.52651
Mean	**0.21654**	**51.56166**	**0.51098**	**1.02234**	**1.01224**	**0.49127**	**0.52520**	**51.08660**	**0.53063**
%RSD	1.53335	0.49355	2.57006	1.26921	0.30504	0.99493	1.86171	1.13107	1.09838

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.51008	1.02533	1.01351	20.92377	52.04291	0.54892	51.44211	1.00274	1.02843
#2	0.50027	1.01028	1.00441	20.67529	51.84781	0.54716	50.84121	0.99104	1.00985
Mean	**0.50518**	**1.01780**	**1.00896**	**20.79953**	**51.94536**	**0.54804**	**51.14166**	**0.99689**	**1.01914**
%RSD	1.37333	1.04552	0.63760	0.84472	0.26558	0.22715	0.83083	0.83019	1.28906

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.11603	0.99932	5.01612	1.01615	1.00780	5.25866	0.49352	1.06302	1.02405
#2	48.86665	0.97177	5.01993	0.98927	1.01611	5.20049	0.46780	1.02419	1.02682
Mean	**48.99134**	**0.98555**	**5.01802**	**1.00271**	**1.01195**	**5.22958**	**0.48066**	**1.04360**	**1.02543**
%RSD	0.35994	1.97655	0.05368	1.89525	0.58035	0.78648	3.78439	2.63143	0.19115

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.06128	1.02906	0.53542	0.35645	0.49562	0.52106	4.95241	0.50640	0.99548
#2	4.99947	1.00518	0.53228	0.32889	0.49024	0.49618	4.93486	0.49877	0.97055
Mean	**5.03038**	**1.01712**	**0.53385**	**0.34267**	**0.49293**	**0.50862**	**4.94364**	**0.50258**	**0.98302**
%RSD	0.86881	1.66028	0.41606	5.68598	0.77188	3.45895	0.25091	1.07360	1.79301

	Zr	Pb	Se
	ppm	calc	calc
#1	1.00073	1.01058	1.03703
#2	0.99161	1.00717	1.02594
Mean	**0.99617**	**1.00888**	**1.03148**
%RSD	0.64692	0.23899	0.75981

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:42
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 14:48:11
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00082	0.05504	0.00172	-0.00057	-0.00078	0.00023	-0.00719	-0.00434	0.00094
#2	-0.00089	0.09684	-0.00193	0.00150	-0.00042	0.00033	0.00166	0.04155	0.00110
Mean	**-0.00085**	**0.07594**	**-0.00010**	**0.00047**	**-0.00060**	**0.00028**	**-0.00277**	**0.01861**	**0.00102**
%RSD	5.98566	38.92716	2469.80728	313.60908	43.23483	26.71344	226.35123	174.41932	10.75458

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00117	-0.00127	-0.00168	0.00937	-0.19681	-0.00256	0.00433	-0.00053	-0.00346
#2	-0.00071	-0.00080	-0.00204	0.02754	-0.19535	-0.00241	0.04868	-0.00033	-0.00263
Mean	**-0.00094**	**-0.00103**	**-0.00186**	**0.01845**	**-0.19608**	**-0.00248**	**0.02651**	**-0.00043**	**-0.00305**
%RSD	34.35943	32.03225	13.85662	69.63092	0.52617	4.21246	118.30191	31.97370	19.18290

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.13361	-0.00307	-0.01598	-0.00315	0.00473	-0.02537	-0.00433	-0.00536	0.00314
#2	0.13928	-0.00274	-0.01195	-0.00119	0.00042	-0.02537	-0.00320	-0.00333	0.00104
Mean	**0.13645**	**-0.00290**	**-0.01396**	**-0.00217**	**0.00257**	**-0.02537**	**-0.00377**	**-0.00435**	**0.00209**
%RSD	2.93844	8.03227	20.41674	64.05487	118.18385	0.00000	21.13836	32.95180	70.97918

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01491	-0.00731	-0.00310	-0.00695	-0.00201	0.00551	-0.03332	-0.00081	-0.00189
#2	-0.01638	-0.00219	-0.00283	-0.00900	-0.00178	0.00123	-0.02801	-0.00039	-0.00189
Mean	**-0.01565**	**-0.00475**	**-0.00296**	**-0.00797**	**-0.00189**	**0.00337**	**-0.03067**	**-0.00060**	**-0.00189**
%RSD	6.61976	76.31446	6.41778	18.15733	8.66492	89.74132	12.24921	49.99633	0.00000

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00084	0.00210	0.00031
#2	0.00129	-0.00011	-0.00041
Mean	**0.00106**	**0.00099**	**-0.00005**
%RSD	30.34394	157.46784	993.48231

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:42
SampleId1 : F111115-1MB **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 14:50:06
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE1

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00168	0.03912	0.00196	-0.00147	-0.00099	0.00003	-0.00050	-0.04118	0.00049
#2	-0.00100	0.05090	0.00111	-0.00102	-0.00094	0.00010	-0.00699	-0.02789	0.00023
Mean	**-0.00134**	**0.04501**	**0.00154**	**-0.00124**	**-0.00096**	**0.00007**	**-0.00374**	**-0.03453**	**0.00036**
%RSD	36.21698	18.50086	39.15567	25.59369	3.83286	68.54267	122.49432	27.20100	50.31042

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00155	-0.00160	-0.00228	-0.00668	-0.20447	-0.00291	-0.03896	-0.00092	-0.00318
#2	-0.00155	-0.00162	-0.00202	-0.00111	-0.21614	-0.00290	-0.02998	-0.00092	-0.00346
Mean	**-0.00155**	**-0.00161**	**-0.00215**	**-0.00390**	**-0.21030**	**-0.00290**	**-0.03447**	**-0.00092**	**-0.00332**
%RSD	0.01503	0.83016	8.60841	101.11498	3.92466	0.24842	18.41076	0.00000	5.86402

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.14062	-0.00281	-0.01813	-0.00654	0.00170	-0.02537	-0.00404	-0.01329	0.00063
#2	0.14256	-0.00054	-0.01114	-0.00291	0.00155	-0.01760	-0.00306	-0.00631	0.00534
Mean	**0.14159**	**-0.00167**	**-0.01463**	**-0.00472**	**0.00162**	**-0.02149**	**-0.00355**	**-0.00980**	**0.00299**
%RSD	0.96873	95.86829	33.76415	54.29170	6.85387	25.58527	19.53182	50.35586	111.40397

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01710	0.00080	-0.00346	-0.01159	-0.00243	-0.00342	-0.03154	-0.00207	0.00206
#2	-0.01765	-0.00560	-0.00337	-0.00939	-0.00255	-0.00297	-0.05905	-0.00123	0.00327
Mean	**-0.01738**	**-0.00240**	**-0.00341**	**-0.01049**	**-0.00249**	**-0.00320**	**-0.04530**	**-0.00165**	**0.00266**
%RSD	2.21143	188.83748	1.85817	14.82431	3.45126	9.94479	42.95477	35.97154	32.24890

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	0.00014	-0.00104	-0.00400**UNDGREEN**
#2	0.00020	0.00006	0.00146
Mean	**0.00017**	**-0.00049**	**-0.00127**
%RSD	25.13597	159.25596	304.31417

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:42
SampleId1 : F111115-1RVS SampleId2 : [SAMPLE]
Analysis commenced : 11/17/2011 14:52:13
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01055	1.03702	0.04600	0.04842	0.04704	0.00961	0.09831	4.89238	0.02112
#2	0.00981	1.04014	0.05537	0.04860	0.04720	0.00960	0.10544	4.88661	0.02179
Mean	**0.01018**	**1.03858**	**0.05069**	**0.04851**	**0.04712**	**0.00961**	**0.10188**	**4.88950**	**0.02146**
%RSD	5.17230	0.21224	13.06664	0.26252	0.23533	0.03589	4.94601	0.08341	2.22701

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01867	0.04798	0.04575	0.99405	8.56253	0.03863	4.90231	0.04744	0.09508
#2	0.01920	0.04784	0.04563	0.99538	8.51110	0.03846	4.91024	0.04783	0.09297
Mean	**0.01894**	**0.04791**	**0.04569**	**0.99471**	**8.53681**	**0.03854**	**4.90627**	**0.04764**	**0.09403**
%RSD	1.99201	0.20539	0.19655	0.09474	0.42600	0.30830	0.11430	0.58019	1.58862

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.30690	0.04781	0.95559	0.04887	0.05011	0.98508	0.08662	0.05357	0.05373
#2	8.25717	0.04620	0.94536	0.04903	0.04731	1.01616	0.08773	0.03693	0.04892
Mean	**8.28204**	**0.04700**	**0.95047**	**0.04895**	**0.04871**	**1.00062**	**0.08717**	**0.04525**	**0.05132**
%RSD	0.42464	2.42442	0.76155	0.23725	4.06588	2.19656	0.89840	25.99740	6.62627

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.26460	0.09303	0.04785	-0.01271	0.04549	0.09559	0.44964	0.04914	0.04456
#2	0.26122	0.08790	0.04778	-0.01603	0.04534	0.09791	0.45851	0.04863	0.04487
Mean	**0.26291**	**0.09046**	**0.04782**	**-0.01437**	**0.04542**	**0.09675**	**0.45407**	**0.04888**	**0.04471**
%RSD	0.90915	4.00675	0.11058	16.34197	0.22368	1.69894	1.38161	0.74022	0.48015

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.04822	0.04970	0.05367
#2	0.04913	0.04788	0.04493
Mean	**0.04868**	**0.04879**	**0.04930**
%RSD	1.32062	2.62828	12.54672

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:43
SampleId1 : F111115-1LCS SampleId2 : [SAMPLE]
Analysis commenced : 11/17/2011 14:53:51

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE3

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09531	2.05740	1.90530	0.48633	1.94136	0.04663	-0.00502	37.71865	0.05030
#2	0.09651	2.04483	1.90699	0.48192	1.93676	0.04637	-0.00351	37.61553	0.05094
Mean	**0.09591**	**2.05112**	**1.90614**	**0.48412**	**1.93906**	**0.04650**	**-0.00427**	**37.66709**	**0.05062**
%RSD	0.88819	0.43344	0.06264	0.64418	0.16793	0.39451	25.00571	0.19358	0.89610

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48031	0.19253	0.23899	0.97299	39.91237	0.48784	37.32420	0.47874	0.96249
#2	0.47802	0.19212	0.23875	0.97246	39.77744	0.48606	37.20035	0.47717	0.96341
Mean	**0.47917**	**0.19232**	**0.23887**	**0.97272**	**39.84491**	**0.48695**	**37.26227**	**0.47795**	**0.96295**
%RSD	0.33741	0.14811	0.07088	0.03875	0.23947	0.25822	0.23503	0.23200	0.06753

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	36.54374	0.46590	0.00230	0.48071	0.48185	-0.00594	0.45225	1.96373	1.93103
#2	36.43156	0.46809	-0.01006	0.47610	0.48134	-0.02149	0.45142	1.95608	1.91836
Mean	**36.48765**	**0.46700**	**-0.00388**	**0.47841**	**0.48160**	**-0.01371**	**0.45183**	**1.95991**	**1.92470**
%RSD	0.21739	0.33258	225.10719	0.68161	0.07395	80.18285	0.13011	0.27585	0.46534

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.95996	0.48456	0.51390	-0.03978	0.47009	1.90487	-0.04197	0.49039	0.47067
#2	1.95923	0.48072	0.51232	-0.04387	0.46867	1.88991	-0.04285	0.48825	0.46581
Mean	**1.95960**	**0.48264**	**0.51311**	**-0.04182**	**0.46938**	**1.89739**	**-0.04241**	**0.48932**	**0.46824**
%RSD	0.02616	0.56268	0.21743	6.91145	0.21472	0.55754	1.47909	0.30925	0.73402

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00607	0.48147	1.94192
#2	0.00568	0.47960	1.93092
Mean	**0.00587**	**0.48053**	**1.93642**
%RSD	4.68205	0.27540	0.40147

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:43
SampleId1 : 1111119-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 14:55:39
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE4

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00094	0.05015	0.00184	0.02888	0.01652	0.00005	-0.00172	9.03991	0.00016
#2	-0.00069	0.04253	-0.00351	0.02960	0.01636	0.00002	-0.00539	8.99691	-0.00019

Mean	**-0.00082**	**0.04634**	**-0.00083**	**0.02924**	**0.01644**	**0.00003**	**-0.00356**	**9.01841**	**-0.00002**
%RSD	22.24342	11.62584	453.60665	1.74223	0.67443	76.12647	72.95052	0.33714	1509.98243

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00077	0.00146	0.02596	0.06575	0.90807	-0.00089	2.21600	0.00729	0.00122
#2	-0.00031	0.00199	0.02595	0.06522	0.89238	-0.00096	2.21759	0.00738	-0.00015
Mean	**-0.00054**	**0.00173**	**0.02595**	**0.06548**	**0.90023**	**-0.00093**	**2.21679**	**0.00733**	**0.00053**
%RSD	60.13553	21.72580	0.02817	0.57308	1.23201	5.05609	0.05055	0.94187	182.09075

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	125.48584	-0.00065	-0.04258	0.00720	0.00803	7.87447	0.00102	-0.00055	0.00396
#2	124.69216	-0.00032	-0.06139	0.00484	0.00852	7.89771	-0.00139	0.00895	-0.00085
Mean	**125.08900**	**-0.00048**	**-0.05198**	**0.00602**	**0.00828**	**7.88609**	**-0.00018**	**0.00420**	**0.00155**
%RSD	0.44865	48.10223	25.58513	27.69191	4.18125	0.20836	931.53235	159.91858	219.25710

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.98661	0.01063	0.07400	-0.01431	-0.00102	0.00762	-0.04401	-0.00057	0.07402
#2	3.97061	0.00721	0.07361	-0.01356	-0.00118	0.00565	-0.03070	-0.00005	0.07189
Mean	**3.97861**	**0.00892**	**0.07381**	**-0.01393**	**-0.00110**	**0.00664**	**-0.03736**	**-0.00031**	**0.07295**
%RSD	0.28436	27.09109	0.37263	3.80108	10.67362	20.92775	25.19958	117.11664	2.06016

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00106	0.00775	0.00245
#2	0.00134	0.00730	0.00241
Mean	**0.00120**	**0.00752**	**0.00243**
%RSD	16.54120	4.30701	1.24885

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:43
SampleId1 : 1111150-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 14:57:28
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE5

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00135	0.01583	0.00561	0.02987	0.02237	0.00014	-0.00590	350.36256	0.00022
#2	-0.00036	0.02109	0.00172	0.02879	0.02248	0.00012	0.00555	347.95076	-0.00045
Mean	**-0.00085**	**0.01846**	**0.00367**	**0.02933**	**0.02242**	**0.00013**	**-0.00017**	**349.15666**	**-0.00011**
%RSD	82.63474	20.16237	75.07104	2.60531	0.32964	8.29464	4665.75573	0.48843	419.97504

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00144	-0.00167	-0.00132	-0.00562	5.95526	0.00305	57.64169	0.44679	1.74147
#2	-0.00037	-0.00100	-0.00061	-0.00469	5.90164	0.00300	57.31517	0.44503	1.72959
Mean	**-0.00090**	**-0.00134**	**-0.00097**	**-0.00516**	**5.92845**	**0.00302**	**57.47843**	**0.44591**	**1.73553**

%RSD	83.37914	35.37981	52.55501	12.73367	0.63953	1.31120	0.40169	0.27969	0.48395

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	78.96023	-0.00142	0.00660	-0.00364	0.00010	298.06329	0.00107	-0.01593	-0.00037
#2	78.43511	-0.00175	0.01735	-0.00215	0.00242	296.97325	0.00012	-0.00597	0.00685
Mean	**78.69767**	**-0.00158**	**0.01197**	**-0.00290**	**0.00126**	**297.51827**	**0.00060**	**-0.01095**	**0.00324**
%RSD	0.47183	14.72116	63.48906	36.43291	130.44172	0.25907	112.38385	64.33680	157.44949

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.88438	-0.00304	2.51380	-0.05416	-0.00372	0.00084	-0.02355	-0.00030	0.00509
#2	10.83048	-0.00646	2.49982	-0.05509	-0.00372	0.00118	-0.02000	0.00058	0.00540
Mean	**10.85743**	**-0.00475**	**2.50681**	**-0.05463**	**-0.00372**	**0.00101**	**-0.02178**	**0.00014**	**0.00524**
%RSD	0.35105	50.90181	0.39430	1.19994	0.00000	24.46694	11.52488	438.31040	4.09429

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00057	-0.00115	-0.00555
#2	-0.00029	0.00090	0.00258
Mean	**-0.00043**	**-0.00013**	**-0.00149**
%RSD	47.23568	1156.24800	386.86822

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:43
SampleId1 : 1111150-1D **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 14:59:16
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00156	0.02271	0.00306	0.02987	0.02201	0.00011	-0.00611	335.99369	0.00087
#2	-0.00051	0.02585	0.00318	0.02879	0.02195	0.00009	-0.00589	335.67128	0.00002
Mean	**-0.00104**	**0.02428**	**0.00312**	**0.02933**	**0.02198**	**0.00010**	**-0.00600**	**335.83248**	**0.00045**
%RSD	72.35673	9.13802	2.75768	2.60531	0.16815	12.21644	2.59989	0.06789	134.71430

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00090	-0.00151	-0.00122	-0.00390	5.74334	0.00281	55.85106	0.43317	1.68226
#2	-0.00068	-0.00132	-0.00074	-0.00350	5.72911	0.00278	55.83871	0.43248	1.69036
Mean	**-0.00079**	**-0.00142**	**-0.00098**	**-0.00370**	**5.73623**	**0.00279**	**55.84489**	**0.43283**	**1.68631**
%RSD	20.38430	9.75882	34.01767	7.61118	0.17536	0.90290	0.01563	0.11205	0.33974

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	77.03049	-0.00146	0.00794	-0.00493	0.00210	290.19781	0.00001	-0.01218	0.00204
#2	76.96328	-0.00127	0.00391	-0.00201	-0.00285	290.36374	0.00036	-0.00548	0.00564
Mean	**76.99689**	**-0.00136**	**0.00593**	**-0.00347**	**-0.00038**	**290.28078**	**0.00018**	**-0.00883**	**0.00384**
%RSD	0.06172	9.49645	48.10201	59.63392	932.11159	0.04042	135.69245	53.63590	66.40083

ted: 11/18/2011 12:19:02 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.57286	0.00038	2.44549	-0.05461	-0.00363	0.00281	-0.00935	-0.00086	0.00479
#2	10.58837	-0.00133	2.44625	-0.05990	-0.00347	0.00746	0.00218	0.00012	0.00448
Mean	**10.58061**	**-0.00048**	**2.44587**	**-0.05725**	**-0.00355**	**0.00514**	**-0.00358**	**-0.00037**	**0.00464**
%RSD	0.10360	253.97965	0.02214	6.53334	3.30041	63.94690	227.59707	187.31331	4.63052

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00038	-0.00024	-0.00270
#2	0.00004	-0.00257	0.00194
Mean	**-0.00017**	**-0.00140**	**-0.00038**
%RSD	171.40423	117.02918	862.03619

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:43
SampleId1 : 1111150-1L 5X SampleId2 : [SAMPLE]
Analysis commenced : 11/17/2011 15:01:04
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE7

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00041	0.01209	0.00878	0.00366	0.00366	-0.00006	-0.01001	64.56444	0.00033
#2	0.00024	0.00573	0.00269	0.00492	0.00371	-0.00011	-0.00071	64.37195	0.00042
Mean	**-0.00009**	**0.00891**	**0.00574**	**0.00429**	**0.00369**	**-0.00009**	**-0.00536**	**64.46820**	**0.00037**
%RSD	538.15765	50.49211	74.99817	20.75974	1.00227	42.98925	122.61651	0.21112	16.12720

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00093	-0.00163	-0.00216	-0.01265	0.59036	-0.00204	11.26871	0.08976	0.35156
#2	-0.00040	-0.00043	-0.00181	-0.01199	0.59692	-0.00199	11.17866	0.08967	0.35147
Mean	**-0.00067**	**-0.00103**	**-0.00198**	**-0.01232**	**0.59364**	**-0.00201**	**11.22368**	**0.08971**	**0.35151**
%RSD	56.54212	82.10550	12.36336	3.80682	0.78207	1.78878	0.56733	0.07704	0.01848

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	14.05135	-0.00142	-0.00657	-0.00307	0.00016	66.28867	0.00164	-0.00691	-0.00337
#2	13.88283	-0.00124	0.00069	-0.00119	-0.00201	65.90461	-0.00203	-0.01608	0.00254
Mean	**13.96709**	**-0.00133**	**-0.00294**	**-0.00213**	**-0.00093**	**66.09664**	**-0.00020**	**-0.01150**	**-0.00042**
%RSD	0.85319	9.75857	174.36132	62.24500	165.12961	0.41087	1327.86646	56.37644	998.64196

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.13826	-0.00518	0.50081	-0.02523	-0.00253	-0.00411	-0.03686	-0.00081	-0.00068
#2	2.11994	0.00166	0.49752	-0.02205	-0.00246	0.00530	-0.01911	0.00016	-0.00037
Mean	**2.12910**	**-0.00176**	**0.49917**	**-0.02364**	**-0.00250**	**0.00059**	**-0.02798**	**-0.00032**	**-0.00053**
%RSD	0.60822	274.82449	0.46609	9.51036	1.87834	1120.21323	44.84897	213.25632	40.88808

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	0.00067	-0.00092	-0.00455
#2	0.00069	-0.00174	-0.00366
Mean	**0.00068**	**-0.00133**	**-0.00411**
%RSD	1.76348	43.64371	15.30471

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:44
SampleId1 : 1111150-1MS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:02:52
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE8

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09682	2.09869	1.95511	0.52575	1.95846	0.04603	-0.00481	376.54893	0.05065
#2	0.09912	2.12514	1.96017	0.53079	1.97064	0.04610	0.00579	377.28095	0.05084
Mean	**0.09797**	**2.11191**	**1.95764**	**0.52827**	**1.96455**	**0.04607**	**0.00049**	**376.91494**	**0.05075**
%RSD	1.65949	0.88552	0.18293	0.67465	0.43826	0.10234	1523.09839	0.13733	0.25499

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47229	0.18609	0.24585	0.96180	54.32394	0.59243	93.25605	0.89645	2.64935
#2	0.47565	0.18835	0.24690	0.96566	54.54894	0.59494	93.63755	0.89960	2.64576
Mean	**0.47397**	**0.18722**	**0.24638**	**0.96373**	**54.43644**	**0.59368**	**93.44680**	**0.89803**	**2.64755**
%RSD	0.50150	0.85390	0.29984	0.28353	0.29227	0.29982	0.28867	0.24765	0.09604

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	114.12538	0.45956	0.01708	0.46726	0.49281	288.50764	0.46143	2.10597	2.09172
#2	114.34835	0.46037	0.01036	0.47995	0.48252	289.64016	0.46574	2.12509	2.06666
Mean	**114.23687**	**0.45997**	**0.01372**	**0.47360**	**0.48766**	**289.07390**	**0.46359**	**2.11553**	**2.07919**
%RSD	0.13801	0.12381	34.62846	1.89376	1.49247	0.27703	0.65638	0.63915	0.85195

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	12.41007	0.48799	2.93494	-0.06023	0.46062	1.91287	-0.06415	0.48355	0.45700
#2	12.46761	0.49226	2.95250	-0.06814	0.46248	1.93545	-0.01800	0.48364	0.45882
Mean	**12.43884**	**0.49012**	**2.94372**	**-0.06418**	**0.46155**	**1.92416**	**-0.04107**	**0.48359**	**0.45791**
%RSD	0.32709	0.61561	0.42188	8.71096	0.28438	0.82989	79.44439	0.01371	0.28146

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00063	0.48430	2.09646
#2	0.00115	0.48166	2.08612
Mean	**0.00026**	**0.48298**	**2.09129**
%RSD	490.86030	0.38675	0.34966

SampleId1 : 1111150-1MSD **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:04:42
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE9

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09818	2.12006	1.97355	0.53556	1.97302	0.04646	0.00126	381.25578	0.05162
#2	0.09859	2.11794	1.96909	0.53610	1.97678	0.04649	0.00083	379.92978	0.05091
Mean	**0.09839**	**2.11900**	**1.97132**	**0.53583**	**1.97490**	**0.04647**	**0.00104**	**380.59278**	**0.05126**
%RSD	0.29643	0.07066	0.16002	0.07126	0.13459	0.05841	29.47379	0.24636	0.97880

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47771	0.18982	0.24785	0.97072	54.62369	0.59771	94.26767	0.90343	2.67287
#2	0.47787	0.18815	0.24858	0.96766	54.65104	0.59878	94.26279	0.90216	2.66881
Mean	**0.47779**	**0.18898**	**0.24822**	**0.96919**	**54.63737**	**0.59824**	**94.26523**	**0.90279**	**2.67084**
%RSD	0.02355	0.62575	0.20855	0.22361	0.03540	0.12648	0.00366	0.10008	0.10742

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	114.51079	0.46769	0.02756	0.48591	0.47832	291.65407	0.46736	2.13135	2.09121
#2	114.44604	0.46692	0.02702	0.48119	0.48163	291.82316	0.46565	2.12478	2.08898
Mean	**114.47842**	**0.46731**	**0.02729**	**0.48355**	**0.47997**	**291.73862**	**0.46651**	**2.12806**	**2.09009**
%RSD	0.03999	0.11633	1.39267	0.69017	0.48690	0.04098	0.25826	0.21852	0.07550

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	12.52298	0.49610	2.96805	-0.06230	0.46279	1.94754	-0.01090	0.48736	0.46915
#2	12.54426	0.49952	2.97231	-0.05952	0.46199	1.94833	-0.02599	0.48690	0.46641
Mean	**12.53362**	**0.49781**	**2.97018**	**-0.06091**	**0.46239**	**1.94793**	**-0.01845**	**0.48713**	**0.46778**
%RSD	0.12009	0.48526	0.10153	3.23145	0.12165	0.02887	57.82567	0.06761	0.41329

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00010	0.48085	2.10458
#2	-0.00018	0.48148	2.10090
Mean	**-0.00004**	**0.48116**	**2.10274**
%RSD	486.82763	0.09300	0.12370

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:44
SampleId1 : 1111179-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:06:30
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE10

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	-0.00027	0.05084	0.00440	0.03464	0.09792	0.00028	-0.00201	6.30573	0.00012
#2	-0.00049	0.05195	0.00634	0.03410	0.09792	0.00022	-0.00179	6.27015	0.00033
Mean	**-0.00038**	**0.05139**	**0.00537**	**0.03437**	**0.09792**	**0.00025**	**-0.00190**	**6.28794**	**0.00022**
%RSD	40.02025	1.53546	25.63044	1.11153	0.00000	17.49957	8.26977	0.40004	64.55455

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00088	-0.00079	-0.00179	-0.00814	2.06364	0.00266	1.39411	0.00406	0.00508
#2	-0.00057	-0.00124	-0.00121	-0.00814	2.05124	0.00256	1.38460	0.00396	0.00324
Mean	**-0.00073**	**-0.00102**	**-0.00150**	**-0.00814**	**2.05744**	**0.00261**	**1.38936**	**0.00401**	**0.00416**
%RSD	29.68154	31.12972	27.59165	0.00000	0.42623	2.76373	0.48383	1.72144	31.20179

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	166.19160	-0.00175	-0.00603	-0.00003	0.00153	42.15899	0.00122	-0.00443	0.00644
#2	166.24636	-0.00230	-0.00281	0.00227	0.00046	42.19708	0.00078	-0.00784	0.00414
Mean	**166.21898**	**-0.00202**	**-0.00442**	**0.00112**	**0.00100**	**42.17804**	**0.00100**	**-0.00613**	**0.00529**
%RSD	0.02329	19.20442	51.58317	145.46701	75.84686	0.06387	30.56207	39.30030	30.78836

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.52066	-0.00133	0.29953	-0.00533	-0.00159	0.00110	-0.03952	-0.00053	0.03788
#2	4.53221	0.00251	0.29963	-0.00505	-0.00179	0.00192	-0.02000	0.00007	0.03819
Mean	**4.52644**	**0.00059**	**0.29958**	**-0.00519**	**-0.00169**	**0.00151**	**-0.02976**	**-0.00023**	**0.03803**
%RSD	0.18039	460.79828	0.02477	3.82271	8.32587	38.59732	46.38814	185.83191	0.56448

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00101	0.00101	0.00282
#2	-0.00086	0.00107	0.00015
Mean	**-0.00093**	**0.00104**	**0.00149**
%RSD	11.38900	3.60353	126.95009

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:44
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 15:09:00
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.21978	52.05954	0.51965	1.03592	1.02453	0.49123	0.52871	51.09544	0.53555
#2	0.21862	52.04556	0.52791	1.03610	1.02721	0.49160	0.53454	51.16142	0.53488
Mean	**0.21920**	**52.05255**	**0.52378**	**1.03601**	**1.02587**	**0.49141**	**0.53162**	**51.12843**	**0.53521**
%RSD	0.37430	0.01900	1.11426	0.01228	0.18496	0.05384	0.77446	0.09124	0.08832

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.50752	1.01824	1.02834	20.79819	52.57387	0.55598	51.32793	0.99517	1.02825

#2	0.50874	1.02142	1.02760	20.83525	52.63332	0.55626	51.37188	0.99763	1.03092
Mean	**0.50813**	**1.01983**	**1.02797**	**20.81672**	**52.60359**	**0.55612**	**51.34990**	**0.99640**	**1.02958**
%RSD	0.16986	0.22042	0.05090	0.12587	0.07990	0.03645	0.06053	0.17449	0.18319

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.36479	1.00335	5.08824	1.00813	1.00170	5.31682	0.48643	1.06138	1.02705
#2	49.33506	0.99925	5.02945	1.01129	1.00483	5.32458	0.48768	1.05384	1.02695
Mean	**49.34993**	**1.00130**	**5.05885**	**1.00971**	**1.00326**	**5.32070**	**0.48706**	**1.05761**	**1.02700**
%RSD	0.04260	0.28936	0.82167	0.22108	0.22090	0.10306	0.18217	0.50388	0.00645

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.04537	1.01584	0.53987	0.32211	0.49030	0.52497	4.99765	0.50591	0.96903
#2	5.05209	1.01584	0.54140	0.33237	0.49064	0.51667	5.02420	0.50638	0.97390
Mean	**5.04873**	**1.01584**	**0.54064**	**0.32724**	**0.49047**	**0.52082**	**5.01093**	**0.50614**	**0.97146**
%RSD	0.09410	0.00003	0.20052	2.21657	0.04938	1.12709	0.37452	0.06599	0.35401

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	1.00289	1.00384	1.03848
#2	1.00445	1.00698	1.03591
Mean	**1.00367**	**1.00541**	**1.03719**
%RSD	0.10969	0.22096	0.17536

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:45
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 15:10:54
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00101	0.04562	0.00087	-0.00048	-0.00104	0.00026	0.00230	-0.04752	0.00021
#2	-0.00108	0.04856	0.00123	-0.00156	-0.00078	0.00026	-0.00288	-0.03574	0.00021
Mean	**-0.00104**	**0.04709**	**0.00105**	**-0.00102**	**-0.00091**	**0.00026**	**-0.00029**	**-0.04163**	**0.00021**
%RSD	4.59688	4.40804	24.54896	74.99748	20.26262	0.96225	1271.84554	20.00059	0.84281

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00132	-0.00092	-0.00299	-0.00562	-0.27888	-0.00281	-0.03684	-0.00082	-0.00153
#2	-0.00102	-0.00052	-0.00215	-0.00310	-0.27159	-0.00280	-0.03209	-0.00063	-0.00355
Mean	**-0.00117**	**-0.00072**	**-0.00257**	**-0.00436**	**-0.27523**	**-0.00280**	**-0.03447**	**-0.00073**	**-0.00254**
%RSD	18.43760	39.24926	23.05911	40.87175	1.87426	0.12861	9.74687	19.05161	56.21053

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.12734	-0.00237	-0.00926	-0.00233	-0.00126	-0.02149	-0.00446	-0.00708	0.00154
#2	0.13107	-0.00233	-0.01517	-0.00296	0.00121	-0.01371	-0.00307	-0.01096	0.00194

Mean	**0.12921**	**-0.00235**	**-0.01221**	**-0.00264**	**-0.00003**	**-0.01760**	**-0.00377**	**-0.00902**	**0.00174**
%RSD	2.04139	1.10090	34.22717	16.84511	6847.72940	31.23635	25.97947	30.48274	16.33043

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01693	-0.00689	-0.00328	-0.00608	-0.00215	0.00643	-0.04308	-0.00053	-0.00250
#2	-0.01724	-0.00390	-0.00319	-0.00163	-0.00205	-0.00215	-0.04042	-0.00058	-0.00219
Mean	**-0.01709**	**-0.00539**	**-0.00323**	**-0.00386**	**-0.00210**	**0.00214**	**-0.04175**	**-0.00056**	**-0.00235**
%RSD	1.25923	39.22721	1.96125	81.53788	3.34291	283.62327	4.50691	5.86451	9.14830

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00066	-0.00161	-0.00133
#2	0.00046	-0.00018	-0.00236
Mean	**0.00056**	**-0.00090**	**-0.00185**
%RSD	24.12784	113.22120	39.36879

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:45
SampleId1 : 1111184-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:12:57
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE11

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00088	0.02682	0.00342	0.02059	0.06890	0.00023	-0.00461	56.46162	0.00078
#2	-0.00055	0.03539	0.00026	0.02032	0.06895	0.00024	-0.00850	56.44688	0.00013
Mean	**-0.00071**	**0.03110**	**0.00184**	**0.02046**	**0.06892**	**0.00024**	**-0.00655**	**56.45425**	**0.00045**
%RSD	33.01509	19.47228	121.42237	0.93373	0.05364	0.73121	41.98638	0.01846	101.54512

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00130	-0.00099	-0.00155	-0.00894	1.90898	-0.00001	14.36583	0.21357	-0.00328
#2	-0.00115	-0.00180	-0.00203	-0.00986	1.89804	-0.00003	14.37325	0.21347	-0.00227
Mean	**-0.00122**	**-0.00140**	**-0.00179**	**-0.00940**	**1.90351**	**-0.00002**	**14.36954**	**0.21352**	**-0.00277**
%RSD	8.83015	40.85758	18.97016	6.98402	0.40650	92.78604	0.03653	0.03240	25.77674

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	22.80843	-0.00135	-0.00980	-0.00235	0.00556	3.40433	0.00241	-0.01174	0.00564
#2	22.79552	-0.00127	-0.00711	0.00080	0.00304	3.42374	-0.00431	-0.00396	0.00284
Mean	**22.80198**	**-0.00131**	**-0.00845**	**-0.00078**	**0.00430**	**3.41403**	**-0.00095**	**-0.00785**	**0.00424**
%RSD	0.04003	3.95805	22.48355	287.19468	41.38546	0.40191	500.13514	70.06134	46.77632

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.07057	-0.00432	1.16701	-0.02034	-0.00235	0.00299	-0.04219	-0.00077	0.00236
#2	4.07732	-0.00304	1.16881	-0.02223	-0.00250	0.00101	-0.04219	-0.00137	0.00236
Mean	**4.07394**	**-0.00368**	**1.16791**	**-0.02129**	**-0.00242**	**0.00200**	**-0.04219**	**-0.00107**	**0.00236**

%RSD	0.11710	24.62160	0.10898	6.28815	4.19032	69.68930	0.00106	40.06266	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00079	0.00292	-0.00015
#2	0.00119	0.00229	0.00057
Mean	**0.00099**	**0.00261**	**0.00021**
%RSD	28.39314	17.04515	238.82107

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:45
SampleId1 : 1111179-1 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:14:43
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE95

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00041	0.02166	0.00282	0.00529	0.01850	0.00008	-0.00288	1.17516	0.00007
#2	-0.00075	0.02127	0.00002	0.00312	0.01840	0.00001	0.00187	1.16247	-0.00022
Mean	**-0.00058**	**0.02147**	**0.00142**	**0.00420**	**0.01845**	**0.00004**	**-0.00050**	**1.16882**	**-0.00008**
%RSD	41.50894	1.30927	139.70647	36.35042	0.40059	104.81988	668.19207	0.76818	267.12456

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00167	-0.00113	-0.00239	-0.01132	0.47546	-0.00101	0.21868	0.00015	-0.00300
#2	-0.00122	-0.00163	-0.00228	-0.01172	0.46196	-0.00106	0.21181	-0.00014	-0.00227
Mean	**-0.00145**	**-0.00138**	**-0.00233**	**-0.01152**	**0.46871**	**-0.00103**	**0.21524**	**0.00001**	**-0.00263**
%RSD	22.35080	25.99468	3.49409	2.44186	2.03610	3.41775	2.25472	2756.58887	19.72737

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	36.32697	-0.00091	-0.01302	-0.00283	0.00020	8.17654	-0.00236	-0.01019	0.00324
#2	36.47038	-0.00116	-0.00980	-0.00066	0.00212	8.16492	-0.00291	-0.01096	0.00514
Mean	**36.39867**	**-0.00103**	**-0.01141**	**-0.00175**	**0.00116**	**8.17073**	**-0.00264**	**-0.01057**	**0.00419**
%RSD	0.27860	17.53361	19.98878	87.66022	116.77460	0.10054	14.76692	5.16933	32.11895

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.85378	-0.00304	0.05735	-0.00341	-0.00209	0.00295	-0.04307	-0.00119	0.00752
#2	0.85626	-0.00432	0.05750	-0.00677	-0.00225	0.00434	-0.03686	-0.00132	0.00570
Mean	**0.85502**	**-0.00368**	**0.05743**	**-0.00509**	**-0.00217**	**0.00365**	**-0.03997**	**-0.00125**	**0.00661**
%RSD	0.20490	24.61271	0.18416	46.63053	5.40128	27.06272	10.99201	7.87255	19.48799

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00006	-0.00081	-0.00123
#2	0.00006	0.00119	-0.00022
Mean	**0.00006**	**0.00019**	**-0.00073**
%RSD	3.25830	735.09332	98.47032

ted: 11/18/2011 12:19:02 **User: MIKE LUNDGREEN**
Method : Paragon File : 111117A Printed : 11/18/2011 12:18:45
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 15:16:33
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.21343	50.83828	0.49878	0.99886	0.99580	0.47612	0.52147	49.50857	0.52170
#2	0.21377	50.73509	0.50788	0.99724	0.99786	0.47677	0.51759	49.56394	0.52212
Mean	**0.21360**	**50.78668**	**0.50333**	**0.99805**	**0.99683**	**0.47645**	**0.51953**	**49.53625**	**0.52191**
%RSD	0.11190	0.14368	1.27902	0.11472	0.14553	0.09656	0.52790	0.07904	0.05668

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49221	0.98904	1.00003	20.17720	51.58779	0.53117	49.94354	0.96812	0.99468
#2	0.49176	0.99062	1.00003	20.20445	51.45724	0.52982	49.90818	0.96921	0.99376
Mean	**0.49198**	**0.98983**	**1.00003**	**20.19083**	**51.52252**	**0.53049**	**49.92586**	**0.96866**	**0.99422**
%RSD	0.06548	0.11316	0.00044	0.09544	0.17918	0.17943	0.05009	0.07896	0.06541

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.48982	0.95805	4.86485	0.97889	0.98320	5.12294	0.47028	1.01540	1.00929
#2	48.33455	0.96153	4.85342	0.97449	0.97455	5.15396	0.47222	1.02465	0.99911
Mean	**48.41218**	**0.95979**	**4.85913**	**0.97669**	**0.97888**	**5.13845**	**0.47125**	**1.02003**	**1.00420**
%RSD	0.22679	0.25606	0.16625	0.31892	0.62504	0.42691	0.29164	0.64073	0.71630

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.91825	0.98045	0.52379	0.31147	0.47810	0.49848	4.87233	0.49011	0.93803
#2	4.90872	0.98983	0.52490	0.30487	0.47899	0.50358	4.86434	0.49323	0.93712
Mean	**4.91348**	**0.98514**	**0.52434**	**0.30817**	**0.47855**	**0.50103**	**4.86833**	**0.49167**	**0.93757**
%RSD	0.13711	0.67356	0.14997	1.51522	0.13061	0.71945	0.11603	0.44901	0.06877

	Zr	Pb	Se
	ppm	calc	calc
#1	0.97626	0.98177	1.01132
#2	0.97667	0.97453	1.00762
Mean	**0.97647**	**0.97815**	**1.00947**
%RSD	0.02957	0.52325	0.25968

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:45
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 15:20:02
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00109	0.02142	-0.00144	-0.00201	-0.00068	0.00021	-0.00439	-0.02548	0.00042
#2	-0.00062	0.02958	0.00196	-0.00192	-0.00073	0.00020	-0.00266	-0.02789	-0.00021
Mean	**-0.00086**	**0.02550**	**0.00026**	**-0.00196**	**-0.00070**	**0.00021**	**-0.00352**	**-0.02668**	**0.00011**
%RSD	38.31581	22.62323	924.70771	3.24152	5.25787	3.34081	34.70944	6.40061	420.29169

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00117	-0.00130	-0.00192	-0.00018	-0.23803	-0.00276	-0.02470	-0.00043	-0.00107
#2	-0.00018	-0.00026	-0.00204	-0.00071	-0.24204	-0.00279	-0.01837	-0.00073	-0.00300
Mean	**-0.00067**	**-0.00078**	**-0.00198**	**-0.00045**	**-0.24003**	**-0.00277**	**-0.02153**	**-0.00058**	**-0.00204**
%RSD	103.91874	93.92204	4.43107	83.90786	1.18201	0.76461	20.80128	35.81462	66.96350

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.13809	-0.00281	-0.01329	-0.00218	0.00010	-0.01760	-0.00347	-0.01002	0.00254
#2	0.13727	-0.00131	-0.01678	-0.00261	0.00032	-0.01371	-0.00181	-0.00940	-0.00017
Mean	**0.13768**	**-0.00206**	**-0.01504**	**-0.00240**	**0.00021**	**-0.01566**	**-0.00264**	**-0.00971**	**0.00119**
%RSD	0.42150	51.55854	16.42945	12.91988	74.62208	17.55712	44.47872	4.56516	161.17698

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02119	-0.00432	-0.00305	-0.00558	-0.00210	0.00238	-0.02977	0.00003	-0.00128
#2	-0.02164	-0.00560	-0.00307	-0.00511	-0.00209	0.00122	-0.02444	-0.00095	-0.00250
Mean	**-0.02141**	**-0.00496**	**-0.00306**	**-0.00534**	**-0.00209**	**0.00180**	**-0.02710**	**-0.00046**	**-0.00189**
%RSD	1.49864	18.25957	0.34523	6.29239	0.37340	45.39369	13.89252	149.78749	45.40465

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00072	-0.00066	-0.00164
#2	0.00083	-0.00066	-0.00324
Mean	**0.00077**	**-0.00066**	**-0.00244**
%RSD	9.98410	0.32716	46.20116

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:46
SampleId1 : IP111116-3MB **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:21:45
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE12

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00048	-0.00896	-0.00229	-0.00282	-0.00109	-0.00001	-0.00288	-0.01340	-0.00012
#2	-0.00061	-0.00433	-0.00290	-0.00147	-0.00089	-0.00001	0.00447	-0.00736	-0.00055
Mean	**-0.00055**	**-0.00665**	**-0.00260**	**-0.00214**	**-0.00099**	**-0.00001**	**0.00079**	**-0.01038**	**-0.00033**
%RSD	17.20995	49.19024	16.55312	44.53923	14.92687	1.98439	654.87610	41.13625	92.09765

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00140	-0.00170	-0.00300	-0.01291	-0.23365	-0.00301	-0.06166	-0.00092	-0.00383
#2	-0.00102	-0.00056	-0.00252	-0.01172	-0.22672	-0.00293	-0.05374	-0.00102	-0.00502
Mean	**-0.00121**	**-0.00113**	**-0.00276**	**-0.01232**	**-0.23018**	**-0.00297**	**-0.05770**	**-0.00097**	**-0.00442**
%RSD	22.28832	71.36009	12.28279	6.85228	2.12901	1.90507	9.70475	7.12588	19.08114

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.12458	-0.00178	-0.01813	-0.00148	0.00074	-0.01760	0.00045	-0.01890	-0.00117
#2	0.12772	-0.00208	-0.01813	-0.00175	-0.00022	-0.01371	-0.00168	-0.01843	0.00674
Mean	**0.12615**	**-0.00193**	**-0.01813**	**-0.00161**	**0.00026**	**-0.01566**	**-0.00062**	**-0.01866**	**0.00279**
%RSD	1.75633	10.72796	0.00000	11.74058	262.55690	17.55712	244.19379	1.77396	200.77683

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02323	-0.00261	-0.00343	-0.00969	-0.00237	0.00423	-0.03508	-0.00081	-0.00128
#2	-0.02368	-0.00560	-0.00331	0.00036	-0.00205	0.00597	-0.03331	-0.00114	-0.00128
Mean	**-0.02346**	**-0.00411**	**-0.00337**	**-0.00467**	**-0.00221**	**0.00510**	**-0.03420**	**-0.00098**	**-0.00128**
%RSD	1.34382	51.47310	2.51055	152.25828	10.23401	24.15560	3.66856	23.59394	0.00000

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00022	0.00000	-0.00707
#2	-0.00023	-0.00073	-0.00164
Mean	**-0.00001**	**-0.00036**	**-0.00436**
%RSD	5300.16201	142.16426	88.22750

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:46
SampleId1 : IP111116-3RVS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:23:22
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE13

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00988	0.99717	0.05172	0.04707	0.04704	0.00977	0.09982	4.83379	0.02062
#2	0.01026	1.00003	0.05452	0.04860	0.04710	0.00971	0.09789	4.82833	0.02067
Mean	**0.01007**	**0.99860**	**0.05312**	**0.04784**	**0.04707**	**0.00974**	**0.09886**	**4.83106**	**0.02064**
%RSD	2.70583	0.20209	3.72422	2.26295	0.07853	0.42931	1.38608	0.07998	0.15796

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01814	0.04704	0.04587	0.99031	7.93005	0.03975	4.84891	0.04696	0.09361
#2	0.01882	0.04780	0.04597	0.99165	7.90962	0.03966	4.83939	0.04696	0.09572
Mean	**0.01848**	**0.04742**	**0.04592**	**0.99098**	**7.91983**	**0.03971**	**4.84415**	**0.04696**	**0.09467**
%RSD	2.62401	1.13645	0.16054	0.09509	0.18237	0.15114	0.13891	0.00000	1.57783

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	8.22605	0.04612	0.93000	0.04591	0.04891	1.01227	0.08816	0.05217	0.05242
#2	8.21161	0.04766	0.92084	0.04553	0.04775	0.99285	0.08972	0.04192	0.04892
Mean	**8.21883**	**0.04689**	**0.92542**	**0.04572**	**0.04833**	**1.00256**	**0.08894**	**0.04705**	**0.05067**
%RSD	0.12422	2.31964	0.69979	0.58839	1.69828	1.37019	1.23678	15.40478	4.89402

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.25904	0.09943	0.04775	-0.01231	0.04505	0.10023	0.45407	0.04835	0.04608
#2	0.25946	0.09559	0.04781	-0.01273	0.04480	0.10175	0.47448	0.04793	0.04456
Mean	**0.25925**	**0.09751**	**0.04778**	**-0.01252**	**0.04492**	**0.10099**	**0.46428**	**0.04814**	**0.04532**
%RSD	0.11348	2.78769	0.08853	2.37181	0.38267	1.06405	3.10802	0.61495	2.36861

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.04908	0.04791	0.05234
#2	0.04940	0.04701	0.04659
Mean	**0.04924**	**0.04746**	**0.04946**
%RSD	0.46063	1.34223	8.22302

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:46
SampleId1 : IP111116-3LCS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:25:11
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE14

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09799	2.04729	1.95945	0.49677	1.93930	0.04878	-0.00265	38.39391	0.05067
#2	0.09732	2.05478	1.95137	0.49425	1.94062	0.04873	-0.00156	38.31651	0.05140
Mean	**0.09766**	**2.05104**	**1.95541**	**0.49551**	**1.93996**	**0.04876**	**-0.00210**	**38.35521**	**0.05103**
%RSD	0.48209	0.25821	0.29215	0.35964	0.04823	0.06861	36.41554	0.14268	1.01173

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48632	0.19384	0.24032	0.97685	37.85694	0.49830	37.70326	0.48040	0.98079
#2	0.48412	0.19257	0.24176	0.97619	37.82484	0.49760	37.65894	0.48021	0.97610
Mean	**0.48522**	**0.19320**	**0.24104**	**0.97652**	**37.84089**	**0.49795**	**37.68110**	**0.48030**	**0.97845**
%RSD	0.32123	0.46777	0.42225	0.04825	0.05997	0.10021	0.08316	0.02886	0.33897

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	36.61583	0.47611	-0.00953	0.48508	0.48398	-0.01760	0.45773	2.07864	2.02611
#2	36.54280	0.47659	-0.02054	0.48523	0.48292	-0.00982	0.46487	2.07054	2.03391
Mean	**36.57931**	**0.47635**	**-0.01504**	**0.48516**	**0.48345**	**-0.01371**	**0.46130**	**2.07459**	**2.03001**
%RSD	0.14118	0.07064	51.81607	0.02308	0.15467	40.09146	1.09474	0.27587	0.27194

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.98199	0.48841	0.51375	-0.04403	0.46860	1.95791	-0.05351	0.49127	0.47644

#2	1.98285	0.48798	0.51393	-0.04125	0.46825	1.93812	-0.05173	0.49164	0.47583
Mean	**1.98242**	**0.48819**	**0.51384**	**-0.04264**	**0.46842**	**1.94801**	**-0.05262**	**0.49146**	**0.47614**
%RSD	0.03054	0.06178	0.02481	4.60582	0.05337	0.71833	2.38585	0.05353	0.09023

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00527	0.48434	2.04360
#2	0.00436	0.48369	2.04611
Mean	**0.00482**	**0.48402**	**2.04485**
%RSD	13.29493	0.09534	0.08687

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:46
SampleId1 : 1111185-2 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:27:00
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE15

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00018	0.02625	0.00196	0.07012	0.09525	0.00171	-0.00092	70.55524	0.00064
#2	-0.00193	0.01496	-0.00047	0.06985	0.09520	0.00162	-0.00958	69.59471	-0.00037
Mean	**-0.00088**	**0.02061**	**0.00075**	**0.06999**	**0.09522**	**0.00166**	**-0.00525**	**70.07498**	**0.00014**
%RSD	170.03204	38.73690	230.28505	0.27294	0.03883	3.57673	116.54383	0.96925	524.07949

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00020	-0.00067	-0.00049	0.02436	12.68527	-0.00207	8.19670	0.01803	0.00802
#2	-0.00210	-0.00253	-0.00142	0.02383	12.67980	-0.00219	8.12896	0.01764	0.00848
Mean	**-0.00115**	**-0.00160**	**-0.00095**	**0.02409**	**12.68254**	**-0.00213**	**8.16283**	**0.01784**	**0.00825**
%RSD	117.14290	82.27575	69.06207	1.55734	0.03050	3.98479	0.58680	1.54926	3.93605

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	57.14224	0.00082	0.02810	-0.00026	-0.00041	29.37920	0.00068	-0.01002	0.00715
#2	57.16756	-0.00178	0.02165	-0.00884	0.00475	29.26419	-0.00197	-0.00055	0.00926
Mean	**57.15490**	**-0.00048**	**0.02487**	**-0.00455**	**0.00217**	**29.32169**	**-0.00064**	**-0.00529**	**0.00820**
%RSD	0.03132	379.47239	18.33714	133.28277	167.90589	0.27735	290.25607	126.59918	18.13593

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.23280	0.00166	0.34968	-0.00222	-0.00174	0.00263	-0.01825	0.00208	0.00175
#2	2.21779	-0.00261	0.34944	-0.01863	-0.00207	0.00075	-0.05552	-0.00025	0.00145
Mean	**2.22530**	**-0.00048**	**0.34956**	**-0.01043**	**-0.00190**	**0.00169**	**-0.03688**	**0.00092**	**0.00160**
%RSD	0.47698	632.27318	0.04855	111.26154	11.89642	78.40019	71.45885	179.58981	13.41600

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00018	-0.00036	0.00143
#2	-0.00027	0.00022	0.00599

Mean	**-0.00023**	**-0.00007**	**0.00371UNDGREEN**
%RSD	29.66686	611.50678	86.75712

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:46
SampleId1 : 1111185-3 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:28:48
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE16

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00057	0.01862	0.00184	0.07048	0.09368	0.00167	-0.00136	69.73169	-0.00023
#2	-0.00050	0.01689	-0.00205	0.07147	0.09405	0.00169	0.00016	69.72617	0.00025
Mean	**-0.00053**	**0.01775**	**-0.00010**	**0.07098**	**0.09386**	**0.00168**	**-0.00060**	**69.72893**	**0.00001**
%RSD	9.22872	6.91371	2634.43484	0.98681	0.27575	0.46195	178.74412	0.00560	3104.95427

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00119	-0.00131	-0.00122	-0.01212	12.60284	-0.00222	8.12155	-0.00102	0.00683
#2	-0.00027	-0.00068	-0.00074	-0.01172	12.58789	-0.00222	8.11679	-0.00092	0.00701
Mean	**-0.00073**	**-0.00100**	**-0.00098**	**-0.01192**	**12.59536**	**-0.00222**	**8.11917**	**-0.00097**	**0.00692**
%RSD	88.36435	45.41262	34.78714	2.36034	0.08396	0.15912	0.04148	7.12588	1.87749

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	56.91328	-0.00069	0.02272	-0.00180	-0.00170	29.31786	-0.00045	-0.00098	0.00304
#2	56.80424	-0.00219	0.02084	0.00118	-0.00207	29.34469	0.00137	-0.00565	-0.00037
Mean	**56.85876**	**-0.00144**	**0.02178**	**-0.00031**	**-0.00188**	**29.33128**	**0.00046**	**-0.00331**	**0.00133**
%RSD	0.13560	73.90094	6.10717	683.36842	13.70659	0.06469	278.93240	99.71762	180.49052

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.19226	0.00251	0.34830	-0.01950	-0.00263	-0.00109	-0.00580	0.00147	-0.00007
#2	2.19284	-0.00048	0.34780	-0.01238	-0.00215	0.00459	-0.00669	0.00133	0.00054
Mean	**2.19255**	**0.00102**	**0.34805**	**-0.01594**	**-0.00239**	**0.00175**	**-0.00624**	**0.00140**	**0.00023**
%RSD	0.01893	207.74299	0.10057	31.55747	14.05246	229.71653	10.05796	7.05830	183.51413

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00067	-0.00173	0.00170
#2	0.00008	-0.00098	-0.00213
Mean	**0.00037**	**-0.00136**	**-0.00021**
%RSD	112.67793	39.00940	1272.81697

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:47
SampleId1 : 1111185-4 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:30:37
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE17

Final concentrations**19:02** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00048	0.05543	0.00574	0.00889	0.02253	0.00031	-0.00158	39.08884	0.00033
#2	-0.00062	0.04869	-0.00096	0.00943	0.02248	0.00028	-0.00158	39.05673	0.00042
Mean	**-0.00055**	**0.05206**	**0.00239**	**0.00916**	**0.02250**	**0.00030**	**-0.00158**	**39.07279**	**0.00037**
%RSD	17.88519	9.16009	198.00803	4.17228	0.16425	6.31827	0.10524	0.05812	16.86373

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00016	-0.00049	-0.00228	0.13462	78.94977	-0.00032	5.49926	0.15185	0.02813
#2	0.00054	-0.00076	-0.00180	0.13542	78.93920	-0.00031	5.50667	0.15204	0.02905
Mean	**0.00035**	**-0.00063**	**-0.00204**	**0.13502**	**78.94448**	**-0.00032**	**5.50297**	**0.15195**	**0.02859**
%RSD	77.48752	30.54583	16.54816	0.41705	0.00947	3.34620	0.09513	0.09102	2.27133

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	230.52760	-0.00138	-0.00899	0.00109	-0.00189	149.65331	-0.00463	-0.00008	0.00567
#2	230.09273	-0.00072	-0.02995	-0.00107	-0.00207	149.28554	0.00086	-0.00288	-0.00104
Mean	**230.31017**	**-0.00105**	**-0.01947**	**0.00001**	**-0.00198**	**149.46943**	**-0.00189**	**-0.00148**	**0.00232**
%RSD	0.13352	44.30176	76.12650	23810.42613	6.67947	0.17399	205.72044	133.43607	204.90193

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.81508	0.00337	0.08974	-0.01600	-0.00139	0.00478	-0.03518	-0.00097	0.00661
#2	4.80584	0.00038	0.08980	-0.01408	-0.00145	0.00838	-0.03075	0.00029	0.00600
Mean	**4.81046**	**0.00187**	**0.08977**	**-0.01504**	**-0.00142**	**0.00658**	**-0.03297**	**-0.00034**	**0.00631**
%RSD	0.13587	112.99448	0.04714	9.01910	2.75413	38.66882	9.51705	259.76677	6.80874

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00038	-0.00090	0.00376
#2	0.00004	-0.00174	-0.00165
Mean	**-0.00017**	**-0.00132**	**0.00105**
%RSD	174.50155	45.29645	363.79152

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:47
SampleId1 : 1111185-5 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:32:25
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE18

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00034	0.01190	-0.00193	0.00934	0.02253	0.00045	-0.00093	40.12241	0.00021
#2	-0.00186	0.00615	-0.00278	0.00754	0.02237	0.00037	-0.00742	39.64030	0.00011
Mean	**-0.00110**	**0.00903**	**-0.00236**	**0.00844**	**0.02245**	**0.00041**	**-0.00418**	**39.88136**	**0.00016**
%RSD	98.01309	45.01922	25.56854	15.09519	0.49388	13.87578	109.83744	0.85479	46.37523

ted: 11/18/2011 12:19:02 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00046	-0.00123	-0.00167	0.04320	78.27448	-0.00022	5.64892	0.15772	0.02841
#2	-0.00091	-0.00246	-0.00274	0.04160	78.61431	-0.00031	5.60238	0.15635	0.02831
Mean	**-0.00022**	**-0.00184**	**-0.00220**	**0.04240**	**78.44440**	**-0.00027**	**5.62565**	**0.15703**	**0.02836**
%RSD	436.06089	47.21297	34.12929	2.65500	0.30633	22.51300	0.58493	0.61652	0.22897

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	230.62245	-0.00039	-0.02001	-0.00128	0.00077	151.12008	-0.00336	-0.01471	0.00365
#2	230.31110	-0.00244	-0.03371	-0.01001	0.00587	150.42108	-0.00489	-0.01768	0.00475
Mean	**230.46678**	**-0.00142**	**-0.02686**	**-0.00565**	**0.00332**	**150.77058**	**-0.00412**	**-0.01619**	**0.00420**
%RSD	0.09553	102.24094	36.07947	109.31999	108.55853	0.32783	26.29136	12.99006	18.54799

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.83049	-0.00219	0.09137	-0.00209	-0.00198	0.00010	-0.04045	-0.00071	0.00843
#2	4.80412	-0.00390	0.09137	-0.00506	-0.00230	-0.00594	-0.06263	-0.00155	0.00843
Mean	**4.81731**	**-0.00304**	**0.09137**	**-0.00358**	**-0.00214**	**-0.00292**	**-0.05154**	**-0.00113**	**0.00843**
%RSD	0.38704	39.72980	0.00000	58.68626	10.60448	146.25975	30.43866	52.53558	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00140	0.00009	-0.00246
#2	-0.00170	0.00058	-0.00272
Mean	**-0.00155**	**0.00034**	**-0.00259**
%RSD	13.75614	104.28739	6.97759

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:47
SampleId1 : 1111185-6 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:34:18
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE19

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00114	0.06397	0.00269	0.15279	0.20301	0.00036	-0.00244	63.02397	-0.00041
#2	-0.00087	0.07008	-0.00473	0.15198	0.20416	0.00036	-0.00331	63.26716	0.00014
Mean	**-0.00101**	**0.06702**	**-0.00102**	**0.15238**	**0.20359**	**0.00036**	**-0.00287**	**63.14557**	**-0.00014**
%RSD	19.15511	6.44893	516.00810	0.37605	0.39986	0.14341	21.30554	0.27233	288.66244

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00018	-0.00103	-0.00107	0.88439	58.57705	0.00337	6.38723	0.50981	-0.00070
#2	0.00026	-0.00079	-0.00107	0.88919	58.62555	0.00340	6.41262	0.51265	-0.00061
Mean	**0.00022**	**-0.00091**	**-0.00107**	**0.88679**	**58.60130**	**0.00339**	**6.39993**	**0.51123**	**-0.00066**
%RSD	25.17383	18.56783	0.31901	0.38236	0.05852	0.62564	0.28052	0.39321	9.85500

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	35.20569	0.00122	0.02138	-0.00243	-0.00055	10.37876	-0.00501	-0.01013	0.00001
#2	35.23095	0.00107	0.02326	-0.00181	-0.00009	10.45226	0.00018	-0.00236	0.00252
Mean	**35.21832**	**0.00115**	**0.02232**	**-0.00212**	**-0.00032**	**10.41551**	**-0.00241**	**-0.00625**	**0.00127**
%RSD	0.05071	9.04519	5.96010	20.83089	103.24479	0.49897	152.25826	88.01043	139.88944

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.14353	0.00337	0.21159	-0.01431	-0.00107	-0.00668	-0.03924	-0.00064	0.02635
#2	8.16297	-0.00603	0.21272	-0.00982	-0.00131	0.00851	-0.04546	-0.00134	0.02635
Mean	**8.15325**	**-0.00133**	**0.21215**	**-0.01207**	**-0.00119**	**0.00092**	**-0.04235**	**-0.00099**	**0.02635**
%RSD	0.16854	498.54947	0.37946	26.32462	14.42111	1168.96364	10.37759	49.91681	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00084	-0.00118	-0.00337
#2	-0.00103	-0.00066	0.00089
Mean	**-0.00093**	**-0.00092**	**-0.00124**
%RSD	13.79012	39.86794	243.81874

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:47
SampleId1 : 1111185-7 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:36:06
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE20

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00100	0.00894	-0.00278	0.15531	0.20552	0.00032	-0.00720	64.65682	-0.00007
#2	-0.00041	0.00753	-0.00631	0.15873	0.20448	0.00030	-0.00244	64.48240	-0.00009
Mean	**-0.00070**	**0.00824**	**-0.00455**	**0.15702**	**0.20500**	**0.00031**	**-0.00482**	**64.56961**	**-0.00008**
%RSD	59.67697	12.09048	54.89003	1.54085	0.36101	4.02179	69.72585	0.19100	17.48343

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00027	-0.00163	-0.00179	0.80981	59.64806	0.00335	6.49302	0.50697	-0.00254
#2	0.00011	-0.00170	-0.00167	0.80635	59.50730	0.00338	6.48192	0.50559	-0.00291
Mean	**-0.00008**	**-0.00166**	**-0.00173**	**0.80808**	**59.57768**	**0.00337**	**6.48747**	**0.50628**	**-0.00273**
%RSD	334.99372	3.09676	4.57024	0.30294	0.16706	0.52485	0.12107	0.19168	9.53129

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	35.98722	0.00027	0.00821	-0.00617	0.00083	10.61085	-0.00474	-0.01122	0.00441
#2	35.90091	0.00129	0.00848	-0.00071	0.00018	10.56830	-0.00404	-0.00265	0.00531
Mean	**35.94406**	**0.00078**	**0.00834**	**-0.00344**	**0.00050**	**10.58957**	**-0.00439**	**-0.00694**	**0.00486**
%RSD	0.16979	93.08442	2.27731	112.18029	91.75879	0.28411	11.27676	87.31988	13.11376

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.17915	-0.00005	0.21579	-0.01246	-0.00266	0.00314	-0.04807	-0.00121	0.02665
#2	8.16000	-0.00304	0.21515	-0.01001	-0.00240	0.00060	-0.03742	-0.00154	0.02604
Mean	**8.16958**	**-0.00155**	**0.21547**	**-0.01123**	**-0.00253**	**0.00187**	**-0.04274**	**-0.00138**	**0.02635**
%RSD	0.16573	136.87788	0.21139	15.46722	7.41487	96.25345	17.62241	16.78605	1.62986

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00156	-0.00150	-0.00080
#2	-0.00128	-0.00012	0.00266
Mean	**-0.00142**	**-0.00081**	**0.00093**
%RSD	13.98158	120.59588	262.89704

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:48
SampleId1 : 1111185-8 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:37:54
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE21

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00075	0.08537	-0.00363	0.05211	0.20013	0.00027	-0.00223	67.14061	0.00024
#2	-0.00035	0.09060	0.00428	0.05139	0.20024	0.00026	-0.00655	67.17655	0.00023
Mean	**-0.00055**	**0.08799**	**0.00032**	**0.05175**	**0.20019**	**0.00026**	**-0.00439**	**67.15858**	**0.00024**
%RSD	51.09475	4.19905	1740.40839	0.98431	0.03697	2.27250	69.60601	0.03784	3.18746

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00020	-0.00130	-0.00204	0.00141	12.06083	-0.00079	14.91730	0.04060	-0.00126
#2	-0.00035	-0.00073	-0.00192	0.00141	12.10715	-0.00077	14.94752	0.04090	-0.00318
Mean	**-0.00028**	**-0.00102**	**-0.00198**	**0.00141**	**12.08399**	**-0.00078**	**14.93241**	**0.04075**	**-0.00222**
%RSD	38.89567	39.61570	4.21056	0.00000	0.27106	1.35640	0.14314	0.50869	61.42361

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	19.98947	-0.00120	-0.01087	-0.00435	-0.00012	6.49140	-0.00206	-0.00442	0.00124
#2	20.07478	0.00063	-0.01221	-0.00126	0.00083	6.46815	-0.00040	-0.00146	0.00444
Mean	**20.03213**	**-0.00028**	**-0.01154**	**-0.00281**	**0.00035**	**6.47977**	**-0.00123**	**-0.00294**	**0.00284**
%RSD	0.30114	457.37293	8.23169	78.05873	191.34186	0.25374	95.54078	71.14618	79.81421

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.26783	-0.00432	0.30448	-0.02332	-0.00245	-0.00689	-0.02888	-0.00021	-0.00037
#2	3.28334	-0.00219	0.30473	-0.01773	-0.00223	0.00390	-0.02622	-0.00076	-0.00128
Mean	**3.27559**	**-0.00325**	**0.30460**	**-0.02053**	**-0.00234**	**-0.00150**	**-0.02755**	**-0.00048**	**-0.00083**
%RSD	0.33486	46.41049	0.05917	19.25639	6.67485	509.74829	6.83360	81.53555	77.72193

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	0.00078	-0.00153	-0.00065	**UNDGREEN**
#2	0.00046	0.00014	0.00248	
Mean	**0.00062**	**-0.00070**	**0.00091**	
%RSD	35.79037	169.11453	241.37993	

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:48
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 15:40:24
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.21299	50.65238	0.50205	0.99517	0.99223	0.47141	0.51651	49.26613	0.52245
#2	0.21182	50.38254	0.48979	0.98879	0.98760	0.46967	0.51885	49.10549	0.51823
Mean	**0.21241**	**50.51746**	**0.49592**	**0.99198**	**0.98991**	**0.47054**	**0.51768**	**49.18581**	**0.52034**
%RSD	0.38945	0.37770	1.74819	0.45527	0.33066	0.26203	0.32053	0.23094	0.57358

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48834	0.98102	1.00352	19.99623	51.52069	0.53041	49.59740	0.95770	0.98235
#2	0.48674	0.97793	0.99730	19.93266	51.24646	0.52737	49.35041	0.95524	0.98327
Mean	**0.48754**	**0.97947**	**1.00041**	**19.96444**	**51.38357**	**0.52889**	**49.47390**	**0.95647**	**0.98281**
%RSD	0.23239	0.22256	0.43968	0.22518	0.37739	0.40611	0.35302	0.18173	0.06617

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.41538	0.96040	4.87301	0.96439	0.97295	5.12681	0.46815	1.00708	0.98698
#2	48.13531	0.95407	4.86185	0.96753	0.96947	5.06477	0.46257	1.01617	0.99352
Mean	**48.27535**	**0.95723**	**4.86743**	**0.96596**	**0.97121**	**5.09579**	**0.46536**	**1.01162**	**0.99025**
%RSD	0.41022	0.46756	0.16202	0.22954	0.25357	0.86099	0.84828	0.63552	0.46680

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.87702	0.97704	0.52310	0.30569	0.47204	0.49075	4.84766	0.48789	0.92222
#2	4.85138	0.98558	0.52048	0.30929	0.47095	0.48678	4.82999	0.48611	0.91493
Mean	**4.86420**	**0.98131**	**0.52179**	**0.30749**	**0.47150**	**0.48877**	**4.83882**	**0.48700**	**0.91857**
%RSD	0.37270	0.61488	0.35435	0.82917	0.16239	0.57460	0.25820	0.25846	0.56155

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.97230	0.97010	0.99367
#2	0.96708	0.96882	1.00106
Mean	**0.96969**	**0.96946**	**0.99737**
%RSD	0.38066	0.09327	0.52379

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:48
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 15:42:19

Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00088	0.01326	-0.00023	-0.00147	-0.00083	-0.00003	0.00101	-0.03544	-0.00096
#2	-0.00029	0.01066	-0.00375	-0.00138	-0.00083	-0.00004	-0.00417	-0.03695	-0.00002
Mean	**-0.00059**	**0.01196**	**-0.00199**	**-0.00142**	**-0.00083**	**-0.00004**	**-0.00158**	**-0.03619**	**-0.00049**
%RSD	71.82394	15.33784	125.35190	4.47137	0.00000	2.42763	231.97800	2.94920	136.08922

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00109	-0.00143	-0.00192	-0.00164	-0.21833	-0.00277	-0.02787	-0.00073	-0.00171
#2	-0.00086	-0.00053	-0.00156	-0.00151	-0.22635	-0.00281	-0.03051	-0.00073	-0.00282
Mean	**-0.00098**	**-0.00098**	**-0.00174**	**-0.00157**	**-0.22234**	**-0.00279**	**-0.02919**	**-0.00073**	**-0.00227**
%RSD	16.54583	65.03141	14.37104	5.95663	2.55213	1.01218	6.39427	0.00000	34.38797

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.13361	-0.00208	-0.01248	-0.00186	0.00029	-0.03315	-0.00122	-0.00271	0.00074
#2	0.13272	-0.00248	-0.00926	-0.00251	0.00302	-0.01760	0.00143	-0.00255	0.00284
Mean	**0.13316**	**-0.00228**	**-0.01087**	**-0.00219**	**0.00166**	**-0.02537**	**0.00010**	**-0.00263**	**0.00179**
%RSD	0.47540	12.49908	20.97712	21.00275	116.86955	43.33131	1826.03634	4.37232	83.21078

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01753	-0.00347	-0.00320	-0.00700	-0.00210	0.00180	-0.03598	-0.00002	-0.00280
#2	-0.01638	-0.00133	-0.00320	-0.00754	-0.00230	0.00296	-0.02710	-0.00058	-0.00219
Mean	**-0.01695**	**-0.00240**	**-0.00320**	**-0.00727**	**-0.00220**	**0.00238**	**-0.03154**	**-0.00030**	**-0.00250**
%RSD	4.79689	62.94528	0.00000	5.32923	6.40006	34.65184	19.89578	132.17830	17.18493

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00071	-0.00043	-0.00041
#2	0.00089	0.00118	0.00104
Mean	**0.00080**	**0.00038**	**0.00032**
%RSD	15.36049	303.11003	326.37472

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:48
SampleId1 : 1111185-9 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:44:13
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE22

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00149	0.02620	0.00196	0.05085	0.20333	-0.00017	0.00144	70.39964	0.00046
#2	-0.00068	0.04263	-0.00485	0.05337	0.20448	-0.00006	0.00144	70.19307	0.00071

Mean	**-0.00109**	**0.03441**	**-0.00144**	**0.05211**	**0.20390**	**-0.00012**	**0.00144**	**70.29636**	**0.00059**
%RSD	52.39335	33.76518	333.90609	3.42127	0.39925	66.65309	0.02725	0.20779	29.26722

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00065	-0.00123	-0.00131	0.00698	11.93791	-0.00088	15.75315	0.01960	-0.00236
#2	-0.00080	-0.00133	-0.00107	0.01229	11.95761	-0.00077	15.73088	0.01989	-0.00236
Mean	**-0.00073**	**-0.00128**	**-0.00119**	**0.00963**	**11.94776**	**-0.00083**	**15.74201**	**0.01974**	**-0.00236**
%RSD	14.61802	5.45324	14.50513	38.94426	0.11657	8.97813	0.10007	1.04983	0.00000

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	20.47721	-0.00215	-0.00953	-0.00071	0.00212	6.53015	-0.00221	-0.00739	0.00605
#2	20.53537	-0.00178	-0.01490	-0.00440	0.00021	6.54565	-0.00362	-0.00475	0.00314
Mean	**20.50629**	**-0.00197**	**-0.01221**	**-0.00256**	**0.00117**	**6.53790**	**-0.00292**	**-0.00607**	**0.00459**
%RSD	0.20056	13.16037	31.11561	101.89748	116.22895	0.16765	34.04739	30.77746	44.68856

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.21044	-0.00261	0.31548	-0.02865	-0.00255	0.00783	-0.04308	-0.00058	0.00114
#2	3.22114	-0.00347	0.31605	-0.03247	-0.00257	-0.00006	-0.04753	-0.00095	0.00054
Mean	**3.21579**	**-0.00304**	**0.31577**	**-0.03056**	**-0.00256**	**0.00389**	**-0.04531**	**-0.00076**	**0.00084**
%RSD	0.23522	19.87188	0.12761	8.83890	0.60991	143.50321	6.93147	34.45532	51.04307

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00317	0.00118	0.00157
#2	0.00321	-0.00133	0.00052
Mean	**0.00319**	**-0.00007**	**0.00104**
%RSD	0.90446	2417.35728	71.61327

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:48
SampleId1 : 1111185-10 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:46:02
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE23

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00069	-0.02877	0.00367	0.02068	0.15509	-0.00021	-0.00741	106.58416	0.00039
#2	-0.00042	-0.03067	0.00257	0.02059	0.15519	-0.00022	-0.00115	106.32011	0.00022
Mean	**-0.00055**	**-0.02972**	**0.00312**	**0.02064**	**0.15514**	**-0.00022**	**-0.00428**	**106.45214**	**0.00030**
%RSD	34.57854	4.53849	24.81915	0.30853	0.04769	0.67194	103.48188	0.17540	38.68973

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00118	-0.00134	-0.00132	0.00048	3.13203	-0.00263	14.97404	0.00680	-0.00263
#2	-0.00004	-0.00093	-0.00132	0.00088	3.12583	-0.00264	14.87911	0.00660	-0.00456
Mean	**-0.00061**	**-0.00113**	**-0.00132**	**0.00068**	**3.12893**	**-0.00263**	**14.92658**	**0.00670**	**-0.00360**

%RSD	133.16664	25.42228	0.29585	41.35835	0.14014	0.26841	0.44968	2.06228	37.90470

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	16.21255	-0.00230	-0.01598	-0.00046	0.00211	4.91740	-0.00474	-0.00131	0.00554
#2	16.14561	-0.00164	-0.01275	-0.00047	-0.00214	4.88249	0.00015	-0.00909	0.00144
Mean	**16.17908**	**-0.00197**	**-0.01436**	**-0.00046**	**-0.00002**	**4.89995**	**-0.00230**	**-0.00520**	**0.00349**
%RSD	0.29256	23.68866	15.87500	0.53010	16198.68167	0.50371	150.83854	105.86304	83.18775

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.75886	-0.00389	0.82934	-0.03049	-0.00261	-0.00052	-0.02888	-0.00067	0.00479
#2	1.75389	-0.00219	0.82697	-0.03412	-0.00256	0.01026	-0.03598	-0.00044	0.00600
Mean	**1.75638**	**-0.00304**	**0.82816**	**-0.03231**	**-0.00258**	**0.00487**	**-0.03243**	**-0.00055**	**0.00540**
%RSD	0.20006	39.74408	0.20207	7.94607	1.20939	156.44464	15.48106	29.69555	15.91635

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00117	0.00125	0.00326
#2	0.00158	-0.00158	-0.00207
Mean	**0.00138**	**-0.00017**	**0.00060**
%RSD	20.72799	1202.29493	632.05920

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:49
SampleId1 : 1111185-11 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:47:52
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE24

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00114	-0.04423	0.00318	0.01960	0.22939	-0.00019	0.00165	123.21118	0.00002
#2	-0.00083	-0.03995	-0.00023	0.01987	0.22798	-0.00022	0.00123	122.51304	0.00026
Mean	**-0.00098**	**-0.04209**	**0.00148**	**0.01974**	**0.22868**	**-0.00020**	**0.00144**	**122.86211**	**0.00014**
%RSD	22.52488	7.18438	163.07347	0.96781	0.43696	8.00185	20.74384	0.40180	120.30402

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00077	-0.00089	-0.00178	0.04850	4.07530	-0.00251	18.07620	-0.00024	-0.00171
#2	-0.00024	-0.00006	-0.00145	0.04824	4.04357	-0.00249	17.93926	-0.00024	-0.00291
Mean	**-0.00050**	**-0.00048**	**-0.00162**	**0.04837**	**4.05943**	**-0.00250**	**18.00773**	**-0.00024**	**-0.00231**
%RSD	74.60263	122.67769	14.74632	0.38789	0.55277	0.56582	0.53774	0.00000	36.51374

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	33.07477	-0.00391	-0.01893	-0.00503	0.00075	4.97557	-0.00305	-0.00553	0.00115
#2	32.72993	-0.00318	-0.01006	0.00028	0.00040	5.01435	0.00100	-0.00084	0.00125
Mean	**32.90235**	**-0.00354**	**-0.01450**	**-0.00237**	**0.00058**	**4.99496**	**-0.00103**	**-0.00319**	**0.00120**
%RSD	0.74111	14.62024	43.25171	158.35808	42.59799	0.54901	279.25562	104.13738	5.88906

ted: 11/18/2011 12:19:02 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.19185	-0.00304	0.93433	-0.03050	-0.00249	0.00274	-0.05110	-0.00052	0.00266
#2	2.17585	-0.00347	0.92751	-0.03103	-0.00262	0.00554	-0.02093	-0.00080	0.00388
Mean	**2.18385**	**-0.00325**	**0.93092**	**-0.03076**	**-0.00255**	**0.00414**	**-0.03601**	**-0.00066**	**0.00327**
%RSD	0.51796	9.28056	0.51808	1.20248	3.67532	47.88725	59.24761	29.85946	26.26061

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00113	-0.00117	-0.00108
#2	0.00101	0.00036	0.00055
Mean	**0.00107**	**-0.00040**	**-0.00026**
%RSD	7.85666	268.88204	438.16642

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:49
SampleId1 : 1111185-12 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:49:42
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE25

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00115	0.01537	0.00549	0.01978	0.03973	-0.00014	-0.00741	27.06230	-0.00026
#2	-0.00060	0.02062	-0.00059	0.01897	0.03967	-0.00014	0.00382	27.05515	0.00018
Mean	**-0.00087**	**0.01800**	**0.00245**	**0.01938**	**0.03970**	**-0.00014**	**-0.00180**	**27.05872**	**-0.00004**
%RSD	44.05379	20.62581	175.53827	2.95739	0.09311	0.25255	441.64931	0.01869	783.08079

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00058	-0.00126	-0.00131	0.03218	3.32535	-0.00278	3.24418	0.00680	0.00168
#2	-0.00119	-0.00082	-0.00118	0.03165	3.32317	-0.00280	3.24471	0.00689	0.00288
Mean	**-0.00088**	**-0.00104**	**-0.00125**	**0.03192**	**3.32426**	**-0.00279**	**3.24444**	**0.00685**	**0.00228**
%RSD	48.72873	30.29274	7.52343	1.17552	0.04655	0.63318	0.01152	1.00907	37.02897

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.94270	-0.00116	0.01627	0.00047	-0.00263	3.52464	-0.00007	0.00024	0.00475
#2	3.95309	-0.00157	0.01547	-0.00376	0.00168	3.51300	0.00050	-0.00289	0.00345
Mean	**3.94789**	**-0.00136**	**0.01587**	**-0.00164**	**-0.00048**	**3.51882**	**0.00021**	**-0.00133**	**0.00410**
%RSD	0.18611	20.89220	3.59246	182.11583	641.00556	0.23396	189.21312	166.49503	22.46514

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.32495	-0.00219	0.11510	-0.01360	-0.00179	0.00018	-0.04044	0.00245	0.00175
#2	1.32805	0.00166	0.11553	-0.01743	-0.00179	0.00980	-0.05641	0.00292	0.00054
Mean	**1.32650**	**-0.00026**	**0.11532**	**-0.01552**	**-0.00179**	**0.00499**	**-0.04843**	**0.00269**	**0.00114**
%RSD	0.16518	1028.81241	0.26612	17.43536	0.00000	136.23857	23.32540	12.24787	75.01211

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	0.00070	-0.00160	0.00325
#2	0.00096	-0.00013	0.00134
Mean	**0.00083**	**-0.00086**	**0.00229**
%RSD	22.05541	120.23647	58.90547

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:49
SampleId1 : 1111185-12D SampleId2 : [SAMPLE]
Analysis commenced : 11/17/2011 15:51:31
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE26

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00081	0.01145	-0.00388	0.01897	0.04035	0.00000	-0.00223	27.70583	0.00029
#2	-0.00028	0.01700	-0.00181	0.01978	0.04067	-0.00002	0.00101	27.73104	0.00032
Mean	**-0.00055**	**0.01423**	**-0.00284**	**0.01938**	**0.04051**	**-0.00001**	**-0.00061**	**27.71843**	**0.00030**
%RSD	69.81647	27.59564	51.46181	2.95739	0.54747	122.71343	377.74034	0.06429	6.87695

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00050	-0.00106	-0.00119	0.03431	3.39028	-0.00274	3.31605	0.00709	0.00352
#2	0.00034	-0.00066	-0.00071	0.03643	3.39502	-0.00276	3.31024	0.00719	0.00233
Mean	**-0.00008**	**-0.00086**	**-0.00095**	**0.03537**	**3.39265**	**-0.00275**	**3.31314**	**0.00714**	**0.00292**
%RSD	708.29592	33.42663	36.01454	4.24360	0.09883	0.51438	0.12406	0.96764	28.88433

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.99928	-0.00182	0.03240	-0.00272	-0.00099	3.59061	-0.00217	-0.00303	0.00565
#2	4.00323	-0.00105	0.02756	-0.00270	-0.00190	3.56733	-0.00021	-0.00646	0.00134
Mean	**4.00125**	**-0.00144**	**0.02998**	**-0.00271**	**-0.00144**	**3.57897**	**-0.00119**	**-0.00474**	**0.00350**
%RSD	0.06971	37.85171	11.41045	0.53174	44.59216	0.46003	116.09459	51.08957	87.06109

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.35346	-0.00304	0.11742	-0.01355	-0.00173	0.00146	-0.03778	0.00227	0.00023
#2	1.36151	0.00080	0.11742	-0.01591	-0.00162	0.00378	-0.04310	0.00311	-0.00037
Mean	**1.35748**	**-0.00112**	**0.11742**	**-0.01473**	**-0.00168**	**0.00262**	**-0.04044**	**0.00269**	**-0.00007**
%RSD	0.41895	242.99575	0.00000	11.33352	4.65594	62.53580	9.31302	22.05638	616.56253

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00085	-0.00157	0.00276
#2	0.00073	-0.00217	-0.00125
Mean	**0.00079**	**-0.00187**	**0.00075**
%RSD	10.17562	22.76319	376.82913

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:49

SampleId1 : 1111185-12L 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:53:20
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE27

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00028	-0.01063	0.00014	0.00078	0.00721	-0.00005	-0.00136	5.53832	0.00043
#2	-0.00054	-0.01384	0.00634	0.00186	0.00727	-0.00004	0.00446	5.54956	-0.00011
Mean	**-0.00041**	**-0.01224**	**0.00324**	**0.00132**	**0.00724**	**-0.00004**	**0.00155**	**5.54394**	**0.00016**
%RSD	44.20999	18.51390	135.36356	57.77836	0.51037	19.56946	265.62899	0.14337	236.76022

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00116	-0.00137	-0.00120	-0.00668	0.40104	-0.00295	0.61255	0.00054	-0.00171
#2	-0.00085	-0.00163	-0.00179	-0.00681	0.39448	-0.00299	0.61889	0.00064	-0.00217
Mean	**-0.00100**	**-0.00150**	**-0.00149**	**-0.00675**	**0.39776**	**-0.00297**	**0.61572**	**0.00059**	**-0.00194**
%RSD	21.46621	12.37702	27.99304	1.38998	1.16721	0.95254	0.72766	11.63590	16.69663

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.82880	-0.00160	-0.00227	0.00088	-0.00054	0.68976	-0.00108	-0.00956	-0.00017
#2	0.83374	-0.00072	-0.00523	0.00148	0.00080	0.70142	-0.00122	-0.00988	-0.00277
Mean	**0.83127**	**-0.00116**	**-0.00375**	**0.00118**	**0.00013**	**0.69559**	**-0.00115**	**-0.00972**	**-0.00147**
%RSD	0.42013	53.48418	55.75878	35.90140	737.46712	1.18508	8.68325	2.33744	125.35915

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.25520	-0.00133	0.02077	-0.01104	-0.00221	-0.00679	-0.03331	-0.00035	-0.00341
#2	0.25580	-0.00518	0.02086	-0.00934	-0.00236	0.01025	-0.04574	-0.00007	-0.00068
Mean	**0.25550**	**-0.00325**	**0.02082**	**-0.01019**	**-0.00229**	**0.00173**	**-0.03953**	**-0.00021**	**-0.00204**
%RSD	0.16636	83.54333	0.30467	11.80618	4.78532	695.22904	22.22788	95.52864	94.56986

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00054	-0.00007	-0.00329
#2	0.00007	0.00103	-0.00514
Mean	**0.00030**	**0.00048**	**-0.00422**
%RSD	108.56754	161.10928	30.92711

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:50
SampleId1 : 1111185-12MS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:55:09
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE28

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	0.09745	2.11487	1.97271	0.52458	2.01622	0.04980	-0.00109	66.97225	0.05127
#2	0.09739	2.11426	1.98525	0.52197	2.01569	0.04964	-0.00218	66.82010	0.05178
Mean	**0.09742**	**2.11457**	**1.97898**	**0.52327**	**2.01596**	**0.04972**	**-0.00163**	**66.89617**	**0.05153**
%RSD	0.04618	0.02041	0.44804	0.35271	0.01857	0.23334	46.79546	0.16083	0.68873

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49189	0.19723	0.24752	1.04736	43.10052	0.51795	41.58386	0.49716	0.99781
#2	0.49174	0.19575	0.24680	1.04603	43.13189	0.51808	41.51544	0.49569	0.99413
Mean	**0.49181**	**0.19649**	**0.24716**	**1.04669**	**43.11621**	**0.51801**	**41.54965**	**0.49643**	**0.99597**
%RSD	0.02208	0.53166	0.20550	0.09005	0.05144	0.01751	0.11644	0.20943	0.26119

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	42.01415	0.47725	0.02084	0.48997	0.49264	3.61390	0.46304	2.10002	2.04924
#2	41.99792	0.47574	0.02810	0.49184	0.49039	3.61390	0.45487	2.09818	2.05847
Mean	**42.00604**	**0.47650**	**0.02447**	**0.49090**	**0.49151**	**3.61390**	**0.45896**	**2.09910**	**2.05385**
%RSD	0.02732	0.22273	20.96912	0.26915	0.32265	0.00000	1.25847	0.06180	0.31769

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.41486	0.49139	0.64252	-0.04518	0.47795	1.96381	-0.04113	0.50268	0.48525
#2	3.40445	0.49395	0.64168	-0.04611	0.47826	1.96749	-0.04379	0.50082	0.48586
Mean	**3.40965**	**0.49267**	**0.64210**	**-0.04564**	**0.47810**	**1.96565**	**-0.04246**	**0.50175**	**0.48555**
%RSD	0.21590	0.36759	0.09279	1.44019	0.04576	0.13240	4.43229	0.26227	0.08848

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00322	0.49175	2.06615
#2	0.00288	0.49087	2.07169
Mean	**0.00305**	**0.49131**	**2.06892**
%RSD	7.92051	0.12575	0.18948

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:50
SampleId1 : 1111185-12MSD **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:56:57
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE29

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09739	2.12177	1.98983	0.52386	2.01930	0.04983	-0.00260	67.07197	0.05238
#2	0.09787	2.13909	1.99441	0.52413	2.03227	0.04994	-0.00800	67.17137	0.05139
Mean	**0.09763**	**2.13043**	**1.99212**	**0.52399**	**2.02578**	**0.04988**	**-0.00530**	**67.12167**	**0.05188**
%RSD	0.34750	0.57480	0.16262	0.03644	0.45291	0.15701	71.94967	0.10472	1.34825

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49258	0.19629	0.24739	1.04270	43.13444	0.51805	41.48925	0.49707	0.99670

#2	0.49450	0.19643	0.24921	1.04629	43.45938	0.52187	41.65710	0.49863	0.99928
Mean	**0.49354**	**0.19636**	**0.24830**	**1.04449**	**43.29691**	**0.51996**	**41.57317**	**0.49785**	**0.99799**
%RSD	0.27466	0.05114	0.51601	0.24366	0.53068	0.51849	0.28548	0.22276	0.18246

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	42.00377	0.48142	0.01950	0.49122	0.48929	3.64494	0.46093	2.09513	2.06019
#2	42.29420	0.48369	0.02004	0.48946	0.49100	3.67599	0.46517	2.10581	2.05603
Mean	**42.14899**	**0.48255**	**0.01977**	**0.49034**	**0.49015**	**3.66046**	**0.46305**	**2.10047**	**2.05811**
%RSD	0.48724	0.33258	1.92283	0.25310	0.24676	0.59970	0.64704	0.35945	0.14282

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.41368	0.49864	0.64440	-0.04781	0.47845	1.98302	-0.03935	0.50371	0.48403
#2	3.42528	0.49779	0.64852	-0.04307	0.48017	1.99371	-0.05355	0.50306	0.48312
Mean	**3.41948**	**0.49821**	**0.64646**	**-0.04544**	**0.47931**	**1.98837**	**-0.04645**	**0.50338**	**0.48358**
%RSD	0.23991	0.12147	0.45095	7.38386	0.25428	0.38026	21.61851	0.09139	0.13327

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00209	0.48993	2.07183
#2	0.00152	0.49049	2.07261
Mean	**0.00180**	**0.49021**	**2.07222**
%RSD	22.32744	0.08026	0.02672

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:50
SampleId1 : 1111185-14 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 15:58:46
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE30

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00088	0.03453	-0.00108	0.01915	0.04077	0.00021	-0.00309	27.99399	0.00003
#2	-0.00035	0.04028	-0.00497	0.01978	0.04129	0.00021	-0.00697	27.90903	0.00010
Mean	**-0.00062**	**0.03740**	**-0.00302**	**0.01947**	**0.04103**	**0.00021**	**-0.00503**	**27.95151**	**0.00006**
%RSD	60.80145	10.86428	91.02399	2.28955	0.90084	0.17904	54.60838	0.21494	77.96965

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00126	-0.00083	-0.00156	0.03789	3.39612	-0.00268	3.31394	0.00729	0.00352
#2	0.00011	-0.00077	-0.00120	0.03855	3.40487	-0.00255	3.32820	0.00758	0.00214
Mean	**-0.00058**	**-0.00080**	**-0.00138**	**0.03822**	**3.40049**	**-0.00261**	**3.32107**	**0.00743**	**0.00283**
%RSD	167.63179	5.86810	18.37329	1.22718	0.18204	3.51607	0.30379	2.78846	34.40928

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.00869	-0.00036	0.03428	-0.00722	0.00276	3.59449	-0.00343	-0.00847	0.00986
#2	3.99503	-0.00105	0.02568	0.00006	0.00134	3.56345	-0.00148	0.00273	0.00425

Mean	**4.00186**	**-0.00070**	**0.02998**	**-0.00358**	**0.00205**	**3.57897**	**-0.00246**	**-0.00287**	**0.00705**
%RSD	0.24128	69.86468	20.28524	143.79349	49.07926	0.61338	56.29305	276.29911	56.22756

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.36661	-0.00432	0.11830	-0.01207	-0.00161	0.00506	-0.02891	0.00222	0.00175
#2	1.36177	0.00123	0.11811	-0.01120	-0.00137	0.00750	-0.02713	0.00343	0.00054
Mean	**1.36419**	**-0.00155**	**0.11821**	**-0.01163**	**-0.00149**	**0.00628**	**-0.02802**	**0.00283**	**0.00114**
%RSD	0.25048	253.96331	0.11638	5.24126	11.53415	27.42402	4.47837	30.26796	75.01211

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00019	-0.00057	0.00376
#2	0.00026	0.00091	0.00375
Mean	**0.00003**	**0.00017**	**0.00375**
%RSD	934.26360	604.73008	0.19410

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:50
SampleId1 : 1111185-15 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:00:36
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE31

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00067	-0.01510	0.00050	0.01861	0.04067	0.00005	0.00274	28.72101	0.00015
#2	-0.00057	-0.01508	-0.00096	0.01834	0.04051	0.00001	-0.00244	28.48401	0.00042
Mean	**-0.00062**	**-0.01509**	**-0.00023**	**0.01848**	**0.04059**	**0.00003**	**0.00015**	**28.60251**	**0.00028**
%RSD	11.77886	0.12185	456.48059	1.03384	0.27321	104.81496	2442.69697	0.58591	67.54096

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00050	-0.00149	-0.00179	-0.01398	3.37350	-0.00276	3.42385	-0.00102	0.00288
#2	-0.00088	-0.00115	-0.00158	-0.01358	3.35855	-0.00272	3.39585	-0.00092	0.00288
Mean	**-0.00069**	**-0.00132**	**-0.00168**	**-0.01378**	**3.36602**	**-0.00274**	**3.40985**	**-0.00097**	**0.00288**
%RSD	38.89096	18.61590	8.73640	2.04220	0.31417	1.03251	0.58082	7.12588	0.00000

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.10582	-0.00160	0.02487	-0.00361	0.00039	3.61390	-0.00076	-0.00210	0.00614
#2	4.08077	-0.00164	0.01385	-0.00067	-0.00079	3.55569	-0.00231	0.00182	0.00764
Mean	**4.09329**	**-0.00162**	**0.01936**	**-0.00214**	**-0.00020**	**3.58479**	**-0.00154**	**-0.00014**	**0.00689**
%RSD	0.43264	1.59870	40.23856	97.10770	419.56703	1.14821	71.30445	2012.04468	15.40695

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.36459	-0.00347	0.12103	-0.01472	-0.00213	-0.00216	-0.04840	0.00249	-0.00159
#2	1.35707	-0.00945	0.11977	-0.01788	-0.00245	0.00308	-0.00668	0.00254	-0.00037
Mean	**1.36083**	**-0.00646**	**0.12040**	**-0.01630**	**-0.00229**	**0.00046**	**-0.02754**	**0.00251**	**-0.00098**

%RSD	0.39064	65.48116	0.73834	13.69504	9.88856	806.62062	107.09881	1.31090	87.58443

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00019	-0.00094	0.00340
#2	0.00052	-0.00075	0.00571
Mean	**0.00036**	**-0.00084**	**0.00455**
%RSD	64.87959	15.82497	35.85843

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:50
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 16:03:07
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.21315	50.95182	0.49829	0.99472	0.99496	0.47928	0.51308	49.56998	0.51631
#2	0.21250	50.75410	0.49356	0.99148	0.99228	0.47804	0.51608	49.39848	0.51328
Mean	**0.21282**	**50.85296**	**0.49592**	**0.99310**	**0.99362**	**0.47866**	**0.51458**	**49.48423**	**0.51480**
%RSD	0.21791	0.27493	0.67504	0.23058	0.19092	0.18324	0.41274	0.24508	0.41573

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49342	0.99558	0.99965	20.26157	51.34419	0.53206	50.12627	0.97363	0.99468
#2	0.49281	0.99266	0.99618	20.19300	51.08527	0.52965	50.00517	0.97166	0.98245
Mean	**0.49312**	**0.99412**	**0.99791**	**20.22729**	**51.21473**	**0.53086**	**50.06572**	**0.97265**	**0.98856**
%RSD	0.08746	0.20784	0.24612	0.23972	0.35748	0.32117	0.17105	0.14298	0.87495

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.56633	0.95121	4.91980	0.98223	0.98676	5.22376	0.46276	1.01711	1.01706
#2	48.32057	0.94755	4.94075	0.98079	0.97965	5.19274	0.46480	1.01927	1.01019
Mean	**48.44345**	**0.94938**	**4.93027**	**0.98151**	**0.98320**	**5.20825**	**0.46378**	**1.01819**	**1.01363**
%RSD	0.35872	0.27250	0.30046	0.10416	0.51172	0.42118	0.31024	0.15025	0.47903

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.95884	0.98471	0.52254	0.31628	0.48152	0.49217	4.89441	0.49185	0.94654
#2	4.94501	0.98684	0.52077	0.31178	0.48028	0.48542	4.89003	0.49118	0.94806
Mean	**4.95193**	**0.98578**	**0.52165**	**0.31403**	**0.48090**	**0.48879**	**4.89222**	**0.49151**	**0.94730**
%RSD	0.19750	0.15310	0.24037	1.01473	0.18196	0.97571	0.06332	0.09561	0.11345

	Zr	Pb	Se
	ppm	calc	calc
#1	0.97448	0.98525	1.01708
#2	0.97213	0.98003	1.01322
Mean	**0.97331**	**0.98264**	**1.01515**
%RSD	0.17085	0.37615	0.26885

ted: 11/18/2011 12:19:03 **User: MIKE LUNDGREEN**
Method : Paragon File : 111117A Printed : 11/18/2011 12:18:51
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 16:05:02
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00068	0.00815	-0.00083	-0.00237	-0.00073	0.00007	-0.00504	-0.02578	0.00072
#2	-0.00062	0.01131	0.00476	-0.00156	-0.00078	0.00006	-0.00093	-0.02880	0.00042
Mean	**-0.00065**	**0.00973**	**0.00196**	**-0.00196**	**-0.00076**	**0.00006**	**-0.00298**	**-0.02729**	**0.00057**
%RSD	6.48755	22.94457	201.51625	29.17365	4.89397	15.46602	97.38923	7.82371	36.92430

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00086	-0.00110	-0.00192	0.00035	-0.24313	-0.00281	-0.01784	-0.00043	-0.00070
#2	-0.00025	-0.00077	-0.00156	-0.00071	-0.23803	-0.00283	-0.02470	-0.00063	-0.00089
Mean	**-0.00056**	**-0.00093**	**-0.00174**	**-0.00018**	**-0.24058**	**-0.00282**	**-0.02127**	**-0.00053**	**-0.00080**
%RSD	76.97069	25.06607	14.30363	412.64828	1.50096	0.62645	22.81436	26.07780	16.30197

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.13719	-0.00307	-0.00657	-0.00489	-0.00099	-0.01371	-0.00304	-0.00271	0.00464
#2	0.13540	-0.00142	-0.01383	-0.00229	0.00060	-0.02537	0.00032	-0.00333	0.00474
Mean	**0.13630**	**-0.00224**	**-0.01020**	**-0.00359**	**-0.00020**	**-0.01954**	**-0.00136**	**-0.00302**	**0.00469**
%RSD	0.92894	51.96766	50.30792	51.10256	567.57543	42.19469	174.97957	14.36937	1.50376

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01592	-0.00219	-0.00310	-0.01159	-0.00226	-0.00075	-0.03509	-0.00090	-0.00280
#2	-0.01623	-0.00560	-0.00313	-0.00812	-0.00208	0.00389	-0.02444	-0.00137	-0.00219
Mean	**-0.01608**	**-0.00390**	**-0.00311**	**-0.00986**	**-0.00217**	**0.00157**	**-0.02977**	**-0.00114**	**-0.00250**
%RSD	1.35898	62.04784	0.67886	24.89322	6.12145	209.44627	25.29975	28.97660	17.18493

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00105	-0.00229	0.00219
#2	0.00089	-0.00037	0.00206
Mean	**0.00097**	**-0.00133**	**0.00212**
%RSD	11.58858	102.52945	4.58672

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:51
SampleId1 : 1111185-16 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:06:56
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE32

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00162	-0.01088	0.00063	0.02014	0.08918	0.00030	-0.00331	28.24769	0.00047
#2	-0.00042	-0.01349	0.00282	0.02357	0.08882	0.00029	-0.00547	28.09173	0.00046
Mean	**-0.00102**	**-0.01219**	**0.00172**	**0.02186**	**0.08900**	**0.00030**	**-0.00439**	**28.16971**	**0.00047**
%RSD	82.65723	15.16009	90.00600	11.07181	0.29081	1.48722	34.71298	0.39148	2.27511

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00104	-0.00163	-0.00251	-0.00085	3.59819	-0.00269	5.15239	0.01647	0.00012
#2	-0.00020	-0.00096	-0.00156	-0.00058	3.57522	-0.00270	5.11644	0.01608	-0.00061
Mean	**-0.00062**	**-0.00130**	**-0.00203**	**-0.00071**	**3.58671**	**-0.00270**	**5.13441**	**0.01627**	**-0.00025**
%RSD	94.93684	36.37381	33.15679	26.33114	0.45304	0.39329	0.49516	1.69806	211.46310

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.36644	-0.00124	-0.01490	-0.00683	0.00235	4.90576	-0.00359	-0.01081	0.00905
#2	4.34570	-0.00146	-0.01087	0.00103	0.00129	4.85922	0.00145	0.00040	0.00885
Mean	**4.35607**	**-0.00135**	**-0.01289**	**-0.00290**	**0.00182**	**4.88249**	**-0.00107**	**-0.00521**	**0.00895**
%RSD	0.33669	11.55087	22.11995	191.56689	41.21521	0.67402	333.02109	152.30336	1.58351

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.65317	-0.00304	0.11760	-0.01599	-0.00235	0.00330	-0.04219	-0.00104	0.00175
#2	1.64599	-0.01030	0.11705	-0.02082	-0.00235	0.00644	-0.03332	-0.00025	0.00114
Mean	**1.64958**	**-0.00667**	**0.11732**	**-0.01841**	**-0.00235**	**0.00487**	**-0.03775**	**-0.00065**	**0.00145**
%RSD	0.30783	76.97274	0.33373	18.55399	0.00000	45.52215	16.62154	86.38883	29.64420

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00225	-0.00071	0.00244
#2	0.00276	0.00120	0.00604
Mean	**0.00250**	**0.00025**	**0.00424**
%RSD	14.43260	544.43287	60.08197

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:51
SampleId1 : 1111185-17 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:08:45
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE33

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00049	-0.00878	-0.00400	0.02068	0.08772	0.00023	0.00209	27.67161	0.00037
#2	-0.00036	-0.00160	-0.00217	0.01978	0.08798	0.00023	0.00015	27.60814	0.00065
Mean	**-0.00043**	**-0.00519**	**-0.00309**	**0.02023**	**0.08785**	**0.00023**	**0.00112**	**27.63987**	**0.00051**
%RSD	21.08681	97.70206	41.82632	3.14705	0.21044	1.16737	122.00185	0.16237	37.47568

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00066	-0.00083	-0.00156	-0.01305	3.54129	-0.00281	5.06938	-0.00004	-0.00199
#2	-0.00089	-0.00121	-0.00121	-0.01305	3.56062	-0.00283	5.07678	-0.00014	-0.00116
Mean	**-0.00078**	**-0.00102**	**-0.00139**	**-0.01305**	**3.55096**	**-0.00282**	**5.07308**	**-0.00009**	**-0.00158**
%RSD	20.75588	26.05238	17.92670	0.00000	0.38497	0.37587	0.10318	76.60577	37.05337

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.34076	-0.00072	-0.00953	0.00232	-0.00201	4.88249	0.00060	-0.00302	0.00574
#2	4.36986	-0.00087	-0.00872	-0.00010	0.00141	4.80492	0.00061	0.00213	0.00133
Mean	**4.35531**	**-0.00080**	**-0.00912**	**0.00111**	**-0.00030**	**4.84371**	**0.00060**	**-0.00044**	**0.00354**
%RSD	0.47244	13.01619	6.24836	154.58937	811.48397	1.13238	1.28395	817.60951	88.09238

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.61629	-0.00603	0.11580	-0.01579	-0.00219	0.00168	-0.02798	0.00002	-0.00007
#2	1.62139	-0.00347	0.11597	-0.01326	-0.00207	0.00447	-0.01645	-0.00016	0.00023
Mean	**1.61884**	**-0.00475**	**0.11589**	**-0.01453**	**-0.00213**	**0.00307**	**-0.02222**	**-0.00007**	**0.00008**
%RSD	0.22292	38.15933	0.10045	12.31607	4.04330	64.17636	36.72328	192.79726	261.28252

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00139	-0.00057	0.00283
#2	0.00100	0.00091	0.00160
Mean	**0.00119**	**0.00017**	**0.00221**
%RSD	23.38431	610.03350	39.22532

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:51
SampleId1 : 1111185-18 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:10:33
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE34

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00062	0.18154	0.00306	0.03852	3.28021	0.00000	-0.00091	438.14949	0.00000
#2	-0.00075	0.18694	0.00586	0.03752	3.27711	0.00002	-0.00631	435.86372	0.00011
Mean	**-0.00069**	**0.18424**	**0.00446**	**0.03802**	**3.27866**	**0.00001**	**-0.00361**	**437.00660**	**0.00006**
%RSD	13.14968	2.07129	44.38535	1.84232	0.06678	152.48884	105.91069	0.36985	140.86450

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00114	0.00079	0.00637	0.58265	20.00410	0.30773	89.08460	0.22149	0.00031
#2	0.00144	-0.00032	0.00650	0.58185	20.01760	0.30806	88.90955	0.22051	0.00086
Mean	**0.00129**	**0.00024**	**0.00644**	**0.58225**	**20.01085**	**0.30789**	**88.99708**	**0.22100**	**0.00058**
%RSD	16.50161	331.70723	1.40995	0.09692	0.04769	0.07744	0.13909	0.31304	67.07844

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	37.62117	0.00071	0.35558	0.00116	-0.00245	2.05719	-0.00193	-0.00201	0.00306
#2	37.66762	0.00115	0.31900	-0.00090	-0.00052	2.03389	-0.00009	-0.00917	0.00035
Mean	**37.64440**	**0.00093**	**0.33729**	**0.00013**	**-0.00149**	**2.04554**	**-0.00101**	**-0.00559**	**0.00171**
%RSD	0.08726	33.57856	7.66867	1125.88560	91.93796	0.80548	129.02948	90.65294	112.12854

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.07175	-0.00903	5.56713	-0.06611	0.00087	0.00695	-0.03904	0.00009	0.04426
#2	4.07323	-0.00689	5.55662	-0.06722	0.00101	-0.00187	-0.04969	0.00098	0.04335
Mean	**4.07249**	**-0.00796**	**5.56188**	**-0.06667**	**0.00094**	**0.00254**	**-0.04436**	**0.00054**	**0.04380**
%RSD	0.02576	18.98046	0.13359	1.17471	9.96769	245.85749	16.97382	116.68770	1.47042

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00311	-0.00125	0.00137
#2	0.00348	-0.00065	-0.00282
Mean	**0.00330**	**-0.00095**	**-0.00072**
%RSD	7.82443	44.76140	409.33427

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:51
SampleId1 : 1111185-19 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:12:23
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE35

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00108	0.08976	-0.00023	0.01780	0.04616	-0.00016	0.00102	23.16597	0.00007
#2	-0.00016	0.08976	0.00330	0.01690	0.04663	-0.00016	0.00340	23.19013	0.00002
Mean	**-0.00062**	**0.08976**	**0.00154**	**0.01735**	**0.04639**	**-0.00016**	**0.00221**	**23.17805**	**0.00004**
%RSD	104.58955	0.00458	162.21706	3.66970	0.71714	1.63737	76.24220	0.07369	75.04715

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00073	-0.00079	-0.00168	0.12546	1.59674	0.00096	11.82602	0.00172	-0.00273
#2	-0.00111	-0.00104	-0.00181	0.12692	1.58726	0.00101	11.85516	0.00181	-0.00291
Mean	**-0.00092**	**-0.00092**	**-0.00174**	**0.12619**	**1.59200**	**0.00098**	**11.84059**	**0.00177**	**-0.00282**
%RSD	29.24019	19.00493	5.54120	0.81803	0.42124	3.58742	0.17402	3.91167	4.61029

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.88683	-0.00197	-0.01490	-0.00285	-0.00094	4.42480	-0.00433	-0.00164	0.00136
#2	1.89119	-0.00252	-0.00926	-0.00136	-0.00014	4.42480	-0.00573	-0.00707	0.00397
Mean	**1.88901**	**-0.00224**	**-0.01208**	**-0.00210**	**-0.00054**	**4.42480**	**-0.00503**	**-0.00435**	**0.00266**
%RSD	0.16322	17.32256	33.03482	50.16521	104.90297	0.00000	19.73348	88.17324	69.11052

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.98438	-0.00390	0.17603	-0.02555	0.00105	0.00707	-0.03607	-0.00125	-0.00098

#2	4.97144	-0.00347	0.17676	-0.02955	0.00096	0.00233	-0.01477	0.00038	-0.00128
Mean	**4.97791**	**-0.00369**	**0.17640**	**-0.02755**	**0.00101**	**0.00470**	**-0.02542**	**-0.00044**	**-0.00113**
%RSD	0.18384	8.19921	0.29414	10.26976	6.20760	71.39446	59.25549	263.68700	18.96047

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00026	-0.00158	0.00036
#2	0.00060	-0.00055	0.00029
Mean	**0.00043**	**-0.00106**	**0.00033**
%RSD	55.50600	68.80482	15.29222

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:52
SampleId1 : 1111185-20 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:14:12
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE36

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00013	-0.02181	0.00841	0.01546	0.04527	-0.00010	0.00079	22.93438	0.00025
#2	0.00012	-0.01410	-0.00497	0.01519	0.04537	-0.00011	0.00166	22.91364	0.00038
Mean	**0.00012**	**-0.01795**	**0.00172**	**0.01533**	**0.04532**	**-0.00010**	**0.00122**	**22.92401**	**0.00031**
%RSD	6.25405	30.35347	550.06826	1.24646	0.16313	11.21496	50.24500	0.06398	30.44677

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00110	-0.00136	-0.00263	-0.01000	1.51978	0.00066	11.80430	-0.00112	-0.00410
#2	-0.00103	-0.00110	-0.00144	-0.01039	1.51759	0.00067	11.78999	-0.00102	-0.00153
Mean	**-0.00106**	**-0.00123**	**-0.00203**	**-0.01020**	**1.51868**	**0.00066**	**11.79715**	**-0.00107**	**-0.00282**
%RSD	5.03117	15.14425	41.50003	2.75952	0.10190	0.53324	0.08574	6.47351	64.54406

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.88518	-0.00266	0.00015	-0.00347	0.00038	4.38213	-0.00391	-0.00428	-0.00107
#2	1.88563	-0.00131	0.00095	-0.00104	0.00088	4.43644	0.00074	-0.01407	-0.00027
Mean	**1.88540**	**-0.00199**	**0.00055**	**-0.00226**	**0.00063**	**4.40928**	**-0.00159**	**-0.00917**	**-0.00067**
%RSD	0.01692	48.24440	103.46042	76.22347	55.61248	0.87094	207.63639	75.49697	84.76437

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.80001	-0.00389	0.17571	-0.02250	-0.00263	0.00074	-0.04574	-0.00105	-0.00159
#2	4.79428	-0.00133	0.17580	-0.03426	-0.00239	0.00434	-0.03509	-0.00091	-0.00189
Mean	**4.79714**	**-0.00261**	**0.17576**	**-0.02838**	**-0.00251**	**0.00254**	**-0.04041**	**-0.00098**	**-0.00174**
%RSD	0.08440	69.35505	0.03615	29.30862	6.85688	100.12217	18.63576	10.11755	12.34177

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00013	-0.00090	-0.00214
#2	0.00102	0.00024	-0.00486

Mean	**0.00058**	**-0.00033**	**-0.00350UNDGREEN**
%RSD	109.52532	244.26859	55.09109

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:52
SampleId1 : 1111185-22 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:16:02
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE37

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00221	1.80343	-0.00302	0.00574	0.05112	0.00015	-0.00625	22.93036	0.00039
#2	-0.00056	1.82826	0.00245	0.00574	0.05128	0.00014	-0.00020	22.93717	-0.00004
Mean	**-0.00138**	**1.81585**	**-0.00029**	**0.00574**	**0.05120**	**0.00014**	**-0.00323**	**22.93376**	**0.00018**
%RSD	84.16489	0.96662	1348.88125	0.00000	0.21660	3.78831	132.77803	0.02100	172.96093

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00086	0.00028	-0.00040	1.11096	22.83039	-0.00212	3.90744	0.14676	0.01031
#2	-0.00078	0.00047	0.00030	1.11376	22.87525	-0.00215	3.91378	0.14696	0.00738
Mean	**-0.00082**	**0.00038**	**-0.00005**	**1.11236**	**22.85282**	**-0.00213**	**3.91061**	**0.14686**	**0.00885**
%RSD	6.57896	35.07379	930.55649	0.17801	0.13881	0.99386	0.11468	0.09417	23.49088

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.56323	-0.00270	0.03939	-0.00744	0.00276	4.02133	-0.00339	-0.00046	0.00326
#2	4.57312	-0.00157	0.02810	-0.00149	0.00099	4.01357	-0.00341	-0.00962	0.00467
Mean	**4.56817**	**-0.00213**	**0.03374**	**-0.00447**	**0.00187**	**4.01745**	**-0.00340**	**-0.00504**	**0.00397**
%RSD	0.15302	37.64435	23.65562	94.27962	66.67267	0.13658	0.55890	128.49069	25.01014

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.40479	-0.00436	0.07521	-0.00750	0.02868	-0.00057	0.02539	0.00318	0.00054
#2	2.40795	-0.00564	0.07524	-0.01525	0.02880	0.00176	0.05467	0.00355	0.00145
Mean	**2.40637**	**-0.00500**	**0.07523**	**-0.01138**	**0.02874**	**0.00060**	**0.04003**	**0.00336**	**0.00099**
%RSD	0.09294	18.13040	0.02812	48.19512	0.29909	277.33716	51.73009	7.84432	64.85973

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00370	-0.00064	0.00202
#2	0.00460	0.00016	-0.00009
Mean	**0.00415**	**-0.00024**	**0.00097**
%RSD	15.28470	239.22957	154.63888

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:52
SampleId1 : 1111185-23 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:17:51
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE38

Final concentrations**19:03** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	0.10179	-0.00023	0.00583	0.04417	0.00008	-0.00500	22.21180	-0.00019
#2	-0.00082	0.10195	0.00671	0.00772	0.04417	0.00008	-0.00197	22.21861	-0.00037
Mean	**-0.00071**	**0.10187**	**0.00324**	**0.00677**	**0.04417**	**0.00008**	**-0.00348**	**22.21520**	**-0.00028**
%RSD	20.45952	0.11131	151.28894	19.74996	0.00000	0.75913	61.41496	0.02166	44.35134

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00005	-0.00081	0.00042	0.21613	22.49885	-0.00303	3.68228	0.10971	0.00894
#2	0.00056	-0.00061	0.00078	0.21732	22.38360	-0.00301	3.67964	0.10961	0.00986
Mean	**0.00025**	**-0.00071**	**0.00060**	**0.21673**	**22.44123**	**-0.00302**	**3.68096**	**0.10966**	**0.00940**
%RSD	169.63200	19.82648	42.07564	0.38988	0.36316	0.35100	0.05076	0.06304	6.91046

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.52088	-0.00219	-0.00630	-0.00160	0.00260	4.10280	-0.00128	-0.00454	0.00408
#2	4.49381	-0.00069	-0.00980	-0.00112	-0.00216	4.08340	-0.00043	-0.00204	-0.00283
Mean	**4.50735**	**-0.00144**	**-0.00805**	**-0.00136**	**0.00022**	**4.09310**	**-0.00085**	**-0.00329**	**0.00063**
%RSD	0.42459	73.90094	30.69253	25.09012	1532.72118	0.33513	70.19857	53.61893	777.70963

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49140	-0.00518	0.07225	-0.01031	0.00317	0.00416	0.04996	0.00165	-0.00007
#2	0.49461	-0.00048	0.07231	-0.01092	0.00315	-0.00280	0.05617	0.00249	-0.00159
Mean	**0.49301**	**-0.00283**	**0.07228**	**-0.01062**	**0.00316**	**0.00068**	**0.05306**	**0.00207**	**-0.00083**
%RSD	0.46006	117.28239	0.05854	4.02727	0.49426	721.38168	8.27708	28.61657	129.53658

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00133	0.00120	0.00121
#2	0.00180	-0.00181	-0.00257
Mean	**0.00156**	**-0.00031**	**-0.00068**
%RSD	21.33086	695.93071	395.11138

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:52
SampleId1 : IP111116-4MB **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:19:41
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE39

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00159	-0.01481	-0.00643	-0.00579	-0.00120	0.00012	-0.00742	-0.06352	-0.00020
#2	0.00003	0.00929	-0.00448	-0.00417	-0.00094	0.00018	0.00621	-0.05657	0.00049
Mean	**-0.00078**	**-0.00276**	**-0.00546**	**-0.00498**	**-0.00107**	**0.00015**	**-0.00061**	**-0.06005**	**0.00015**
%RSD	146.84193	617.46926	25.22099	23.01033	17.28988	27.40756	1588.07404	8.17731	331.65984

ted: 11/18/2011 12:19:03 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00178	-0.00253	-0.00310	-0.01477	-0.28508	-0.00310	-0.06588	-0.00112	-0.00383
#2	0.00058	-0.00078	-0.00147	-0.01384	-0.26393	-0.00302	-0.05215	-0.00102	-0.00126
Mean	**-0.00060**	**-0.00166**	**-0.00228**	**-0.01431**	**-0.27450**	**-0.00306**	**-0.05902**	**-0.00107**	**-0.00254**
%RSD	278.79847	74.55057	50.48865	4.58843	5.44980	1.96299	16.44538	6.47351	71.54069

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.11854	-0.00208	-0.01087	-0.00855	0.00337	-0.02926	-0.00362	-0.00973	0.00434
#2	0.12406	-0.00113	-0.00899	0.00785	-0.00739	-0.01371	0.00187	0.00339	-0.00478
Mean	**0.12130**	**-0.00160**	**-0.00993**	**-0.00035**	**-0.00201**	**-0.02149**	**-0.00088**	**-0.00317**	**-0.00022**
%RSD	3.21812	42.04153	13.39577	3345.16222	378.73758	51.17051	442.50318	292.54905	2950.28246

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01867	0.00123	-0.00359	0.00396	-0.00187	-0.00031	-0.06082	-0.00160	0.00054
#2	-0.00168	0.00080	-0.00346	0.01612	-0.00159	-0.00004	0.00574	0.00007	0.00175
Mean	**-0.01017**	**0.00102**	**-0.00352**	**0.01004**	**-0.00173**	**-0.00018**	**-0.02754**	**-0.00077**	**0.00114**
%RSD	118.08231	29.71687	2.69861	85.58015	11.30488	108.37475	170.90317	154.55392	75.01211

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00143	-0.00060	-0.00035
#2	-0.00086	-0.00231	-0.00206
Mean	**-0.00114**	**-0.00146**	**-0.00120**
%RSD	35.15238	83.43426	100.58224

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:53
SampleId1 : IP111116-4RVS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:21:30
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE40

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01041	1.01685	0.05780	0.04743	0.04809	0.01033	0.10760	4.99409	0.02147
#2	0.01087	1.02631	0.05318	0.04608	0.04819	0.01029	0.09984	4.97071	0.02013
Mean	**0.01064**	**1.02158**	**0.05549**	**0.04676**	**0.04814**	**0.01031**	**0.10372**	**4.98240**	**0.02080**
%RSD	3.03629	0.65520	5.88999	2.04288	0.15357	0.33355	5.29633	0.33178	4.55256

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01928	0.04992	0.04706	1.01284	7.96907	0.04052	4.97421	0.04852	0.10004
#2	0.01935	0.04931	0.04705	1.00871	7.95996	0.04039	4.96945	0.04852	0.09876
Mean	**0.01932**	**0.04962**	**0.04706**	**1.01077**	**7.96451**	**0.04045**	**4.97183**	**0.04852**	**0.09940**
%RSD	0.27922	0.87090	0.01347	0.28904	0.08096	0.23560	0.06768	0.00000	0.91472

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.33332	0.04858	0.97014	0.05109	0.04781	1.03559	0.09254	0.05233	0.05343
#2	8.32830	0.04792	0.96933	0.04820	0.04936	1.03170	0.08959	0.04488	0.05233
Mean	**8.33081**	**0.04825**	**0.96974**	**0.04965**	**0.04858**	**1.03364**	**0.09107**	**0.04860**	**0.05288**
%RSD	0.04262	0.96621	0.05893	4.11467	2.24882	0.26579	2.29470	10.84718	1.47524

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.27278	0.09858	0.04887	-0.01157	0.04597	0.10418	0.46471	0.04989	0.04851
#2	0.27538	0.10285	0.04874	-0.01458	0.04597	0.09723	0.47624	0.04979	0.04578
Mean	**0.27408**	**0.10071**	**0.04880**	**-0.01307**	**0.04597**	**0.10071**	**0.47048**	**0.04984**	**0.04714**
%RSD	0.67228	2.99914	0.19501	16.29997	0.00000	4.88011	1.73406	0.13320	4.09874

	Zr	Pb	Se
	ppm	calc	calc
#1	0.04703	0.04890	0.05307
#2	0.04772	0.04897	0.04985
Mean	**0.04738**	**0.04894**	**0.05146**
%RSD	1.02572	0.09908	4.42316

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:53
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 16:33:14
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.21224	50.79366	0.49999	0.99112	0.99044	0.47747	0.52449	49.34471	0.51619
#2	0.21327	50.58762	0.50096	0.98600	0.98781	0.47656	0.50594	49.21682	0.51424
Mean	**0.21275**	**50.69064**	**0.50048**	**0.98856**	**0.98912**	**0.47701**	**0.51521**	**49.28076**	**0.51521**
%RSD	0.34225	0.28741	0.13721	0.36676	0.18803	0.13583	2.54572	0.18350	0.26781

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49121	0.99129	1.00003	20.13517	51.20197	0.52987	50.01803	0.96832	0.98245
#2	0.48992	0.98680	0.99585	20.09358	50.96164	0.52717	49.85674	0.96596	0.98796
Mean	**0.49057**	**0.98904**	**0.99794**	**20.11438**	**51.08181**	**0.52852**	**49.93738**	**0.96714**	**0.98521**
%RSD	0.18689	0.32097	0.29582	0.14620	0.33267	0.36088	0.22839	0.17255	0.39606

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.47913	0.95011	4.88416	0.97273	0.97655	5.15784	0.46566	1.01757	0.99759
#2	48.22152	0.94642	4.89803	0.97319	0.98123	5.16947	0.46209	1.01524	0.99617
Mean	**48.35033**	**0.94827**	**4.89110**	**0.97296**	**0.97889**	**5.16365**	**0.46387**	**1.01640**	**0.99688**
%RSD	0.37675	0.27555	0.20058	0.03352	0.33820	0.15931	0.54286	0.16213	0.10064

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.93536	0.98813	0.52044	0.30892	0.47830	0.48597	4.87413	0.49112	0.94289
#2	4.91268	0.98258	0.51921	0.30553	0.47792	0.48894	4.84670	0.48884	0.93894
Mean	**4.92402**	**0.98535**	**0.51982**	**0.30722**	**0.47811**	**0.48745**	**4.86042**	**0.48998**	**0.94092**
%RSD	0.32559	0.39794	0.16762	0.77969	0.05719	0.43186	0.39898	0.33012	0.29696

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.97288	0.97528	1.00424
#2	0.97070	0.97855	1.00252
Mean	**0.97179**	**0.97692**	**1.00338**
%RSD	0.15843	0.23716	0.12138

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:53
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 16:35:11
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00018	-0.00990	-0.00521	-0.00273	-0.00109	-0.00011	-0.00633	-0.05989	0.00054
#2	-0.00049	-0.00705	0.00026	-0.00300	-0.00104	-0.00008	-0.00460	-0.05899	0.00045
Mean	**-0.00015**	**-0.00848**	**-0.00248**	**-0.00287**	**-0.00107**	**-0.00010**	**-0.00547**	**-0.05944**	**0.00050**
%RSD	306.25669	23.77192	156.29460	6.66787	3.45798	15.80487	22.32968	1.07744	11.57296

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00018	-0.00124	-0.00204	-0.00986	-0.25699	-0.00300	-0.04740	-0.00102	-0.00245
#2	-0.00102	-0.00053	-0.00240	-0.01066	-0.25918	-0.00302	-0.04318	-0.00082	-0.00263
Mean	**-0.00060**	**-0.00088**	**-0.00222**	**-0.01026**	**-0.25809**	**-0.00301**	**-0.04529**	**-0.00092**	**-0.00254**
%RSD	99.09409	56.54430	11.46556	5.48338	0.59963	0.35216	6.59364	15.00798	5.11005

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.12302	-0.00167	-0.01624	-0.00107	0.00389	-0.02926	-0.00713	-0.01687	0.00865
#2	0.12249	-0.00230	-0.02135	-0.00104	-0.00160	-0.02926	-0.00040	-0.00582	0.00254
Mean	**0.12276**	**-0.00199**	**-0.01880**	**-0.00105**	**0.00115**	**-0.02926**	**-0.00376**	**-0.01134**	**0.00559**
%RSD	0.30081	22.16635	19.20627	1.55433	338.45333	0.00000	126.51089	68.87939	77.26662

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02397	-0.00475	-0.00340	-0.01112	-0.00224	-0.00319	-0.02799	-0.00100	-0.00219
#2	-0.02382	-0.00176	-0.00338	-0.01138	-0.00243	0.00586	-0.02799	-0.00067	-0.00341
Mean	**-0.02390**	**-0.00325**	**-0.00339**	**-0.01125**	**-0.00234**	**0.00133**	**-0.02799**	**-0.00084**	**-0.00280**
%RSD	0.43028	64.98711	0.31174	1.61557	5.68704	479.91690	0.00137	27.55379	30.64589

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	0.00093	0.00224	0.00015	**UNDGREEN**
#2	0.00124	-0.00141	-0.00025	
Mean	**0.00109**	**0.00041**	**-0.00005**	
%RSD	20.18494	624.36375	594.35643	

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:53
SampleId1 : IP111116-4LCS SampleId2 : [SAMPLE]
Analysis commenced : 11/17/2011 16:36:53
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE41

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09686	2.03940	1.93087	0.49119	1.92813	0.04846	-0.00286	38.03184	0.05080
#2	0.09638	2.03004	1.92858	0.48246	1.91331	0.04830	-0.00525	37.83655	0.05079
Mean	**0.09662**	**2.03472**	**1.92972**	**0.48682**	**1.92072**	**0.04838**	**-0.00405**	**37.93420**	**0.05080**
%RSD	0.34767	0.32497	0.08396	1.26813	0.54555	0.23673	41.67511	0.36403	0.00845

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48197	0.19354	0.24188	0.97206	37.58049	0.49683	37.58794	0.47834	0.96764
#2	0.48013	0.19195	0.23899	0.97072	37.18990	0.49170	37.33327	0.47570	0.96359
Mean	**0.48105**	**0.19275**	**0.24044**	**0.97139**	**37.38520**	**0.49427**	**37.46060**	**0.47702**	**0.96562**
%RSD	0.27016	0.58176	0.85007	0.09700	0.73877	0.73432	0.48070	0.39226	0.29633

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	36.55505	0.46996	-0.01490	0.48320	0.47998	-0.02149	0.45074	2.08704	2.00776
#2	36.18499	0.46560	-0.01436	0.47856	0.47731	-0.01760	0.44510	2.07116	2.01424
Mean	**36.37002**	**0.46778**	**-0.01463**	**0.48088**	**0.47865**	**-0.01954**	**0.44792**	**2.07910**	**2.01100**
%RSD	0.71947	0.65850	2.59724	0.68288	0.39460	14.06490	0.89039	0.53991	0.22813

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.97711	0.48371	0.51043	-0.04623	0.46796	1.93237	-0.05262	0.48857	0.46550
#2	1.96597	0.47945	0.50604	-0.04472	0.46359	1.92754	-0.04108	0.48643	0.46915
Mean	**1.97154**	**0.48158**	**0.50824**	**-0.04548**	**0.46577**	**1.92995**	**-0.04685**	**0.48750**	**0.46733**
%RSD	0.39977	0.62611	0.61042	2.34446	0.66424	0.17685	17.41569	0.31042	0.55159

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00485	0.48105	2.03416
#2	0.00468	0.47773	2.03320
Mean	**0.00477**	**0.47939**	**2.03368**
%RSD	2.54541	0.49090	0.03334

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:53
SampleId1 : 1111137-1 SampleId2 : [SAMPLE]
Analysis commenced : 11/17/2011 16:38:43

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE42

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00094	-0.00164	0.00294	0.13370	0.18496	0.00016	0.00036	130.92755	0.00054
#2	-0.00076	-0.00020	0.00111	0.13136	0.18642	0.00019	-0.00093	131.29253	0.00051
Mean	**-0.00085**	**-0.00092**	**0.00202**	**0.13253**	**0.18569**	**0.00018**	**-0.00029**	**131.11004**	**0.00053**
%RSD	14.75691	110.26987	63.73692	1.24914	0.55790	14.11085	316.16672	0.19684	4.14161

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00060	-0.00108	-0.00214	0.87973	2.03154	-0.00069	58.28193	0.03601	-0.00052
#2	-0.00083	-0.00097	-0.00216	0.88200	2.06145	-0.00054	58.48713	0.03621	-0.00217
Mean	**-0.00072**	**-0.00103**	**-0.00215**	**0.88086**	**2.04650**	**-0.00061**	**58.38453**	**0.03611**	**-0.00135**
%RSD	22.33648	8.12573	0.79326	0.18177	1.03347	17.26135	0.24852	0.38270	86.73134

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	71.26714	-0.00292	0.07460	-0.00162	-0.00067	4.57996	0.00033	0.00074	0.00392
#2	71.69725	-0.00296	0.07110	-0.00263	0.00300	4.60323	-0.00137	-0.00141	0.00422
Mean	**71.48219**	**-0.00294**	**0.07285**	**-0.00213**	**0.00116**	**4.59160**	**-0.00052**	**-0.00033**	**0.00407**
%RSD	0.42547	0.88135	3.39171	33.62029	223.39612	0.35841	230.74113	456.52466	5.22090

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	11.02431	-0.00475	0.70266	-0.05554	-0.00249	0.00575	-0.05877	-0.00101	0.00023
#2	11.06307	0.00038	0.70536	-0.05863	-0.00256	0.00218	-0.02771	-0.00027	0.00297
Mean	**11.04369**	**-0.00219**	**0.70401**	**-0.05708**	**-0.00252**	**0.00396**	**-0.04324**	**-0.00064**	**0.00160**
%RSD	0.24814	165.84218	0.27068	3.83593	2.16741	63.80953	50.79845	82.36020	120.74389

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00129	-0.00099	0.00286
#2	0.00179	0.00113	0.00235
Mean	**0.00154**	**0.00007**	**0.00260**
%RSD	23.01920	2211.47303	14.03371

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:54
SampleId1 : 1111138-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:40:33
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE43

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00075	0.00044	0.02106	0.09624	0.41500	0.00019	-0.00460	121.20552	0.00005
#2	-0.00070	0.00287	0.02484	0.09723	0.41311	0.00020	0.00124	120.76581	0.00022

Mean	**-0.00072**	**0.00166**	**0.02295**	**0.09673**	**0.41405**	**0.00019**	**-0.00168**	**120.98567**	**0.00014**
%RSD	4.44285	103.45640	11.61951	0.72406	0.32218	4.90195	246.10271	0.25699	88.43202

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00066	-0.00186	0.00085	3.63752	1.31369	-0.00078	51.85760	0.03767	-0.00135
#2	-0.00059	-0.00060	0.00252	3.62254	1.30201	-0.00071	51.60508	0.03748	-0.00227
Mean	**-0.00062**	**-0.00123**	**0.00169**	**3.63003**	**1.30785**	**-0.00075**	**51.73134**	**0.03757**	**-0.00181**
%RSD	8.29710	72.45448	69.72710	0.29176	0.63109	7.09976	0.34516	0.36778	35.93912

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	26.24450	-0.00358	0.49736	0.00017	0.00135	2.30960	-0.00150	-0.01077	0.00508
#2	26.15699	-0.00164	0.49386	0.00200	0.00064	2.33678	0.00003	-0.01433	0.00347
Mean	**26.20074**	**-0.00261**	**0.49561**	**0.00108**	**0.00100**	**2.32319**	**-0.00073**	**-0.01255**	**0.00428**
%RSD	0.23616	52.61360	0.49907	119.42466	50.41073	0.82731	146.90629	20.03532	26.56065

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.75218	-0.00389	0.76793	-0.04825	-0.00255	0.00633	-0.04556	-0.00099	0.06885
#2	8.71651	0.00123	0.76270	-0.05324	-0.00246	0.00611	-0.01981	-0.00011	0.06703
Mean	**8.73434**	**-0.00133**	**0.76532**	**-0.05074**	**-0.00251**	**0.00622**	**-0.03268**	**-0.00055**	**0.06794**
%RSD	0.28880	272.25364	0.48298	6.95967	2.49341	2.54475	55.70509	113.50227	1.89606

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00200	0.00096	-0.00020
#2	0.00285	0.00109	-0.00246
Mean	**0.00243**	**0.00102**	**-0.00133**
%RSD	24.82344	9.30592	120.10904

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:54
SampleId1 : 1111140-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:42:23
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE44

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	0.00489	0.00111	0.00529	0.05081	0.00027	-0.00106	44.37432	0.00004
#2	-0.00101	0.00766	0.00002	0.00547	0.05086	0.00025	-0.00020	44.47151	0.00015
Mean	**-0.00102**	**0.00627**	**0.00056**	**0.00538**	**0.05083**	**0.00026**	**-0.00063**	**44.42292**	**0.00009**
%RSD	0.09449	31.28975	137.12002	2.36942	0.07272	6.08541	97.16243	0.15470	87.98456

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00125	-0.00150	0.02931	0.00950	-0.02464	0.00311	17.12991	0.00006	-0.00355
#2	-0.00117	-0.00093	0.03051	0.00857	-0.02646	0.00312	17.19200	0.00006	-0.00401
Mean	**-0.00121**	**-0.00122**	**0.02991**	**0.00904**	**-0.02555**	**0.00312**	**17.16096**	**0.00006**	**-0.00378**

%RSD	4.47668	33.27838	2.84438	7.26540	5.04750	0.11339	0.25583	0.00000	8.58656

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	28.73222	-0.00266	-0.00576	0.00109	-0.00091	17.92786	-0.00222	-0.01578	0.00184
#2	28.76218	-0.00204	-0.00845	-0.00187	-0.00036	17.86233	-0.00350	-0.00333	0.00094
Mean	**28.74720**	**-0.00235**	**-0.00711**	**-0.00039**	**-0.00063**	**17.89509**	**-0.00286**	**-0.00956**	**0.00139**
%RSD	0.07370	18.71527	26.73386	539.80840	61.40812	0.25893	31.52541	92.08555	45.90426

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.38663	-0.00133	0.07035	-0.02898	-0.00234	0.00424	-0.02977	-0.00067	0.00661
#2	9.41668	0.00251	0.07057	-0.02891	-0.00252	0.00296	-0.03244	-0.00030	0.00813
Mean	**9.40166**	**0.00059**	**0.07046**	**-0.02895**	**-0.00243**	**0.00360**	**-0.03110**	**-0.00048**	**0.00737**
%RSD	0.22606	460.12361	0.22517	0.18869	5.14559	25.09773	6.05112	54.49707	14.56719

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00048	-0.00024	-0.00403
#2	-0.00035	-0.00086	-0.00048
Mean	**-0.00041**	**-0.00055**	**-0.00226**
%RSD	22.06449	79.04437	111.04635

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:54
SampleId1 : 1111160-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:44:13
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE45

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00112	76.76126	0.05196	0.16575	1.07100	0.00922	0.00287	230.22295	0.00234
#2	-0.00179	76.75889	0.05184	0.16314	1.06994	0.00920	0.00589	230.27089	0.00208
Mean	**-0.00146**	**76.76008**	**0.05190**	**0.16445**	**1.07047**	**0.00921**	**0.00438**	**230.24692**	**0.00221**
%RSD	32.44442	0.00218	0.16572	1.12279	0.06953	0.13663	48.83892	0.01472	8.32254

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06074	0.06063	0.13830	141.52578	42.27559	0.11183	47.33335	1.86814	0.00150
#2	0.06089	0.06170	0.13841	141.48399	42.20703	0.11175	47.33602	1.86606	0.00389
Mean	**0.06081**	**0.06117**	**0.13835**	**141.50488**	**42.24131**	**0.11179**	**47.33468**	**1.86710**	**0.00269**
%RSD	0.17424	1.24274	0.06101	0.02088	0.11477	0.05043	0.00400	0.07868	62.69351

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	18.06025	0.10296	4.48039	0.15407	0.16453	24.33203	0.00111	-0.02318	0.01578
#2	18.04444	0.10128	4.46300	0.15595	0.16219	24.19753	0.00211	-0.01383	0.01547
Mean	**18.05235**	**0.10212**	**4.47169**	**0.15501**	**0.16336**	**24.26478**	**0.00161**	**-0.01850**	**0.01562**
%RSD	0.06193	1.16649	0.27503	0.85825	1.00926	0.39196	43.62432	35.69915	1.39860

ted: 11/18/2011 12:19:03 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	81.79435	0.00997	1.24793	0.03064	0.19886	0.00222	0.05313	0.19049	0.41842
#2	81.78304	0.00057	1.24781	0.03620	0.19930	0.00324	0.05405	0.19025	0.42024
Mean	**81.78869**	**0.00527**	**1.24787**	**0.03342**	**0.19908**	**0.00273**	**0.05359**	**0.19037**	**0.41933**
%RSD	0.00978	126.12693	0.00686	11.75882	0.15700	26.60627	1.20845	0.08944	0.30735

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00452	0.16105	0.00280
#2	-0.00429	0.16012	0.00571
Mean	**-0.00441**	**0.16058**	**0.00426**
%RSD	3.77684	0.40894	48.25046

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:54
SampleId1 : 1111162-16 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:46:03
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE46

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00068	2.56068	0.00063	0.02591	0.08699	0.00047	-0.00302	44.84230	0.00013
#2	-0.00048	2.57845	-0.00363	0.02681	0.08683	0.00047	0.00324	44.70803	0.00026
Mean	**-0.00058**	**2.56957**	**-0.00150**	**0.02636**	**0.08691**	**0.00047**	**0.00011**	**44.77517**	**0.00019**
%RSD	23.86248	0.48885	200.25062	2.41589	0.12763	0.26318	3974.23967	0.21205	50.11502

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00071	0.00058	0.00097	3.12374	10.22032	0.00227	7.02784	0.05008	-0.00254
#2	0.00055	0.00085	0.00061	3.11607	10.22214	0.00225	7.00245	0.05008	-0.00089
Mean	**0.00063**	**0.00072**	**0.00079**	**3.11991**	**10.22123**	**0.00226**	**7.01515**	**0.05008**	**-0.00171**
%RSD	17.37945	26.39350	32.52833	0.17390	0.01262	0.62560	0.25596	0.00000	68.15443

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.86473	0.00027	0.09825	-0.00064	0.00355	13.47117	0.00044	-0.00853	0.00127
#2	1.86804	0.00118	0.09422	0.00018	0.00245	13.35142	-0.00335	-0.01133	0.00047
Mean	**1.86639**	**0.00072**	**0.09623**	**-0.00023**	**0.00300**	**13.41129**	**-0.00146**	**-0.00993**	**0.00087**
%RSD	0.12531	89.41697	2.96268	247.59686	25.83289	0.63136	183.71450	19.93534	65.47895

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	6.70891	-0.00522	0.25261	-0.00681	0.03191	0.00091	-0.03633	0.00436	0.00782
#2	6.72758	-0.00223	0.25182	-0.01588	0.03331	0.00555	-0.03455	0.00440	0.00509
Mean	**6.71824**	**-0.00372**	**0.25221**	**-0.01134**	**0.03261**	**0.00323**	**-0.03544**	**0.00438**	**0.00646**
%RSD	0.19645	56.78300	0.22268	56.51646	3.04349	101.56637	3.55171	0.72760	29.91912

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	0.00000	0.00215	-0.00199
#2	0.00080	0.00169	-0.00346
Mean	**0.00040**	**0.00192**	**-0.00273**
%RSD	142.99412	16.87644	38.04740

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:55
SampleId1 : 1111185-13 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:47:52
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE47

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00047	0.01354	0.00136	0.01879	0.04124	0.00028	-0.00677	28.99483	0.00006
#2	-0.00041	0.00910	-0.00023	0.01969	0.04098	0.00030	-0.00029	28.98798	0.00020
Mean	**-0.00044**	**0.01132**	**0.00056**	**0.01924**	**0.04111**	**0.00029**	**-0.00353**	**28.99141**	**0.00013**
%RSD	9.76278	27.75195	198.06251	3.30906	0.44956	4.86730	129.90045	0.01672	79.28279

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00157	-0.00230	-0.00227	-0.01291	3.37751	-0.00277	3.42438	-0.00102	0.00168
#2	-0.00088	-0.00133	-0.00227	-0.01265	3.39028	-0.00280	3.45081	-0.00102	0.00187
Mean	**-0.00122**	**-0.00182**	**-0.00227**	**-0.01278**	**3.38390**	**-0.00279**	**3.43759**	**-0.00102**	**0.00177**
%RSD	39.58651	37.86178	0.10731	1.46742	0.26677	0.76050	0.54352	0.00000	7.31810

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.12608	-0.00160	0.01762	-0.00628	0.00108	3.59061	-0.00062	0.00335	0.00374
#2	4.14316	-0.00080	0.02971	-0.00373	0.00112	3.62942	0.00190	-0.00303	0.00414
Mean	**4.13462**	**-0.00120**	**0.02366**	**-0.00501**	**0.00110**	**3.61002**	**0.00064**	**0.00016**	**0.00394**
%RSD	0.29208	47.52925	36.13919	36.01461	2.67459	0.76012	279.64252	2800.77989	7.19256

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.36311	-0.00475	0.12222	-0.00556	-0.00240	-0.00378	-0.04485	0.00235	-0.00098
#2	1.37334	-0.00731	0.12228	-0.01331	-0.00240	0.00840	-0.04041	0.00235	-0.00159
Mean	**1.36823**	**-0.00603**	**0.12225**	**-0.00944**	**-0.00240**	**0.00231**	**-0.04263**	**0.00235**	**-0.00128**
%RSD	0.52852	30.05374	0.03463	58.14479	0.00000	373.34300	7.36059	0.00155	33.43789

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00030	-0.00137	0.00361
#2	0.00043	-0.00050	0.00175
Mean	**0.00006**	**-0.00094**	**0.00268**
%RSD	806.71672	66.26747	48.95315

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:55

SampleId1 : 1111185-13D **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:49:42
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE48

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00214	0.00022	0.00196	0.01798	0.03978	0.00023	0.00014	28.34451	0.00020
#2	-0.00074	0.00855	-0.00570	0.01888	0.04004	0.00021	-0.00331	28.24862	0.00021
Mean	**-0.00144**	**0.00438**	**-0.00187**	**0.01843**	**0.03991**	**0.00022**	**-0.00158**	**28.29657**	**0.00021**
%RSD	68.34637	134.39151	290.04224	3.45456	0.46310	5.42573	154.13919	0.23962	3.05788

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00134	-0.00179	-0.00190	-0.01345	3.31514	-0.00277	3.36467	-0.00112	0.00159
#2	-0.00088	-0.00150	-0.00215	-0.00960	3.30347	-0.00276	3.34406	-0.00082	0.00233
Mean	**-0.00111**	**-0.00165**	**-0.00203**	**-0.01152**	**3.30930**	**-0.00277**	**3.35436**	**-0.00097**	**0.00196**
%RSD	29.08418	12.70851	8.71094	23.60463	0.24941	0.12778	0.43446	21.37764	26.52703

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.04928	-0.00149	0.01332	-0.00294	0.00131	3.48195	-0.00344	-0.00521	0.01316
#2	4.03259	-0.00204	0.02111	0.00187	0.00116	3.52076	-0.00049	-0.00272	0.00194
Mean	**4.04093**	**-0.00177**	**0.01721**	**-0.00053**	**0.00124**	**3.50135**	**-0.00196**	**-0.00397**	**0.00755**
%RSD	0.29210	21.99170	32.01624	637.83094	8.42605	0.78375	106.44454	44.56997	105.13242

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.33623	-0.00518	0.11941	-0.00766	-0.00244	0.00352	-0.05195	0.00207	-0.00068
#2	1.33402	-0.00304	0.11901	-0.01024	-0.00231	0.00376	-0.03952	0.00254	-0.00128
Mean	**1.33512**	**-0.00411**	**0.11921**	**-0.00895**	**-0.00237**	**0.00364**	**-0.04573**	**0.00231**	**-0.00098**
%RSD	0.11697	36.76094	0.23969	20.42416	3.94899	4.67404	19.20623	14.29649	43.79221

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00044	-0.00010	0.00704
#2	0.00016	0.00140	0.00039
Mean	**-0.00014**	**0.00065**	**0.00371**
%RSD	304.37529	164.20460	126.67235

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:55
SampleId1 : 1111185-13L 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:51:32
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE49

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	-0.00115	-0.00098	-0.00388	-0.00039	0.00727	0.00009	-0.00417	5.76073	-0.00010
#2	-0.00130	-0.00093	0.00245	-0.00039	0.00721	0.00007	-0.01000	5.73307	-0.00026
Mean	**-0.00122**	**-0.00095**	**-0.00071**	**-0.00039**	**0.00724**	**0.00008**	**-0.00709**	**5.74690**	**-0.00018**
%RSD	8.77268	3.89356	627.57210	0.00000	0.51037	23.62765	58.13415	0.34023	59.55155

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00085	-0.00079	-0.00252	-0.01371	0.39630	-0.00302	0.64001	-0.00102	-0.00208
#2	-0.00093	-0.00074	-0.00277	-0.01398	0.39667	-0.00302	0.64318	-0.00102	-0.00162
Mean	**-0.00089**	**-0.00077**	**-0.00265**	**-0.01384**	**0.39648**	**-0.00302**	**0.64159**	**-0.00102**	**-0.00185**
%RSD	6.02843	5.10528	6.88075	1.35494	0.06505	0.00000	0.34916	0.00000	17.52422

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.84976	-0.00076	-0.00281	-0.00347	0.00266	0.68588	-0.00320	-0.00816	0.00644
#2	0.85073	0.00027	-0.00603	-0.00787	0.00063	0.69754	-0.00601	-0.01452	0.00284
Mean	**0.85024**	**-0.00025**	**-0.00442**	**-0.00567**	**0.00165**	**0.69171**	**-0.00460**	**-0.01134**	**0.00464**
%RSD	0.08091	294.18650	51.58317	54.83696	87.23274	1.19174	43.11743	39.67623	54.96479

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.25535	-0.00261	0.02160	-0.00234	-0.00219	-0.00076	-0.03508	-0.00025	-0.00128
#2	0.25283	-0.00304	0.02145	-0.00842	-0.00233	-0.00504	-0.01290	-0.00053	-0.00128
Mean	**0.25409**	**-0.00283**	**0.02152**	**-0.00538**	**-0.00226**	**-0.00290**	**-0.02399**	**-0.00039**	**-0.00128**
%RSD	0.69958	10.68159	0.49121	79.93293	4.49787	104.32340	65.39856	50.09731	0.00000

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00059	0.00062	0.00158
#2	0.00001	-0.00220	-0.00294
Mean	**-0.00029**	**-0.00079**	**-0.00068**
%RSD	147.35513	252.71471	469.63350

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:55
SampleId1 : 1111185-13MS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:53:22
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE50

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09632	2.01462	1.90313	0.50298	1.94703	0.04740	-0.00353	65.50930	0.05049
#2	0.09620	2.01270	1.90349	0.50388	1.95422	0.04751	-0.00655	65.60726	0.04966
Mean	**0.09626**	**2.01366**	**1.90331**	**0.50343**	**1.95062**	**0.04745**	**-0.00504**	**65.55828**	**0.05007**
%RSD	0.09376	0.06736	0.01344	0.12642	0.26097	0.15414	42.36524	0.10566	1.17164

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47168	0.18967	0.24103	0.95074	41.99296	0.50158	40.05011	0.46639	0.95715

#2	0.47260	0.18840	0.24200	0.95407	42.04766	0.50206	40.08965	0.46766	0.96175
Mean	**0.47214**	**0.18903**	**0.24152**	**0.95240**	**42.02031**	**0.50182**	**40.06988**	**0.46702**	**0.95945**
%RSD	0.13785	0.47650	0.28263	0.24732	0.09205	0.06814	0.06977	0.19289	0.33889

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	41.12061	0.46282	0.03105	0.47117	0.47103	3.51300	0.45026	2.00623	1.95281
#2	41.16934	0.46341	0.02165	0.47193	0.46747	3.53240	0.45243	2.00806	1.96345
Mean	**41.14497**	**0.46312**	**0.02635**	**0.47155**	**0.46925**	**3.52270**	**0.45134**	**2.00714**	**1.95813**
%RSD	0.08374	0.08943	25.24165	0.11297	0.53642	0.38950	0.33849	0.06442	0.38431

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.27558	0.47604	0.62683	-0.04422	0.45475	1.89956	-0.04284	0.48355	0.45760
#2	3.27883	0.47988	0.62898	-0.04223	0.45609	1.90624	-0.04905	0.48471	0.45457
Mean	**3.27720**	**0.47796**	**0.62790**	**-0.04323**	**0.45542**	**1.90290**	**-0.04595**	**0.48413**	**0.45609**
%RSD	0.07010	0.56821	0.24226	3.25479	0.20929	0.24793	9.56419	0.16996	0.47098

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00252	0.47108	1.97060
#2	0.00209	0.46896	1.97831
Mean	**0.00231**	**0.47002**	**1.97445**
%RSD	12.94099	0.31947	0.27602

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:55
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 16:55:51
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.21366	50.57899	0.50375	0.98888	0.98712	0.47239	0.52556	49.01261	0.51396
#2	0.21307	50.69368	0.49647	0.98663	0.99012	0.47203	0.51004	48.95823	0.51398
Mean	**0.21337**	**50.63634**	**0.50011**	**0.98775**	**0.98862**	**0.47221**	**0.51780**	**48.98542**	**0.51397**
%RSD	0.19418	0.16016	1.02981	0.16099	0.21446	0.05390	2.11848	0.07850	0.00386

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48787	0.98339	1.00038	19.96480	51.05865	0.52856	49.68206	0.95809	0.99008
#2	0.48673	0.98303	1.00172	19.97291	51.16404	0.52952	49.67509	0.95888	0.98364
Mean	**0.48730**	**0.98321**	**1.00105**	**19.96886**	**51.11134**	**0.52904**	**49.67857**	**0.95849**	**0.98686**
%RSD	0.16531	0.02578	0.09432	0.02872	0.14581	0.12852	0.00991	0.05803	0.46130

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.29823	0.95052	4.89776	0.97089	0.96510	5.13069	0.46369	1.02206	0.99654
#2	48.36303	0.94986	4.86539	0.96706	0.96778	5.08416	0.45985	1.00338	0.99927

Mean	**48.33063**	**0.95019**	**4.88158**	**0.96897**	**0.96644**	**5.10742**	**0.46177**	**1.01272**	**0.99791**
%RSD	0.09481	0.04901	0.46892	0.27986	0.19598	0.64427	0.58894	1.30416	0.19293

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.88655	0.98131	0.51936	0.30858	0.47297	0.49666	4.87424	0.48737	0.92739
#2	4.89432	0.97789	0.52033	0.30815	0.47388	0.50371	4.85298	0.48877	0.92861
Mean	**4.89043**	**0.97960**	**0.51984**	**0.30836**	**0.47342**	**0.50018**	**4.86361**	**0.48807**	**0.92800**
%RSD	0.11248	0.24642	0.13286	0.09921	0.13697	0.99676	0.30909	0.20242	0.09264

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.96805	0.96703	1.00504
#2	0.96793	0.96754	1.00064
Mean	**0.96799**	**0.96728**	**1.00284**
%RSD	0.00925	0.03725	0.31051

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:56
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 16:57:48
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00123	0.00461	-0.00047	-0.00192	-0.00094	0.00002	-0.00439	-0.05446	0.00002
#2	-0.00149	0.01339	-0.00047	-0.00192	-0.00099	0.00001	0.00166	-0.05446	0.00035
Mean	**-0.00136**	**0.00900**	**-0.00047**	**-0.00192**	**-0.00096**	**0.00001**	**-0.00136**	**-0.05446**	**0.00019**
%RSD	13.43357	68.98891	0.00000	0.00000	3.83286	75.56336	313.51505	0.00000	123.03108

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00124	-0.00087	-0.00241	-0.00841	-0.29748	-0.00308	-0.04107	-0.00082	-0.00254
#2	-0.00079	-0.00096	-0.00228	-0.00827	-0.29858	-0.00308	-0.04160	-0.00082	-0.00098
Mean	**-0.00102**	**-0.00092**	**-0.00234**	**-0.00834**	**-0.29803**	**-0.00308**	**-0.04133**	**-0.00082**	**-0.00176**
%RSD	31.78900	7.25881	3.91373	1.12467	0.25963	0.00000	0.90316	0.00000	62.68964

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.12511	-0.00215	-0.01732	-0.00208	0.00004	-0.02926	-0.00292	-0.01484	0.00053
#2	0.12466	-0.00230	-0.01060	-0.00278	0.00115	-0.00982	-0.00712	-0.00644	0.00284
Mean	**0.12488**	**-0.00222**	**-0.01396**	**-0.00243**	**0.00060**	**-0.01954**	**-0.00502**	**-0.01064**	**0.00169**
%RSD	0.25345	4.65738	34.02791	20.29858	131.49155	70.32443	59.14780	55.77701	96.64369

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02354	-0.00646	-0.00340	-0.00550	-0.00226	-0.00585	-0.01911	-0.00058	-0.00341
#2	-0.02483	-0.00176	-0.00334	-0.00770	-0.00228	0.00122	-0.03154	-0.00063	-0.00189
Mean	**-0.02419**	**-0.00411**	**-0.00337**	**-0.00660**	**-0.00227**	**-0.00232**	**-0.02532**	**-0.00060**	**-0.00265**

%RSD	3.76746	80.87765	1.25527	23.54367	0.34431	215.57100	34.69262	5.45835	40.50153

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00051	-0.00066	-0.00458
#2	0.00028	-0.00016	-0.00025
Mean	**0.00040**	**-0.00041**	**-0.00242**
%RSD	41.21824	87.89618	126.63325

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:56
SampleId1 : 1111185-13MSD **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 16:59:55
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE51

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09525	2.00138	1.89203	0.49965	1.92786	0.04734	0.00056	65.76537	0.05015
#2	0.09672	1.99766	1.88443	0.50172	1.92681	0.04725	-0.00009	65.58204	0.05042
Mean	**0.09598**	**1.99952**	**1.88823**	**0.50068**	**1.92734**	**0.04729**	**0.00024**	**65.67370**	**0.05029**
%RSD	1.07898	0.13170	0.28457	0.29236	0.03884	0.13738	192.01292	0.19739	0.37931

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.46952	0.18749	0.23792	0.94887	41.84562	0.49905	40.19063	0.46472	0.95504
#2	0.46906	0.18809	0.23791	0.94541	41.82301	0.49888	40.14308	0.46492	0.95384
Mean	**0.46929**	**0.18779**	**0.23791**	**0.94714**	**41.83431**	**0.49897**	**40.16685**	**0.46482**	**0.95444**
%RSD	0.06878	0.22601	0.00205	0.25863	0.03822	0.02378	0.08371	0.02982	0.08857

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	41.01700	0.45894	0.02272	0.46778	0.47067	3.46255	0.44113	1.99277	1.95028
#2	40.98604	0.45686	0.02219	0.47076	0.46988	3.51688	0.44772	1.99645	1.97045
Mean	**41.00152**	**0.45790**	**0.02245**	**0.46927**	**0.47027**	**3.48971**	**0.44443**	**1.99461**	**1.96036**
%RSD	0.05340	0.32223	1.69270	0.44911	0.11843	1.10091	1.04846	0.13032	0.72746

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.26401	0.47604	0.62105	-0.04289	0.45405	1.90129	-0.04728	0.48210	0.45123
#2	3.26106	0.47049	0.62048	-0.04406	0.45328	1.90682	-0.03840	0.48024	0.45092
Mean	**3.26253**	**0.47327**	**0.62077**	**-0.04348**	**0.45366**	**1.90405**	**-0.04284**	**0.48117**	**0.45107**
%RSD	0.06386	0.82910	0.06511	1.90270	0.12055	0.20531	14.65354	0.27355	0.04762

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00370	0.46971	1.96443
#2	0.00344	0.47017	1.97911
Mean	**0.00357**	**0.46994**	**1.97177**
%RSD	5.25398	0.07029	0.52631

ted: 11/18/2011 12:19:03 **User: MIKE LUNDGREEN**
Method : Paragon File : 111117A Printed : 11/18/2011 12:18:56
SampleId1 : 1111185-24 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:01:51
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE52

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00088	0.54853	-0.00156	0.02321	0.05630	0.00010	-0.00631	48.41423	-0.00006
#2	-0.00061	0.54978	0.00476	0.02375	0.05708	0.00011	-0.00761	48.51055	-0.00012
Mean	**-0.00074**	**0.54915**	**0.00160**	**0.02348**	**0.05669**	**0.00010**	**-0.00696**	**48.46239**	**-0.00009**
%RSD	25.17946	0.16092	279.80741	1.62747	0.97816	9.21834	13.16383	0.14053	52.49671

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00065	-0.00002	-0.00155	1.73433	2.75013	0.00298	13.05169	0.39516	-0.00144
#2	0.00072	-0.00073	-0.00179	1.73513	2.74648	0.00307	13.10045	0.39682	-0.00135
Mean	**0.00003**	**-0.00037**	**-0.00167**	**1.73473**	**2.74830**	**0.00303**	**13.07607**	**0.39599**	**-0.00139**
%RSD	3037.90288	134.45804	10.27235	0.03271	0.09385	2.09988	0.26368	0.29735	4.65965

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.89788	-0.00189	0.02622	0.00189	0.00373	2.91138	0.00382	-0.00432	0.00449
#2	1.91006	-0.00072	0.02380	-0.00119	-0.00025	2.90362	-0.00362	0.00362	0.00580
Mean	**1.90397**	**-0.00131**	**0.02501**	**0.00035**	**0.00174**	**2.90750**	**0.00010**	**-0.00035**	**0.00514**
%RSD	0.45234	63.32880	6.83948	619.56992	161.93583	0.18882	5069.48327	1587.99140	17.90102

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.47139	-0.00220	0.27935	-0.02650	0.00850	0.00201	-0.04160	0.00097	0.00054
#2	5.50338	-0.00177	0.28052	-0.02614	0.00838	-0.00112	-0.03805	0.00027	0.00266
Mean	**5.48739**	**-0.00199**	**0.27993**	**-0.02632**	**0.00844**	**0.00044**	**-0.03982**	**0.00062**	**0.00160**
%RSD	0.41224	15.22340	0.29535	0.98271	1.01858	498.66665	6.30233	79.66884	93.91194

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00035	0.00312	0.00156
#2	0.00026	-0.00056	0.00507
Mean	**0.00031**	**0.00128**	**0.00331**
%RSD	20.93898	203.84160	74.94923

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:56
SampleId1 : 1111185-25 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:03:41
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE53

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00081	0.00761	-0.00351	0.01681	0.04605	0.00019	-0.00504	40.90848	0.00026
#2	-0.00074	0.00806	0.00817	0.01690	0.04563	0.00017	0.00122	40.85202	0.00060
Mean	**-0.00078**	**0.00784**	**0.00233**	**0.01686**	**0.04584**	**0.00018**	**-0.00191**	**40.88025**	**0.00043**
%RSD	6.35280	4.08914	354.65011	0.37775	0.64508	9.32545	232.06266	0.09766	54.88639

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00095	-0.00143	-0.00336	0.50684	2.46196	0.00159	11.90072	0.25290	-0.00300
#2	-0.00042	-0.00113	-0.00288	0.50751	2.45576	0.00159	11.88589	0.25280	-0.00355
Mean	**-0.00068**	**-0.00128**	**-0.00312**	**0.50718**	**2.45886**	**0.00159**	**11.89331**	**0.25285**	**-0.00328**
%RSD	55.06330	16.79513	10.96304	0.09269	0.17832	0.00000	0.08820	0.02737	11.89241

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.87037	-0.00270	-0.01329	-0.00070	0.00192	3.56345	-0.00236	-0.01413	0.00344
#2	1.86165	-0.00208	-0.01141	0.00004	-0.00201	3.60614	-0.00546	0.00500	0.00424
Mean	**1.86601**	**-0.00239**	**-0.01235**	**-0.00033**	**-0.00005**	**3.58479**	**-0.00391**	**-0.00456**	**0.00384**
%RSD	0.33043	18.42836	10.77195	159.31728	5940.08767	0.84202	56.08287	296.51697	14.74507

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.64497	-0.00048	0.25441	-0.02507	-0.00252	0.00043	-0.03455	-0.00132	-0.00280
#2	4.63251	-0.00261	0.25354	-0.01851	-0.00247	0.00344	-0.03810	0.00027	-0.00159
Mean	**4.63874**	**-0.00155**	**0.25397**	**-0.02179**	**-0.00250**	**0.00194**	**-0.03633**	**-0.00053**	**-0.00219**
%RSD	0.18997	97.75980	0.24201	21.27132	1.25223	110.03010	6.91121	212.75754	39.12406

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00011	0.00105	-0.00241
#2	-0.00008	-0.00133	0.00450
Mean	**0.00001**	**-0.00014**	**0.00104**
%RSD	934.59422	1189.41986	467.74670

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:57
SampleId1 : 1111185-26 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:05:33
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE54

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00208	0.04976	0.00318	0.01375	0.02927	0.00025	-0.00029	32.62084	-0.00004
#2	-0.00095	0.04882	-0.00035	0.01420	0.02901	0.00023	-0.00417	32.63929	-0.00019
Mean	**-0.00152**	**0.04929**	**0.00142**	**0.01398**	**0.02914**	**0.00024**	**-0.00223**	**32.63006**	**-0.00012**
%RSD	52.58141	1.35055	176.15196	2.27824	0.63418	6.18017	123.27093	0.03999	89.01047

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00136	-0.00089	-0.00264	0.02051	2.15666	0.00076	11.37148	0.00015	-0.00171
#2	-0.00105	-0.00090	-0.00204	0.02051	2.14936	0.00075	11.37518	0.00025	-0.00015
Mean	**-0.00120**	**-0.00090**	**-0.00234**	**0.02051**	**2.15301**	**0.00075**	**11.37333**	**0.00020**	**-0.00093**
%RSD	17.86133	0.29863	17.99480	0.00000	0.23960	1.40852	0.02305	34.04540	118.13947

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.28419	-0.00329	0.00230	-0.00293	0.00176	5.07640	-0.00151	-0.01128	0.00084
#2	2.28065	-0.00296	0.00015	-0.00045	-0.00090	5.04926	0.00145	0.00196	0.00224
Mean	**2.28242**	**-0.00312**	**0.00122**	**-0.00169**	**0.00043**	**5.06283**	**-0.00003**	**-0.00466**	**0.00154**
%RSD	0.10965	7.46682	124.31641	103.74250	441.85295	0.37914	7641.04919	200.81742	64.32198

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.58100	-0.00048	0.21839	-0.02070	-0.00160	0.00192	-0.03688	-0.00011	-0.00250
#2	3.57602	-0.00261	0.21869	-0.02577	-0.00155	0.00355	-0.02978	-0.00062	-0.00159
Mean	**3.57851**	**-0.00155**	**0.21854**	**-0.02323**	**-0.00157**	**0.00273**	**-0.03333**	**-0.00036**	**-0.00204**
%RSD	0.09851	97.69252	0.09695	15.43679	2.48331	42.10428	15.06201	99.37216	31.52327

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00016	0.00019	-0.00319
#2	0.00071	-0.00075	0.00215
Mean	**0.00043**	**-0.00028**	**-0.00052**
%RSD	88.18002	240.20181	721.71809

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:57
SampleId1 : 1111185-27 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:07:23
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE55

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00128	0.01825	0.00014	0.01258	0.02901	0.00031	0.00360	32.78504	0.00002
#2	0.00012	0.01383	-0.00083	0.01492	0.02896	0.00030	-0.00266	32.80850	-0.00006
Mean	**-0.00058**	**0.01604**	**-0.00035**	**0.01375**	**0.02898**	**0.00031**	**0.00047**	**32.79677**	**-0.00002**
%RSD	170.90422	19.50122	197.87227	12.04082	0.12752	1.78960	945.63903	0.05058	284.73891

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00036	-0.00083	-0.00275	-0.01039	2.15775	0.00077	11.41545	-0.00024	-0.00116
#2	0.00009	-0.00039	-0.00228	-0.01013	2.15921	0.00077	11.43346	-0.00024	-0.00116
Mean	**-0.00014**	**-0.00061**	**-0.00251**	**-0.01026**	**2.15848**	**0.00077**	**11.42445**	**-0.00024**	**-0.00116**
%RSD	237.17068	50.47820	13.39562	1.82779	0.04780	0.46034	0.11148	0.00000	0.00000

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	2.26679	-0.00237	-0.02054	-0.00473	-0.00085	5.02211	-0.00375	-0.01392	0.00083
#2	2.26499	-0.00266	-0.00711	-0.00044	-0.00058	5.00660	-0.00123	-0.00458	-0.00087
Mean	**2.26589**	**-0.00252**	**-0.01383**	**-0.00258**	**-0.00072**	**5.01435**	**-0.00249**	**-0.00925**	**-0.00002**
%RSD	0.05640	8.23055	68.71744	117.11968	26.59818	0.21875	71.65850	71.40404	6989.61381

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.54014	-0.00774	0.21942	-0.01896	-0.00257	-0.00088	-0.04130	-0.00067	-0.00159
#2	3.53574	-0.00090	0.21936	-0.02088	-0.00244	0.00202	-0.03597	-0.00011	-0.00037
Mean	**3.53794**	**-0.00432**	**0.21939**	**-0.01992**	**-0.00251**	**0.00057**	**-0.03864**	**-0.00039**	**-0.00098**
%RSD	0.08800	111.83060	0.01931	6.82299	3.74012	358.43077	9.74539	100.36205	87.58443

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00013	-0.00214	-0.00408
#2	0.00052	-0.00054	-0.00210
Mean	**0.00020**	**-0.00134**	**-0.00309**
%RSD	230.60355	84.81114	45.16277

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:57
SampleId1 : 1111185-28 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:09:14
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE56

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00115	0.06078	-0.00169	0.01258	0.02843	0.00039	-0.00028	30.37076	-0.00021
#2	-0.00095	0.06685	0.00002	0.01285	0.02854	0.00036	-0.00244	30.32021	-0.00004
Mean	**-0.00105**	**0.06382**	**-0.00083**	**0.01271**	**0.02849**	**0.00038**	**-0.00136**	**30.34549**	**-0.00013**
%RSD	13.84969	6.72689	144.33192	1.50249	0.25949	4.82790	111.91626	0.11778	91.56166

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00082	-0.00130	-0.00276	0.05036	2.18730	0.00097	11.76721	0.00103	-0.00116
#2	-0.00113	-0.00076	-0.00179	0.05129	2.17344	0.00093	11.77304	0.00103	0.00012
Mean	**-0.00098**	**-0.00103**	**-0.00228**	**0.05082**	**2.18037**	**0.00095**	**11.77013**	**0.00103**	**-0.00052**
%RSD	22.01411	37.15798	30.00496	1.29208	0.44952	2.59683	0.03501	0.00000	174.43731

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.20867	-0.00336	-0.01248	-0.00151	0.00175	5.20825	0.00005	-0.00987	-0.00076
#2	2.20822	-0.00292	-0.00657	-0.00267	-0.00140	5.20049	-0.00388	-0.00972	0.00085
Mean	**2.20844**	**-0.00314**	**-0.00953**	**-0.00209**	**0.00018**	**5.20437**	**-0.00192**	**-0.00980**	**0.00005**
%RSD	0.01446	9.89769	43.88249	39.01693	1269.65307	0.10537	144.74173	1.08080	2509.84159

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.35000	0.00337	0.22123	-0.01600	-0.00161	0.00252	-0.03069	-0.00043	-0.00007

#2	3.35353	-0.00091	0.22158	-0.01722	-0.00189	0.00031	-0.03779	-0.00010	-0.00037
Mean	**3.35176**	**0.00123**	**0.22141**	**-0.01661**	**-0.00175**	**0.00141**	**-0.03424**	**-0.00027**	**-0.00022**
%RSD	0.07450	245.39206	0.11005	5.21018	11.16211	110.49140	14.66384	86.86887	96.94749

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00011	0.00066	-0.00379
#2	0.00012	-0.00182	-0.00267
Mean	**0.00012**	**-0.00058**	**-0.00323**
%RSD	9.58523	303.42136	24.47693

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:57
SampleId1 : 1111185-29 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:11:04
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE57

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00041	0.01784	0.00026	0.01186	0.02880	0.00035	-0.00137	29.85545	0.00011
#2	-0.00048	0.01803	0.00391	0.01366	0.02854	0.00034	-0.00655	29.76533	0.00023
Mean	**-0.00045**	**0.01793**	**0.00209**	**0.01276**	**0.02867**	**0.00035**	**-0.00396**	**29.81039**	**0.00017**
%RSD	11.08678	0.73905	123.75580	9.98126	0.64458	2.27692	92.56249	0.21376	52.92716

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00075	-0.00096	-0.00276	-0.00960	2.15118	0.00084	11.59715	-0.00033	-0.00328
#2	-0.00158	-0.00127	-0.00228	-0.01013	2.13988	0.00084	11.57119	-0.00033	-0.00126
Mean	**-0.00116**	**-0.00112**	**-0.00252**	**-0.00986**	**2.14553**	**0.00084**	**11.58417**	**-0.00033**	**-0.00227**
%RSD	50.86235	19.41389	13.33125	3.80305	0.37267	0.00000	0.15845	0.00000	63.04463

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.18315	-0.00160	-0.01248	-0.00603	0.00056	5.11130	-0.00349	-0.01112	0.00073
#2	2.18134	-0.00233	-0.01033	-0.00194	-0.00141	5.10742	-0.00248	-0.01313	0.00975
Mean	**2.18225**	**-0.00197**	**-0.01141**	**-0.00398**	**-0.00043**	**5.10936**	**-0.00299**	**-0.01212**	**0.00524**
%RSD	0.05854	26.32074	13.32585	72.66709	328.13178	0.05367	23.76349	11.76487	121.61467

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.23883	-0.00518	0.21809	-0.01621	-0.00231	-0.00482	-0.03597	-0.00086	-0.00219
#2	3.23707	-0.00475	0.21734	-0.01284	-0.00233	-0.00226	-0.02887	-0.00049	-0.00280
Mean	**3.23795**	**-0.00496**	**0.21771**	**-0.01453**	**-0.00232**	**-0.00354**	**-0.03242**	**-0.00067**	**-0.00250**
%RSD	0.03843	6.08715	0.24328	16.39007	0.67385	51.03003	15.48468	39.12671	17.18493

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00009	-0.00163	-0.00321
#2	-0.00054	-0.00159	0.00213

Mean	**-0.00031**	**-0.00161**	**-0.00054UNDGREEN**
%RSD	100.57662	2.06035	697.92110

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:57
SampleId1 : 1111185-30 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:12:55
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE58

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00094	0.14193	0.00136	0.01078	0.02624	0.00029	-0.01237	30.63320	0.00019
#2	-0.00141	0.13801	0.00245	0.01186	0.02608	0.00023	-0.00114	30.62196	0.00016
Mean	**-0.00117**	**0.13997**	**0.00190**	**0.01132**	**0.02616**	**0.00026**	**-0.00676**	**30.62758**	**0.00017**
%RSD	28.28222	1.98197	40.68711	6.75114	0.42383	17.54346	117.47258	0.02594	12.07641

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00160	-0.00079	-0.00155	0.18812	2.09282	0.00044	11.89437	0.00904	-0.00346
#2	-0.00137	-0.00153	-0.00263	0.18732	2.09209	0.00046	11.89702	0.00924	-0.00208
Mean	**-0.00148**	**-0.00116**	**-0.00209**	**0.18772**	**2.09246**	**0.00045**	**11.89569**	**0.00914**	**-0.00277**
%RSD	10.87384	45.21626	36.67989	0.30005	0.02465	3.17425	0.01575	1.51133	35.15010

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.21213	-0.00376	0.00445	-0.00421	0.00145	5.46417	-0.00476	-0.00866	0.00709
#2	2.21206	-0.00146	0.00552	-0.00401	0.00433	5.40601	-0.00347	-0.01504	0.00398
Mean	**2.21209**	**-0.00261**	**0.00499**	**-0.00411**	**0.00289**	**5.43509**	**-0.00411**	**-0.01185**	**0.00553**
%RSD	0.00241	62.54069	15.24738	3.36761	70.50975	0.75667	22.06240	38.06693	39.69273

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.12565	-0.00006	0.21123	-0.02067	0.00223	-0.00091	-0.04765	0.00011	0.01025
#2	3.12433	-0.00219	0.21182	-0.02112	0.00233	0.00118	-0.04498	-0.00008	0.01147
Mean	**3.12499**	**-0.00112**	**0.21153**	**-0.02090**	**0.00228**	**0.00013**	**-0.04631**	**0.00002**	**0.01086**
%RSD	0.02979	134.45591	0.20031	1.52222	3.07991	1124.39875	4.06582	767.35412	7.90717

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00003	-0.00044	0.00184
#2	-0.00007	0.00155	-0.00235
Mean	**-0.00002**	**0.00056**	**-0.00026**
%RSD	376.17111	251.73467	1162.49719

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:58
SampleId1 : 1111185-31 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:14:45
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE59

Final concentrations**19:04** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00148	0.00806	0.00513	0.01222	0.02436	0.00019	-0.00482	29.93217	0.00029
#2	-0.00060	0.00715	-0.00083	0.01240	0.02420	0.00014	-0.00375	29.89381	0.00042
Mean	**-0.00104**	**0.00761**	**0.00215**	**0.01231**	**0.02428**	**0.00017**	**-0.00428**	**29.91299**	**0.00035**
%RSD	59.50749	8.41550	196.40651	1.03464	0.45668	19.84255	17.75166	0.09068	25.49947

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00030	-0.00143	-0.00239	-0.00496	2.05817	0.00032	11.67662	-0.00024	-0.00355
#2	-0.00090	-0.00055	-0.00263	-0.00429	2.06765	0.00030	11.68827	-0.00024	-0.00061
Mean	**-0.00060**	**-0.00099**	**-0.00251**	**-0.00463**	**2.06291**	**0.00031**	**11.68245**	**-0.00024**	**-0.00208**
%RSD	71.71360	62.75874	6.51556	10.13882	0.32508	4.62879	0.07055	0.00000	99.78962

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.20995	-0.00343	-0.01114	-0.00122	0.00221	5.35172	-0.00391	-0.01797	-0.00117
#2	2.21364	-0.00131	-0.00926	-0.00297	0.00053	5.34784	-0.00642	-0.00942	0.00454
Mean	**2.21179**	**-0.00237**	**-0.01020**	**-0.00209**	**0.00137**	**5.34978**	**-0.00516**	**-0.01369**	**0.00169**
%RSD	0.11793	63.35886	13.04277	59.15225	86.75833	0.05125	34.40973	44.15779	239.34831

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.95345	-0.00090	0.20814	-0.01991	-0.00207	0.01130	-0.03864	-0.00053	0.00266
#2	2.95289	-0.00261	0.20826	-0.01791	-0.00242	0.00225	-0.05018	-0.00039	0.00266
Mean	**2.95317**	**-0.00176**	**0.20820**	**-0.01891**	**-0.00224**	**0.00678**	**-0.04441**	**-0.00046**	**0.00266**
%RSD	0.01331	68.67914	0.04070	7.50229	11.15354	94.46351	18.37168	21.37815	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00054	0.00107	-0.00676
#2	0.00035	-0.00064	-0.00011
Mean	**0.00044**	**0.00022**	**-0.00343**
%RSD	30.22684	555.57048	137.05131

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:58
SampleId1 : 1111185-32 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:16:35
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE60

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00155	0.02939	0.00099	0.01087	0.02472	0.00019	-0.00244	30.31741	0.00032
#2	0.00005	0.03237	0.00391	0.01249	0.02493	0.00024	-0.00719	30.27934	0.00010
Mean	**-0.00075**	**0.03088**	**0.00245**	**0.01168**	**0.02483**	**0.00021**	**-0.00482**	**30.29837**	**0.00021**
%RSD	150.33390	6.81289	84.25781	9.81436	0.59544	17.05328	69.68305	0.08883	72.29776

ted: 11/18/2011 12:19:04 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00174	-0.00127	-0.00264	0.00751	2.11070	0.00044	11.73860	0.00006	-0.00263
#2	-0.00144	-0.00087	-0.00204	0.00725	2.10413	0.00042	11.73119	0.00015	-0.00061
Mean	**-0.00159**	**-0.00107**	**-0.00234**	**0.00738**	**2.10741**	**0.00043**	**11.73489**	**0.00011**	**-0.00162**
%RSD	13.54550	26.56512	18.02805	2.54226	0.22030	2.47803	0.04469	65.65806	88.01271

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.18082	-0.00244	-0.01678	-0.00011	0.00317	5.32846	-0.00446	-0.00178	0.00294
#2	2.18157	-0.00189	-0.00872	-0.00208	0.00161	5.32458	-0.00403	-0.00987	0.00124
Mean	**2.18119**	**-0.00217**	**-0.01275**	**-0.00110**	**0.00239**	**5.32652**	**-0.00425**	**-0.00582**	**0.00209**
%RSD	0.02440	17.90748	44.70614	126.75871	46.15215	0.05148	7.23506	98.25393	57.62467

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.01596	-0.00219	0.20904	-0.01673	-0.00173	0.00122	-0.03066	-0.00020	0.00114
#2	3.01684	-0.00774	0.20896	-0.02097	-0.00163	-0.00399	-0.02622	-0.00053	0.00206
Mean	**3.01640**	**-0.00496**	**0.20900**	**-0.01885**	**-0.00168**	**-0.00139**	**-0.02844**	**-0.00037**	**0.00160**
%RSD	0.02063	79.11800	0.02534	15.91789	4.17659	266.21517	11.03276	62.80805	40.24799

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00022	0.00207	0.00137
#2	0.00039	0.00038	-0.00246
Mean	**0.00009**	**0.00123**	**-0.00054**
%RSD	489.15379	97.70499	497.30183

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:58
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 17:19:06
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.21304	50.47812	0.49550	0.98519	0.98144	0.46808	0.51303	48.75058	0.51458
#2	0.21361	50.61473	0.49683	0.98681	0.98802	0.46931	0.51219	48.81099	0.51542
Mean	**0.21333**	**50.54642**	**0.49617**	**0.98600**	**0.98473**	**0.46870**	**0.51261**	**48.78079**	**0.51500**
%RSD	0.18946	0.19111	0.19030	0.11612	0.47215	0.18440	0.11558	0.08757	0.11575

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48460	0.97390	0.99923	19.81540	51.00285	0.52699	49.37023	0.94954	0.97601
#2	0.48530	0.97644	1.00424	19.87301	51.07105	0.52815	49.50042	0.95200	0.97831
Mean	**0.48495**	**0.97517**	**1.00174**	**19.84420**	**51.03695**	**0.52757**	**49.43533**	**0.95077**	**0.97716**
%RSD	0.10068	0.18417	0.35393	0.20528	0.09448	0.15598	0.18622	0.18281	0.16638

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.23096	0.95169	4.80637	0.96351	0.96101	5.11130	0.46185	1.02866	0.98825
#2	48.30411	0.95055	4.84608	0.96147	0.95674	5.08028	0.46338	1.02775	0.98232
Mean	**48.26753**	**0.95112**	**4.82622**	**0.96249**	**0.95888**	**5.09579**	**0.46261**	**1.02821**	**0.98529**
%RSD	0.10717	0.08432	0.58183	0.15017	0.31482	0.43049	0.23529	0.06257	0.42584

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.84023	0.97705	0.51724	0.30618	0.46699	0.48661	4.81855	0.48474	0.91614
#2	4.86733	0.97235	0.52021	0.30272	0.46871	0.49660	4.84597	0.48558	0.91614
Mean	**4.85378**	**0.97470**	**0.51872**	**0.30445**	**0.46785**	**0.49161**	**4.83226**	**0.48516**	**0.91614**
%RSD	0.39483	0.34057	0.40559	0.80301	0.26051	1.43756	0.40115	0.12367	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	0.96489	0.96184	1.00171
#2	0.96759	0.95832	0.99745
Mean	**0.96624**	**0.96008**	**0.99958**
%RSD	0.19800	0.25986	0.30141

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:58
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 17:21:01
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00021	0.01305	-0.00229	-0.00399	-0.00094	0.00017	-0.00634	-0.05023	0.00091
#2	-0.00062	0.02191	0.00245	-0.00255	-0.00083	0.00017	-0.00029	-0.04993	0.00064
Mean	**-0.00041**	**0.01748**	**0.00008**	**-0.00327**	**-0.00089**	**0.00017**	**-0.00331**	**-0.05008**	**0.00077**
%RSD	70.31850	35.83581	4301.83477	31.15520	8.34416	0.10278	129.19268	0.42627	24.92237

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00117	-0.00126	-0.00311	-0.00748	-0.31025	-0.00307	-0.04054	-0.00082	-0.00199
#2	-0.00079	-0.00056	-0.00276	-0.00734	-0.29894	-0.00308	-0.04107	-0.00073	-0.00254
Mean	**-0.00098**	**-0.00091**	**-0.00293**	**-0.00741**	**-0.30460**	**-0.00308**	**-0.04080**	**-0.00077**	**-0.00227**
%RSD	27.53248	54.36892	8.48297	1.26559	2.62505	0.34472	0.91485	8.92466	17.19398

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.12660	-0.00281	-0.01060	-0.00369	0.00075	-0.02926	-0.00277	-0.00350	0.00624
#2	0.12645	-0.00318	-0.00523	-0.00290	0.00065	-0.02926	-0.00222	-0.00100	0.00364
Mean	**0.12652**	**-0.00299**	**-0.00791**	**-0.00330**	**0.00070**	**-0.02926**	**-0.00250**	**-0.00225**	**0.00494**
%RSD	0.08339	8.65175	48.02101	16.97040	10.17206	0.00000	15.57507	78.57424	37.26855

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02803	-0.00304	-0.00335	0.00065	-0.00216	-0.00610	-0.04396	-0.00114	-0.00280
#2	-0.02498	-0.00133	-0.00332	-0.00167	-0.00216	-0.00122	-0.03331	-0.00091	-0.00371
Mean	**-0.02651**	**-0.00219**	**-0.00334**	**-0.00051**	**-0.00216**	**-0.00366**	**-0.03864**	**-0.00102**	**-0.00326**
%RSD	8.12942	55.26931	0.63326	321.05302	0.00000	94.25173	19.49029	16.11372	19.77111

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00027	-0.00073	0.00300
#2	0.00058	-0.00053	0.00209
Mean	**0.00043**	**-0.00063**	**0.00255**
%RSD	50.19990	22.02292	25.12937

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:58
SampleId1 : 1111185-33 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:22:57
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE61

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00041	-0.00227	-0.00169	0.01249	0.02457	0.00011	-0.00569	29.84329	0.00023
#2	-0.00083	0.00562	-0.00169	0.01294	0.02472	0.00011	-0.00201	29.70359	0.00032
Mean	**-0.00062**	**0.00168**	**-0.00169**	**0.01271**	**0.02465**	**0.00011**	**-0.00385**	**29.77344**	**0.00027**
%RSD	46.97711	332.69728	0.00000	2.50415	0.44990	3.57358	67.53317	0.33177	22.61990

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00159	-0.00109	-0.00263	-0.00933	2.08261	0.00039	11.63477	-0.00024	-0.00254
#2	-0.00106	-0.00114	-0.00253	-0.00761	2.07714	0.00039	11.64483	-0.00024	-0.00171
Mean	**-0.00132**	**-0.00112**	**-0.00258**	**-0.00847**	**2.07987**	**0.00039**	**11.63980**	**-0.00024**	**-0.00213**
%RSD	28.49573	2.69986	2.93359	14.39185	0.18602	0.00000	0.06115	0.00000	27.46029

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.18390	-0.00157	-0.01598	-0.00667	0.00052	5.31295	-0.00404	-0.00987	0.00063
#2	2.17931	-0.00080	-0.01463	-0.00049	0.00165	5.33233	-0.00094	-0.00644	0.00164
Mean	**2.18161**	**-0.00118**	**-0.01530**	**-0.00358**	**0.00108**	**5.32264**	**-0.00249**	**-0.00816**	**0.00113**
%RSD	0.14883	46.07265	6.20806	122.02863	73.75118	0.25756	87.84682	29.79760	62.41283

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.97044	-0.00560	0.20811	-0.02168	-0.00237	0.00202	-0.04041	-0.00039	0.00023
#2	2.96427	-0.00390	0.20733	-0.02283	-0.00230	0.00412	-0.02355	-0.00049	-0.00128
Mean	**2.96735**	**-0.00475**	**0.20772**	**-0.02225**	**-0.00234**	**0.00307**	**-0.03198**	**-0.00044**	**-0.00053**
%RSD	0.14706	25.44093	0.26516	3.63420	2.34172	48.31500	37.28080	14.91467	204.44054

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	0.00138	-0.00188	-0.00287 **UNDGREEN**
#2	0.00123	0.00094	-0.00105
Mean	**0.00131**	**-0.00047**	**-0.00196**
%RSD	7.71875	423.03612	65.43276

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:59
SampleId1 : 1111185-34 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:24:50
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE62

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00069	0.00511	0.00233	-0.00399	-0.00125	0.00004	-0.00093	-0.06533	0.00009
#2	-0.00007	-0.00348	0.00014	-0.00372	-0.00120	-0.00003	-0.00115	-0.06442	0.00030
Mean	**-0.00038**	**0.00082**	**0.00123**	**-0.00386**	**-0.00123**	**0.00000**	**-0.00104**	**-0.06488**	**0.00020**
%RSD	114.12414	743.95477	125.50747	4.95474	3.01556	1384.18997	14.95524	0.98718	75.41823

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00132	-0.00097	-0.00313	-0.01504	-0.32046	-0.00325	-0.05954	-0.00112	-0.00015
#2	-0.00018	-0.00099	-0.00263	-0.01424	-0.31645	-0.00323	-0.05796	-0.00102	-0.00245
Mean	**-0.00075**	**-0.00098**	**-0.00288**	**-0.01464**	**-0.31846**	**-0.00324**	**-0.05875**	**-0.00107**	**-0.00130**
%RSD	107.73099	1.60361	12.20463	3.84385	0.89093	0.43657	1.90607	6.47351	124.70926

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.11548	-0.00072	-0.02189	-0.00164	-0.00165	-0.01760	-0.00093	-0.00597	-0.00027
#2	0.11593	-0.00189	-0.01705	0.00182	-0.00007	-0.02537	-0.00081	-0.00225	-0.00428
Mean	**0.11571**	**-0.00131**	**-0.01947**	**0.00009**	**-0.00086**	**-0.02149**	**-0.00087**	**-0.00411**	**-0.00227**
%RSD	0.27354	63.32880	17.56753	2794.00686	129.25984	25.58527	9.82390	63.95945	124.68513

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02499	-0.00219	-0.00356	-0.00604	-0.00223	0.00122	-0.02177	-0.00151	-0.00128
#2	-0.02555	-0.00090	-0.00355	-0.00808	-0.00237	0.00596	-0.04307	-0.00100	-0.00280
Mean	**-0.02527**	**-0.00155**	**-0.00355**	**-0.00706**	**-0.00230**	**0.00359**	**-0.03242**	**-0.00126**	**-0.00204**
%RSD	1.56972	58.65359	0.29732	20.41922	4.41153	93.40797	46.45749	28.84488	52.53879

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00003	-0.00165	-0.00217
#2	0.00017	0.00056	-0.00360
Mean	**0.00007**	**-0.00054**	**-0.00288**
%RSD	194.78310	285.72394	35.16671

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:59
SampleId1 : 1111185-35 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:26:41

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE63

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00141	0.00958	0.00002	-0.00246	-0.00094	0.00016	-0.00504	-0.06503	0.00000
#2	-0.00048	0.01393	-0.00193	-0.00372	-0.00094	0.00015	-0.01152	-0.06261	0.00001
Mean	**-0.00094**	**0.01175**	**-0.00096**	**-0.00309**	**-0.00094**	**0.00015**	**-0.00828**	**-0.06382**	**0.00001**
%RSD	69.11698	26.19781	143.96156	28.84970	0.00000	4.47618	55.29392	2.67608	158.00148

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00185	-0.00143	-0.00311	-0.00986	-0.29530	-0.00315	-0.06430	-0.00121	-0.00282
#2	-0.00064	-0.00110	-0.00240	-0.01026	-0.28180	-0.00313	-0.05902	-0.00102	-0.00107
Mean	**-0.00124**	**-0.00126**	**-0.00275**	**-0.01006**	**-0.28855**	**-0.00314**	**-0.06166**	**-0.00112**	**-0.00194**
%RSD	69.22379	18.41601	18.23716	2.79589	3.30739	0.45048	6.05436	12.38031	63.44721

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.11988	-0.00299	-0.01410	-0.00100	-0.00030	-0.02149	-0.00179	-0.00630	0.00244
#2	0.12055	-0.00164	-0.01033	-0.00138	0.00051	-0.02537	-0.00010	0.01067	0.00424
Mean	**0.12022**	**-0.00232**	**-0.01221**	**-0.00119**	**0.00011**	**-0.02343**	**-0.00095**	**0.00219**	**0.00334**
%RSD	0.39491	41.37743	21.78092	22.67189	537.27305	11.73145	126.94873	548.95076	38.18374

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02453	-0.00390	-0.00358	-0.00335	-0.00221	0.00039	-0.04574	-0.00095	-0.00128
#2	-0.02381	-0.00219	-0.00349	-0.00487	-0.00226	0.00690	-0.03242	-0.00035	-0.00250
Mean	**-0.02417**	**-0.00304**	**-0.00353**	**-0.00411**	**-0.00224**	**0.00365**	**-0.03908**	**-0.00065**	**-0.00189**
%RSD	2.09767	39.74148	1.79526	26.22232	1.74705	126.10336	24.08804	65.86506	45.40465

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00048	-0.00053	-0.00047
#2	0.00036	-0.00012	0.00638
Mean	**-0.00006**	**-0.00033**	**0.00295**
%RSD	1041.69209	90.31959	164.02190

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:59
SampleId1 : 1111205-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:28:33
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE64

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00050	-0.03345	0.01072	3.19130	0.01197	-0.00041	0.00338	257.42157	-0.00044
#2	0.00004	-0.03241	0.00707	3.19426	0.01197	-0.00042	-0.00180	258.35875	0.00019

Mean	**-0.00023**	**-0.03293**	**0.00890**	**3.19278**	**0.01197**	**-0.00042**	**0.00079**	**257.89016**	**-0.00013**
%RSD	165.05454	2.22483	29.00254	0.06558	0.00000	2.51597	463.13818	0.25696	353.62570

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00022	-0.00103	-0.00312	-0.01278	399.08884	0.16875	888.82361	0.00709	0.00389
#2	-0.00061	-0.00093	-0.00216	-0.01318	399.35570	0.16907	893.28326	0.00729	0.00444
Mean	**-0.00020**	**-0.00098**	**-0.00264**	**-0.01298**	**399.22227**	**0.16891**	**891.05343**	**0.00719**	**0.00416**
%RSD	303.43389	7.40351	25.81843	2.16740	0.04727	0.13540	0.35390	1.92213	9.36054

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	447.86288	-0.00025	0.07621	-0.00158	-0.00127	499.52576	0.00290	-0.01111	-0.00097
#2	444.51344	-0.00094	0.07486	0.00325	-0.00177	499.97706	-0.00075	-0.01158	-0.00007
Mean	**446.18816**	**-0.00059**	**0.07554**	**0.00084**	**-0.00152**	**499.75141**	**0.00107**	**-0.01135**	**-0.00052**
%RSD	0.53081	82.77860	1.25809	407.81907	23.18622	0.06386	241.06424	2.92715	122.88969

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.80598	0.00252	5.10624	-0.06799	-0.00393	0.00805	-0.03065	0.00300	-0.00068
#2	1.81198	0.00209	5.11689	-0.06373	-0.00360	0.01084	-0.03420	0.00333	0.00054
Mean	**1.80898**	**0.00230**	**5.11157**	**-0.06586**	**-0.00377**	**0.00945**	**-0.03242**	**0.00317**	**-0.00007**
%RSD	0.23466	13.13844	0.14737	4.57149	6.22322	20.81849	7.74186	7.27375	1233.12806

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00438	-0.00137	-0.00435
#2	0.00409	-0.00010	-0.00390
Mean	**0.00424**	**-0.00074**	**-0.00412**
%RSD	4.81696	122.51113	7.62782

Method : Paragon File : 111117A Printed : 11/18/2011 12:18:59
SampleId1 : 1111205-2 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:30:28
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE65

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00109	-0.02452	0.00476	3.15523	0.01234	-0.00030	-0.00353	256.55887	-0.00049
#2	-0.00043	-0.02304	0.00561	3.14921	0.01218	-0.00036	-0.00288	256.70054	0.00050
Mean	**-0.00076**	**-0.02378**	**0.00519**	**3.15222**	**0.01226**	**-0.00033**	**-0.00320**	**256.62971**	**0.00001**
%RSD	61.17191	4.37810	11.60777	0.13487	0.90445	13.07841	14.37771	0.03903	9517.46032

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00039	-0.00157	-0.00264	-0.00973	394.32798	0.16638	881.06803	0.01198	0.00435
#2	-0.00077	-0.00134	-0.00277	-0.00960	393.32242	0.16543	880.45735	0.01178	0.00664
Mean	**-0.00058**	**-0.00145**	**-0.00270**	**-0.00967**	**393.82520**	**0.16590**	**880.76269**	**0.01188**	**0.00549**

%RSD	46.81512	11.13377	3.39839	0.97033	0.18055	0.40724	0.04903	1.16327	29.54914

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	443.81398	0.00052	0.07486	-0.00163	-0.00117	495.88330	-0.00286	-0.00847	-0.00367
#2	447.06180	-0.00014	0.08992	-0.00275	-0.00439	496.13105	-0.00157	-0.00006	0.00134
Mean	**445.43789**	**0.00019**	**0.08239**	**-0.00219**	**-0.00278**	**496.00718**	**-0.00222**	**-0.00427**	**-0.00117**
%RSD	0.51557	241.52017	12.91862	36.32771	81.69838	0.03532	40.91192	139.47249	302.90482

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.90266	-0.00389	5.05356	-0.06063	-0.00359	0.00527	-0.03775	0.00296	0.00145
#2	1.89783	-0.00560	5.03633	-0.05643	-0.00328	0.00458	-0.02532	0.00370	0.00023
Mean	**1.90025**	**-0.00475**	**5.04494**	**-0.05853**	**-0.00344**	**0.00493**	**-0.03154**	**0.00333**	**0.00084**
%RSD	0.17996	25.45448	0.24144	5.07612	6.36886	9.89109	27.85904	15.81348	102.08612

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00307	-0.00133	-0.00527
#2	0.00325	-0.00384	0.00087
Mean	**0.00316**	**-0.00258**	**-0.00220**
%RSD	4.05601	68.88725	197.39909

Method : Paragon File : 111117A Printed : 11/18/2011 12:19:00
SampleId1 : 1111185-4 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:34:24
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE66

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00135	0.02879	0.00099	0.00069	0.00377	0.00036	-0.00309	8.08495	-0.00007
#2	-0.00028	0.03328	0.00050	0.00213	0.00361	0.00037	-0.00353	8.05174	0.00028
Mean	**-0.00081**	**0.03104**	**0.00075**	**0.00141**	**0.00369**	**0.00037**	**-0.00331**	**8.06835**	**0.00010**
%RSD	92.83951	10.21972	46.05681	72.12654	3.00681	1.73352	9.24080	0.29102	241.07407

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00086	-0.00157	-0.00300	0.01441	12.80527	-0.00245	1.46330	0.03034	0.00233
#2	-0.00070	-0.00106	-0.00288	0.01375	12.70752	-0.00246	1.39781	0.03025	0.00389
Mean	**-0.00078**	**-0.00132**	**-0.00294**	**0.01408**	**12.75640**	**-0.00246**	**1.43055**	**0.03029**	**0.00311**
%RSD	13.81081	27.14526	2.93943	3.33146	0.54185	0.43171	3.23712	0.22807	35.53845

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.26784	-0.00259	-0.00200	-0.00407	0.00079	32.16046	-0.00287	-0.00863	-0.00046
#2	48.69703	-0.00146	-0.00496	-0.00239	0.00070	31.93458	-0.00132	-0.00629	0.00124
Mean	**48.98243**	**-0.00202**	**-0.00348**	**-0.00323**	**0.00075**	**32.04752**	**-0.00210**	**-0.00746**	**0.00039**
%RSD	0.82402	39.68912	60.06462	36.89097	8.29211	0.49840	52.40261	22.10817	310.08900

ted: 11/18/2011 12:19:04 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.95270	-0.00304	0.01765	-0.00156	-0.00239	0.00007	-0.03155	-0.00118	0.00054
#2	0.94862	-0.00689	0.01717	-0.00564	-0.00258	-0.00039	-0.03421	-0.00113	0.00054
Mean	**0.95066**	**-0.00496**	**0.01741**	**-0.00360**	**-0.00249**	**-0.00016**	**-0.03288**	**-0.00116**	**0.00054**
%RSD	0.30354	54.77988	1.94297	80.19420	5.66007	203.41167	5.72426	2.83718	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00045	-0.00083	-0.00318
#2	0.00003	-0.00033	-0.00127
Mean	**-0.00021**	**-0.00058**	**-0.00222**
%RSD	162.20669	61.56608	60.77786

Method : Paragon File : 111117A Printed : 11/18/2011 12:19:00
SampleId1 : 1111185-5 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/17/2011 17:36:15
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE67

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00055	0.02096	-0.00047	0.00096	0.00361	0.00037	-0.00158	8.10079	0.00005
#2	-0.00001	0.02367	-0.00229	0.00123	0.00366	0.00034	-0.00482	8.04961	0.00043
Mean	**-0.00028**	**0.02232**	**-0.00138**	**0.00110**	**0.00363**	**0.00035**	**-0.00320**	**8.07520**	**0.00024**
%RSD	134.87842	8.60234	93.37768	17.40797	1.01668	4.56134	71.59963	0.44816	113.92281

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00101	-0.00151	-0.00289	-0.00416	12.57293	-0.00254	1.25891	0.03132	0.00425
#2	-0.00048	-0.00177	-0.00324	-0.00456	12.51275	-0.00259	1.19184	0.03103	0.00324
Mean	**-0.00074**	**-0.00164**	**-0.00306**	**-0.00436**	**12.54284**	**-0.00257**	**1.22537**	**0.03117**	**0.00375**
%RSD	50.74279	11.47862	8.22290	6.45343	0.33928	1.37602	3.87034	0.66490	19.05258

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	47.81576	-0.00160	-0.01598	-0.00171	-0.00141	31.96521	-0.00328	-0.00302	0.00775
#2	47.39551	-0.00080	-0.01329	-0.00510	-0.00022	31.88480	0.00107	-0.00489	0.00294
Mean	**47.60564**	**-0.00120**	**-0.01463**	**-0.00341**	**-0.00081**	**31.92500**	**-0.00110**	**-0.00395**	**0.00534**
%RSD	0.62422	47.52925	12.98620	70.43346	103.83503	0.17809	278.59846	33.48917	63.63448

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.94657	-0.00261	0.01657	-0.00455	-0.00234	-0.00237	-0.02533	-0.00025	0.00114
#2	0.94599	-0.00731	0.01613	-0.00427	-0.00239	0.00575	-0.03065	-0.00081	0.00175
Mean	**0.94628**	**-0.00496**	**0.01635**	**-0.00441**	**-0.00236**	**0.00169**	**-0.02799**	**-0.00053**	**0.00145**
%RSD	0.04338	66.95456	1.93978	4.46566	1.32249	339.83264	13.45175	74.24152	29.64420

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	-0.00010	-0.00151	0.00416
#2	-0.00044	-0.00184	0.00033
Mean	**-0.00027**	**-0.00168**	**0.00225**
%RSD	89.18015	14.06436	120.49261

Method : Paragon File : 111117A Printed : 11/18/2011 12:19:00
SampleId1 : CRI **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/17/2011 17:38:06
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD3

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.02062	0.46881	0.00586	0.41144	0.40792	0.01209	0.04724	5.23792	0.01312
#2	0.02081	0.46615	0.01304	0.40973	0.40944	0.01216	0.05200	5.25310	0.01277
Mean	**0.02072**	**0.46748**	**0.00945**	**0.41058**	**0.40868**	**0.01212**	**0.04962**	**5.24551**	**0.01295**
%RSD	0.65078	0.40250	53.73250	0.29455	0.26293	0.39466	6.77210	0.20469	1.93246

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10259	0.02043	0.04909	0.19967	3.85243	0.01517	5.18835	0.03113	0.01987
#2	0.10282	0.02056	0.04908	0.19980	3.85535	0.01521	5.21848	0.03103	0.01812
Mean	**0.10270**	**0.02050**	**0.04908**	**0.19973**	**3.85389**	**0.01519**	**5.20341**	**0.03108**	**0.01899**
%RSD	0.15892	0.45068	0.00794	0.04700	0.05354	0.16276	0.40956	0.22233	6.49594

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.30201	0.08165	0.18186	0.00599	0.00761	0.21174	0.11268	0.00382	0.01380
#2	4.35823	0.08308	0.19745	0.00421	0.00586	0.21562	0.11351	-0.00505	0.01119
Mean	**4.33012**	**0.08236**	**0.18965**	**0.00510**	**0.00674**	**0.21368**	**0.11310**	**-0.00062**	**0.01249**
%RSD	0.91802	1.22626	5.81418	24.69703	18.33305	1.28623	0.51700	1016.20326	14.74191

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09521	0.10160	0.01964	0.00827	0.01861	0.01923	0.17776	0.10395	0.04699
#2	0.09768	0.10032	0.01977	0.00696	0.01846	0.02225	0.18486	0.10483	0.04699
Mean	**0.09645**	**0.10096**	**0.01971**	**0.00761**	**0.01853**	**0.02074**	**0.18131**	**0.10439**	**0.04699**
%RSD	1.80676	0.89743	0.48283	12.17366	0.59026	10.29324	2.76868	0.59898	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	0.04981	0.00707	0.01047
#2	0.05104	0.00531	0.00578
Mean	**0.05042**	**0.00619**	**0.00813**
%RSD	1.72259	20.07859	40.79329

Method : Paragon File : 111117A Printed : 11/18/2011 12:19:00

SampleId1 : ICSA **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/17/2011 17:40:02
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD4

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00087	264.66674	-0.00765	-0.00282	-0.00083	0.00094	0.00015	264.71166	0.00092
#2	-0.00094	263.79802	-0.00023	-0.00381	-0.00094	0.00091	0.00879	263.71507	0.00098
Mean	**-0.00090**	**264.23238**	**-0.00394**	**-0.00332**	**-0.00089**	**0.00093**	**0.00447**	**264.21337**	**0.00095**
%RSD	5.57946	0.23248	133.29760	21.12829	8.34416	2.58949	136.68456	0.26671	4.30792

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00005	-0.00216	-0.00652	107.21520	-0.32375	-0.00269	268.56863	0.00191	-0.00328
#2	0.00027	-0.00176	-0.00676	106.82364	-0.32046	-0.00272	267.72336	0.00201	-0.00337
Mean	**0.00016**	**-0.00196**	**-0.00664**	**107.01942**	**-0.32211**	**-0.00271**	**268.14599**	**0.00196**	**-0.00332**
%RSD	100.42680	14.34523	2.63406	0.25871	0.72068	0.65306	0.22290	3.52201	1.95467

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.14734	-0.00017	-0.00496	-0.00103	0.00067	0.04460	0.00144	-0.02353	0.00572
#2	0.14674	-0.00014	0.00176	-0.00755	0.00088	0.05237	-0.00109	-0.01617	0.00654
Mean	**0.14704**	**-0.00015**	**-0.00160**	**-0.00429**	**0.00077**	**0.04848**	**0.00017**	**-0.01985**	**0.00613**
%RSD	0.28704	16.71617	297.12419	107.40872	18.71736	11.33851	1029.13262	26.24566	9.47745

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02812	-0.00048	-0.00189	-0.04942	-0.00063	0.00897	0.00994	-0.00498	-0.00128
#2	-0.03047	-0.00262	-0.00184	-0.04760	-0.00068	0.00672	0.01908	-0.00534	-0.00584
Mean	**-0.02929**	**-0.00155**	**-0.00187**	**-0.04851**	**-0.00066**	**0.00785**	**0.01451**	**-0.00516**	**-0.00356**
%RSD	5.67238	97.61928	1.69949	2.65063	5.95487	20.23707	44.55200	4.86920	90.42760

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00590	0.00010	-0.00402
#2	0.00542	-0.00193	-0.00102
Mean	**0.00566**	**-0.00091**	**-0.00252**
%RSD	6.08775	157.57580	84.25583

Method : Paragon File : 111117A Printed : 11/18/2011 12:19:00
SampleId1 : ICSAB **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/17/2011 17:41:59
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD5

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	0.20472	211.12007	0.10268	1.00246	0.49818	0.47144	0.52340	264.45569	1.03807
#2	0.20517	210.95554	0.09453	1.00147	0.49803	0.47076	0.53181	263.97548	1.03400
Mean	**0.20494**	**211.03780**	**0.09861**	**1.00196**	**0.49811**	**0.47110**	**0.52760**	**264.21559**	**1.03604**
%RSD	0.15417	0.05513	5.84298	0.06983	0.02233	0.10235	1.12695	0.12852	0.27775

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48046	0.47596	0.51987	107.50343	-0.30296	1.10348	268.52081	0.48021	0.97877
#2	0.47992	0.47417	0.52009	107.34832	-0.30697	1.10243	268.42461	0.48040	0.98677
Mean	**0.48019**	**0.47507**	**0.51998**	**107.42587**	**-0.30496**	**1.10296**	**268.47271**	**0.48030**	**0.98277**
%RSD	0.07831	0.26711	0.03001	0.10210	0.93035	0.06697	0.02534	0.02886	0.57571

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19435	0.94587	0.97984	0.04478	0.05217	1.10164	0.55698	0.03447	0.05692
#2	0.19890	0.94861	0.97930	0.04532	0.05292	1.10164	0.54864	0.03996	0.05889
Mean	**0.19662**	**0.94724**	**0.97957**	**0.04505**	**0.05255**	**1.10164**	**0.55281**	**0.03722**	**0.05791**
%RSD	1.63709	0.20484	0.03889	0.84035	1.01150	0.00000	1.06777	10.41688	2.40805

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.93056	1.00297	1.04479	0.00265	0.92339	0.10249	9.84097	0.48312	0.89821
#2	0.93626	0.99529	1.04351	-0.00752	0.92286	0.10371	9.86582	0.48230	0.89578
Mean	**0.93341**	**0.99913**	**1.04415**	**-0.00244**	**0.92312**	**0.10310**	**9.85340**	**0.48271**	**0.89699**
%RSD	0.43137	0.54338	0.08696	295.00289	0.04062	0.84057	0.17831	0.12025	0.19168

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.48640	0.04971	0.04945
#2	0.48729	0.05039	0.05259
Mean	**0.48685**	**0.05005**	**0.05102**
%RSD	0.12995	0.96020	4.35350

Method : Paragon File : 111117A Printed : 11/18/2011 12:19:01
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/17/2011 17:43:55
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.21355	50.62005	0.49768	0.98537	0.98197	0.47661	0.50420	49.31957	0.51242
#2	0.21400	50.70091	0.49465	0.99121	0.98376	0.47712	0.51413	49.42870	0.51247
Mean	**0.21377**	**50.66048**	**0.49617**	**0.98829**	**0.98286**	**0.47686**	**0.50917**	**49.37414**	**0.51245**
%RSD	0.15153	0.11287	0.43251	0.41835	0.12867	0.07527	1.37825	0.15629	0.00588

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49037	0.98822	0.99467	20.10532	50.76946	0.52579	50.00034	0.96537	0.98024

#2	0.49212	0.99262	0.99694	20.14082	50.85334	0.52699	50.13324	0.96645	0.98337
Mean	**0.49124**	**0.99042**	**0.99580**	**20.12307**	**50.81140**	**0.52639**	**50.06679**	**0.96591**	**0.98180**
%RSD	0.25169	0.31393	0.16112	0.12476	0.11672	0.16164	0.18769	0.07918	0.22521

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.10534	0.94536	4.84635	0.97156	0.97846	5.16172	0.46230	1.03249	1.00625
#2	48.20124	0.94587	4.91082	0.97592	0.97978	5.17335	0.46579	1.02725	1.00686
Mean	**48.15329**	**0.94561**	**4.87858**	**0.97374**	**0.97912**	**5.16753**	**0.46404**	**1.02987**	**1.00655**
%RSD	0.14082	0.03830	0.93446	0.31685	0.09577	0.15919	0.53257	0.35960	0.04297

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.90520	0.98984	0.51715	0.30687	0.47618	0.49345	4.82721	0.48819	0.94624
#2	4.91370	0.98471	0.51781	0.30815	0.47820	0.50030	4.83870	0.49024	0.95049
Mean	**4.90945**	**0.98727**	**0.51748**	**0.30751**	**0.47719**	**0.49688**	**4.83296**	**0.48921**	**0.94836**
%RSD	0.12245	0.36681	0.09035	0.29311	0.29961	0.97479	0.16809	0.29684	0.31730

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.97137	0.97616	1.01499
#2	0.97176	0.97850	1.01365
Mean	**0.97156**	**0.97733**	**1.01432**
%RSD	0.02841	0.16912	0.09314

Method : Paragon File : 111117A Printed : 11/18/2011 12:19:01
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/17/2011 17:46:03
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00141	0.00524	-0.00169	-0.00030	-0.00078	0.00011	0.00036	-0.04510	0.00027
#2	-0.00109	0.00484	0.00306	-0.00120	-0.00078	0.00011	-0.00698	-0.04420	0.00035
Mean	**-0.00125**	**0.00504**	**0.00069**	**-0.00075**	**-0.00078**	**0.00011**	**-0.00331**	**-0.04465**	**0.00031**
%RSD	18.43387	5.62818	488.86454	85.04919	0.00000	1.21598	156.87606	1.43447	17.38837

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00178	-0.00153	-0.00227	-0.00549	-0.26940	-0.00295	-0.04160	-0.00073	-0.00282
#2	-0.00094	-0.00070	-0.00216	-0.00602	-0.27961	-0.00297	-0.03209	-0.00073	-0.00208
Mean	**-0.00136**	**-0.00111**	**-0.00222**	**-0.00575**	**-0.27450**	**-0.00296**	**-0.03684**	**-0.00073**	**-0.00245**
%RSD	43.58337	53.10709	3.67687	6.52140	2.63094	0.47707	18.23684	0.00000	21.20646

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.13764	-0.00296	-0.01705	-0.00679	0.00230	-0.03704	0.00228	-0.00707	0.00294
#2	0.13719	-0.00252	-0.00684	-0.00600	-0.00402	-0.01371	-0.00194	-0.00660	0.00664

Mean	**0.13742**	**-0.00274**	**-0.01195**	**-0.00640**	**-0.00086**	**-0.02537**	**0.00017**	**-0.00684**	**0.00479**
%RSD	0.23035	11.35459	60.44983	8.79142	520.25319	64.99692	1726.64168	4.88168	54.69014

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02337	0.00123	-0.00331	-0.00610	-0.00220	0.00875	-0.03775	-0.00128	-0.00250
#2	-0.02425	-0.00560	-0.00326	-0.01048	-0.00214	-0.00017	-0.03154	-0.00114	-0.00280
Mean	**-0.02381**	**-0.00219**	**-0.00329**	**-0.00829**	**-0.00217**	**0.00429**	**-0.03464**	**-0.00121**	**-0.00265**
%RSD	2.62013	221.07911	0.96501	37.35003	1.80043	147.18919	12.68039	8.17283	8.10030

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00040	-0.00073	-0.00039
#2	0.00129	-0.00468	0.00223
Mean	**0.00085**	**-0.00270**	**0.00092**
%RSD	75.25718	103.35227	202.11066

Method : Paragon File : 111117A Printed : 11/18/2011 12:19:01
SampleId1 : Pb/Ba 1 11/16/11 10X SampleId2 : [SAMPLE]
Analysis commenced : 11/17/2011 17:49:48
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE94

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00103	0.04946	0.00744	0.22545	0.02572	-0.00060	-0.00137	0.07054	-0.00062
#2	-0.00017	0.04908	0.00196	0.22365	0.02572	-0.00057	-0.00050	0.06843	-0.00021
Mean	**-0.00060**	**0.04927**	**0.00470**	**0.22455**	**0.02572**	**-0.00058**	**-0.00093**	**0.06948**	**-0.00041**
%RSD	101.36017	0.54389	82.34634	0.56705	0.00000	2.56694	65.67080	2.15101	69.65716

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00047	-0.00016	-0.00396	0.01321	0.55972	-0.00259	-0.05163	-0.00024	0.00205
#2	0.00077	0.00004	-0.00373	0.01242	0.55169	-0.00262	-0.04846	-0.00014	0.00260
Mean	**0.00062**	**-0.00006**	**-0.00385**	**0.01282**	**0.55571**	**-0.00261**	**-0.05004**	**-0.00019**	**0.00233**
%RSD	34.84702	227.31029	4.31389	4.39078	1.02112	0.94936	4.47570	36.77012	16.75287

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	520.56566	-0.00083	0.02998	0.00126	-0.00356	986.33380	-0.00120	0.01207	0.00485
#2	522.84304	-0.00153	0.03079	0.00138	-0.00086	985.91800	-0.00289	0.00586	0.00925
Mean	**521.70435**	**-0.00118**	**0.03038**	**0.00132**	**-0.00221**	**986.12590**	**-0.00205**	**0.00896**	**0.00705**
%RSD	0.30867	41.68478	1.87651	6.50858	86.12904	0.02981	58.18805	49.04463	44.20967

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.65710	0.02216	-0.00262	-0.01101	-0.00121	0.00482	-0.02711	-0.00104	0.00175
#2	1.64846	0.01661	-0.00259	-0.00940	-0.00121	0.00378	-0.02001	-0.00062	-0.00037
Mean	**1.65278**	**0.01939**	**-0.00261**	**-0.01020**	**-0.00121**	**0.00430**	**-0.02356**	**-0.00083**	**0.00069**

%RSD	0.36945	20.25624	0.81126	11.10842	0.00000	17.09467	21.30698	35.62067	217.99000

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00397	-0.00195	0.00725
#2	0.00383	-0.00012	0.00812
Mean	**0.00390**	**-0.00103**	**0.00769**
%RSD	2.67015	125.53062	7.99512

Method : Paragon File : 111117A Printed : 11/18/2011 12:19:01
SampleId1 : Pb/Ba 2 11/16/11 10X SampleId2 : [SAMPLE]
Analysis commenced : 11/17/2011 17:51:39
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE95

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00069	0.03632	0.00780	0.11344	0.07235	-0.00071	0.00079	0.20613	-0.00021
#2	-0.00036	0.04305	-0.00290	0.11200	0.07308	-0.00071	-0.00267	0.20643	0.00024
Mean	**-0.00053**	**0.03968**	**0.00245**	**0.11272**	**0.07271**	**-0.00071**	**-0.00094**	**0.20628**	**0.00002**
%RSD	45.24380	11.99380	308.95291	0.90382	0.71183	0.02942	261.29931	0.10352	2052.84820

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00129	0.00256	-0.00408	0.22370	1.02917	-0.00260	-0.04001	0.00084	-0.00245
#2	0.00084	0.00209	-0.00468	0.22396	1.03756	-0.00262	-0.04318	0.00074	-0.00328
Mean	**0.00106**	**0.00233**	**-0.00438**	**0.22383**	**1.03337**	**-0.00261**	**-0.04160**	**0.00079**	**-0.00286**
%RSD	30.27379	14.21796	9.63445	0.08389	0.57408	0.40609	5.38458	8.75465	20.41356

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	479.34557	-0.00028	0.05524	0.01128	0.00641	997.86322	-0.00141	0.00053	0.00288
#2	478.59738	0.00071	0.03965	0.01067	0.01108	997.45356	-0.00071	0.00069	0.00329
Mean	**478.97148**	**0.00021**	**0.04745**	**0.01097**	**0.00874**	**997.65839**	**-0.00106**	**0.00061**	**0.00309**
%RSD	0.11046	330.88650	23.23110	3.89339	37.77573	0.02904	46.68782	17.62061	9.18604

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.16545	0.03754	-0.00153	-0.01073	-0.00106	0.00549	-0.02814	-0.00063	0.00995
#2	1.17335	0.02686	-0.00154	-0.01442	-0.00114	0.00630	-0.03258	-0.00091	0.01025
Mean	**1.16940**	**0.03220**	**-0.00154**	**-0.01258**	**-0.00110**	**0.00589**	**-0.03036**	**-0.00077**	**0.01010**
%RSD	0.47743	23.45078	0.68771	20.74337	4.98102	9.71035	10.33427	25.73830	2.12533

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00233	0.00803	0.00210
#2	0.00255	0.01094	0.00242
Mean	**0.00244**	**0.00949**	**0.00226**
%RSD	6.34599	21.72446	9.94372

ted: 11/18/2011 12:19:04 **User: MIKE LUNDGREEN**
Method : Paragon File : 111117A Printed : 11/18/2011 12:19:01
SampleId1 : Pb/Ba 3 11/16/11 10X SampleId2 : **[SAMPLE]**
Analysis commenced : 11/17/2011 17:53:30
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE96

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00029	0.06000	-0.00035	0.10200	0.14478	-0.00041	-0.00785	0.12489	0.00013
#2	-0.00043	0.05573	0.00209	0.10497	0.14305	-0.00042	-0.00288	0.12610	-0.00006
Mean	**-0.00036**	**0.05787**	**0.00087**	**0.10349**	**0.14392**	**-0.00042**	**-0.00536**	**0.12550**	**0.00004**
%RSD	28.26097	5.22453	198.03731	2.03041	0.84815	0.99919	65.57874	0.68058	364.69399

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00162	-0.00029	-0.00396	0.03112	1.23344	-0.00229	-0.03843	0.00035	0.01041
#2	0.00101	0.00142	-0.00312	0.03139	1.23344	-0.00231	-0.04054	0.00045	0.01096
Mean	**0.00132**	**0.00056**	**-0.00354**	**0.03126**	**1.23344**	**-0.00230**	**-0.03948**	**0.00040**	**0.01068**
%RSD	32.85616	214.00296	16.62586	0.60023	0.00000	0.76796	3.78170	17.34402	3.64726

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	497.51699	-0.00167	0.04369	-0.00183	-0.00157	986.40681	-0.00268	0.02451	0.00765
#2	497.07812	-0.00087	0.04342	0.00519	-0.00122	986.22803	0.00124	0.01830	0.01487
Mean	**497.29756**	**-0.00127**	**0.04355**	**0.00168**	**-0.00140**	**986.31742**	**-0.00072**	**0.02140**	**0.01126**
%RSD	0.06240	44.79218	0.43637	295.08624	18.05065	0.01282	386.86032	20.53134	45.29143

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.97612	0.03156	-0.00320	-0.01149	-0.00147	0.00343	-0.03689	-0.00080	0.00266
#2	0.97582	0.02985	-0.00319	-0.01256	-0.00130	0.00228	-0.02624	-0.00034	0.00266
Mean	**0.97597**	**0.03071**	**-0.00320**	**-0.01202**	**-0.00139**	**0.00286**	**-0.03156**	**-0.00057**	**0.00266**
%RSD	0.02219	3.93526	0.33070	6.25924	8.46010	28.56329	23.85787	57.57627	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00212	-0.00166	0.01327
#2	0.00257	0.00092	0.01601
Mean	**0.00235**	**-0.00037**	**0.01464**
%RSD	13.72037	490.93336	13.24268

HEADER INFORMATION FOR ANALYTICAL SEQUENCE 111118A
Analyst: Michael Lundgreen

STANDARD SOLUTION CODES

Stock A (ST110701-1) Exp.6-30-2012

Element	ug/ml
Al, Ca, Mg	1000
K	500
Na	300
Fe	400
Li	20

Standard	Dilution	Procedure
A1	1/2 of Stock A	5ml of Stock A to 10ml final volume.
A2	1/2.5 of Stock A	2ml of Stock A to a 5ml final volume.
A3	1/5 of Stock A	1ml of Stock A to a 5ml final volume.
A4	1/10 of A1	1ml of Standard A1 up to a 10ml final volume.
A5	1/10 of A4	1ml of Standard A4 up to a 10ml final volume.

Stock B (ST100625-8) Exp. 2-28-15

Element	ug/ml
P, Si	100
B, Ba, Cr, Cu, Mn, Mo, Ni, Pb, Sn, Sr, Ti ,Zn	20
As, Cd, Co, Se, Tl, V	10
Sb	4
Be	2

Stock Ag- 1000 ug/ml (ST100407-4) Exp. 2-28-15
Stock Th – 1000 ug/ml (ST100407-5) Exp. 2-28-15

The following dilutions of Stock Ag and Stock Th are made to provide the daily calibration Standards.

Standard	Dilution	Procedure
B1	1/2 of Stock B 1/500 Ag and 1/500 Th	5ml of Stock B, 0.02ml of Stock Ag and 0.02ml of Stock Th up to a 10ml final volume.
B2	1/10 of B1	1.0ml of Standard B1 up to a 10ml final volume.
B3	1/10 of B2	1.0ml of Standard B2 up to a 10ml final volume.

Stock C (ST100625-9) Exp. 6-30-15

Element	ug/ml
S, U	100
Bi, Zr	10

Standard	Dilution	Procedure
C1	1/2 of Stock C	5ml of Stock C up to a 10ml final volume.
C2	1/10 of C1	1.0ml of Standard C1 up to a 10ml final volume.
C3	1/10 of C2	1.0ml of Standard C2 up to a 10ml final volume.

RL STD (Reporting Limit Standard) Intermediate.
(ST100301-54) Exp. 2-28-15

Element	ug/ml
K, Na	500
Ca, Mg	200
Al, U	100
B, Fe, P, S, Si	50
Li, Mo, Sn, Sr, Ti	10
Sb	8
Ni, As, Bi, Se, Tl, Zn, Zr	5
Pb	3
Ag, Ba, Co, Cr, Cu, Mn, V, Th	2
Be, Cd	1

RL STD (working standard) made daily by diluting the intermediate above 1000 fold. This working standard has concentration levels at the normal ALS-FC reporting limits for all elements except Ca, Mg and Na, K which are at 0.2ppm and 0.5ppm; this is below the normal ALS-FC reporting limit.

RL2 (working standard) made daily by diluting the intermediate above 333 fold.

Blank Solution

Double D.I. water, 3% HNO_3 and 5%HCl
Used for Std. Blank, ICB and CCB

CCV (ST110818-5) Exp. 6-20-12

Element	ug/ml
Al, Ca, Mg, K, Na	50
Fe	20
U, P, S, Si	5
B, Ba, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn, Zn, Zr	1
As, Be, Bi, Cd, Co, Li, Sb, Sr, Ti, Tl, V	0.5
Ag, Th	0.2

ICV (ST110815-5) Exp. 6-20-12
Prepared daily by diluting the CCV (described above) ½.
The 1/2 dilution is made by diluting 5ml of the CCV to a 10ml final volume.
The resulting concentrations are:

Element	ug/ml
Al, Ca, Mg, K, Na	25
Fe	10
U, P, S, Si	2.5
B, Ba, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn, Zn, Zr	0.5
As, Be, Bi, Cd, Co, Li, Sb, Sr, Ti, Tl, V	0.25
Ag, Th	0.1

CRI (ST110105-13) Exp. 6-20-12
Made By diluting
1.0ml of CRI Stock (ST110105-4) Exp. 6-20-12
to a 100ml final volume.

Element	ug/ml
Ca, Mg, K, Na	5.0
Al, B, Ba	0.4
Fe, U, P, S	0.2
Sb	0.12
Co, Si,, Sn, V, Th	0.1
Ni	0.08
Cu, Bi, Zr	0.05
Zn	0.04
Mn	0.03
Ag, Cr, Li, Mo, Sr, Ti, Tl	0.02
Be, Cd, As, Se,	0.01
Pb	0.006

ICSA (ST110105-7) Exp. 6-20-12

Element	ug/ml
Ca, Mg, Al	250
Fe	100

ICSAB (ST110105-8) Exp. 6-20-12

Element	ug/ml
Ca, Mg, Al	250
Fe	100
U	10

Sb	0.6
Ba, Be, Co, V, Cr, Cu, Mn, Bi, Zr	0.5
Ag	0.2
As, Tl	0.1
Se, Pb, Th	0.05

Pipette ID Numbers

1.0ml to 5.0ml --- M-55
0.1ml to 1.0ml --- M-61
0.01ml to 0.1ml --- M-57

Acid Lot Numbers

HCl – J35042
HNO_3 – J41037

Inter Element Correction Information

The following table summarizes spectral interferences that have been identified and for which IEC's are used. If a sample contains a concentration of an interfering element that exceeds the upper analytical range, and an affected element is being determined, it is necessary to dilute the sample to bring the interfering element into analytical range.

Interfering Element (ug/ml)	Affected Element
Al (500)	Pb
Mg (500)	Th
Fe (200)	Se, Tl, V, Pb, U
Si (50)	Zr
U (50)	Al, Cr, Cu, Bi, Pb, Mg, Se, Ag, Tl, Si
Ba (10)	Co
Cr (10)	Sb
Cu (10)	Bi
Mn (10)	Tl
Mo (10)	Al, Si, Pb,, Sb
Ti (10)	Co, Bi, Si, Sn, Tl, Pb, Zr
As (5)	Cd
V (5)	Al, Be, Tl
Zr (5)	Ag

The following table lists element concentrations (ug/ml) that no significant spectral interferences have been observed.

Element	Concentration	Element	Concentration	Element	Concentration
K	500	Se	10		
Na	500	Pb	10	Li	5
Ca	500	Zn	10	Cd	5
P	50	Sr	10	Co	5
S	50	Sn	10	Ag	2
Ni	10	Bi	5	Sb	2
B	10	Tl	5	Be	1

2X – Dilution made by diluting 2.5ml of sample up to a 5ml final volume.
3X - Dilution made by diluting 2.0ml of sample up to a 6ml final volume.
4X - Dilution made by diluting 2.0ml of sample up to a 8ml final volume.
5X - Dilution made by diluting 1.0ml of sample to a 5ml final volume.
10X - Dilution made by diluting 0.5ml of sample to a 5ml final volume.
20X – Dilution made by diluting 0.25ml of sample to a 5ml final volume.
25X – Dilution made by diluting 0.2ml of sample to a 5ml final volume.

100X – Dilution made by diluting 0.05ml of sample to a 5ml final volume.
500X – Dilution made by diluting 0.02ml of sample to a 10ml final volume.
1000X – Dilution made by diluting a 10X dilution 100X.

Analytical Spikes

1111160-2 was post spiked for B, Ba, K, Li, Sb, Si, Ti, Zn and Zr by spiking 0.1mL ST110916-7, 0.1mL ST111116-1 and 0.1mL ST110301-2 onto 4.7mL sample, 5.0mL final volume.

1111162-1 was post spiked for Sb and Mn by spiking 0.1mL ST110916-7 onto 4.9mL sample, 5.0mL final volume.

1111106-22 was post spiked for K by spiking 0.1mL ST111116-1 onto 4.9mL sample. 5.0mL final volume.

1111238-3 was post spiked at a five fold dilution for Ca, Mg and K by spiking 0.1mL ST111116-1onto 1.0mL sample and 3.9mL millq water, 5.0mL final volume.

1111238-3 was also post spiked at a 25X dilution for Na by spiking 0.1mL ST111116-1 onto 0.2mL sample and 4.7mL millq water, 5.0mL final volume.

Comments

1. Please see run log and work orders for elements of interest.

Daily Maintenance

1. Check/ Change Peristaltic pump tubing.
2. Check the torch for deposits, clean if necessary.
3. Check/ Empty drain water.

Daily Maintenance done by _____MTL_____.

Monthly Maintenance

1. Check/Clean nebulizer and spray chamber.
2. Clean air filters
3. Check/Clean entrance slit.
4. Fill water recirculating reservoir.

Monthly maintenance done by: MTL 11-01-2011.

Major problems / adjustments / repairs recorded in the ICP Maintenance Log (3716).

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Inst Sample Name	Lab ID	DF	Date Analyzed	Time Analyzed
	MIXBHIGH	MIXBHIGH	1	11/18/2011	14:08
	MIXAHIGH	MIXAHIGH	1	11/18/2011	14:10
	MIXCHIGH	MIXCHIGH	1	11/18/2011	14:12
	ICV	ICV	1	11/18/2011	14:47
	ICB	ICB	1	11/18/2011	14:49
	CRI	CRI1	1	11/18/2011	14:51
	ICSA	ICSA1	1	11/18/2011	14:53
	ICSAB	ICSAB1	1	11/18/2011	14:55
	CCV	CCV1	1	11/18/2011	15:00
	CCB	CCB1	1	11/18/2011	15:02
	F111115-1LCS	F111115-1LCS	1	11/18/2011	15:04
- Na	1111179-1	1111179-1	1	11/18/2011	15:06
	1111184-1	1111184-1	1	11/18/2011	15:08
	IP111116-5MB	IP111116-5MB	1	11/18/2011	15:10
	IP111116-5LCS	IP111116-5LCS	1	11/18/2011	15:11
	1111037-3	1111037-3	1	11/18/2011	15:13
	1111037-3D	1111037-3DUP	1	11/18/2011	15:15
	1111037-3L 5X	1111037-3SER	5	11/18/2011	15:17
	1111037-3MS	1111037-3MS	1	11/18/2011	15:19
	1111037-3MSD	1111037-3MSD	1	11/18/2011	15:20
	CCV	CCV2	1	11/18/2011	15:23
	CCB	CCB2	1	11/18/2011	15:25
- Ca,Na,Sr	1111040-1 10X	1111040-1	10	11/18/2011	15:27
- Ca,Na,Sr	1111040-3 10X	1111040-3	10	11/18/2011	15:29
- Ba,Ca,Co,Na,Sr	1111040-4 10X	1111040-4	10	11/18/2011	15:31
- Ba,Ca,Co,Na,Sr	1111040-5 10X	1111040-5	10	11/18/2011	15:33
- Ca,Na,Sr	1111040-7 10X	1111040-7	10	11/18/2011	15:35
- Ba,Ca,Co,Na,Sr	1111051-1 10X	1111051-1	10	11/18/2011	15:37
- Ba,Ca,Co,Na,Sr	1111051-2 10X	1111051-2	10	11/18/2011	15:38
	1111059-9	1111059-9	1	11/18/2011	15:42
	1111059-10	1111059-10	1	11/18/2011	15:44
	1111078-2	1111078-2	1	11/18/2011	15:46
	CCV	CCV3	1	11/18/2011	15:48
	CCB	CCB3	1	11/18/2011	15:50
	1111078-8	1111078-8	1	11/18/2011	15:52

Data Package ID:

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Inst Sample Name	Lab ID	DF	Date Analyzed	Time Analyzed
	1111078-14	1111078-14	1	11/18/2011	15:54
	1111078-19	1111078-19	1	11/18/2011	15:56
	1111078-35	1111078-35	1	11/18/2011	15:58
	IP111117-1MB	IP111117-1MB	1	11/18/2011	15:59
	IP111117-1RVS	IP111117-1	1	11/18/2011	16:01
	ZZZ	ZZZ	1	11/18/2011	16:03
- Bi,Cu,Fe,Mn,Pb,Se,Tl,U,V,Zn	1110384-1	1110384-1	1	11/18/2011	16:05
- Bi,Cu,Fe,Pb,Se,Tl,U,V,Zn	1110384-2	1110384-2	1	11/18/2011	16:07
	1110384-3	1110384-3	1	11/18/2011	16:16
	CCV	CCV4	1	11/18/2011	16:17
	CCB	CCB4	1	11/18/2011	16:19
	1110384-4	1110384-4	1	11/18/2011	16:21
- Pb	1110384-5	1110384-5	1	11/18/2011	16:23
- Pb	1110384-6	1110384-6	1	11/18/2011	16:25
	1111160-2	1111160-2	1	11/18/2011	16:31
	1111160-2D	1111160-2DUP	1	11/18/2011	16:33
	1111160-2L 5X	1111160-2SER	5	11/18/2011	16:34
	1111160-2MS	1111160-2MS	1	11/18/2011	16:36
	1111160-2MSD	1111160-2MSD	1	11/18/2011	16:38
- Fe,Pb,Se,Tl,U,V	1111160-3	1111160-3	1	11/18/2011	16:40
- Fe,Pb,Se,Tl,U,V	1111160-4	1111160-4	1	11/18/2011	16:42
	CCV	CCV5	1	11/18/2011	16:44
	CCB	CCB5	1	11/18/2011	16:46
- Fe,Pb,Se,Tl,U,V	1111160-5	1111160-5	1	11/18/2011	16:48
	1111160-6	1111160-6	1	11/18/2011	16:50
	1111160-7	1111160-7	1	11/18/2011	16:52
	1111160-8	1111160-8	1	11/18/2011	16:54
	1111160-9	1111160-9	1	11/18/2011	16:55
	1111160-10	1111160-10	1	11/18/2011	16:57
	1111160-11	1111160-11	1	11/18/2011	16:59
	1111160-12	1111160-12	1	11/18/2011	17:01
	1111160-13	1111160-13	1	11/18/2011	17:03
- S	1111160-14	1111160-14	1	11/18/2011	17:04
	CCV	CCV6	1	11/18/2011	17:07
	CCB	CCB6	1	11/18/2011	17:09

Data Package ID:

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Inst Sample Name	Lab ID	DF	Date Analyzed	Time Analyzed
	1111160-15	1111160-15	1	11/18/2011	17:11
+ Ca,Sr	1111040-1 100X	1111040-1	100	11/18/2011	17:13
+ Ca,Sr	1111040-3 100X	1111040-3	100	11/18/2011	17:15
+ Ba,Ca,Co	1111040-4 100X	1111040-4	100	11/18/2011	17:16
+ Ba,Ca,Co	1111040-5 100X	1111040-5	100	11/18/2011	17:18
+ Ca,Sr	1111040-7 100X	1111040-7	100	11/18/2011	17:20
+ Ba,Ca,Co	1111051-1 100X	1111051-1	100	11/18/2011	17:22
+ Ba,Ca,Co	1111051-2 100X	1111051-2	100	11/18/2011	17:24
	CCV	CCV7	1	11/18/2011	17:26
	CCB	CCB7	1	11/18/2011	17:28
	IP111117-1LCS	IP111117-1LCS	1	11/18/2011	17:49
+ Bi,Cu,Fe,Mn,Pb,Se,Tl,U,V,Zn	1110384-1 10X	1110384-1	10	11/18/2011	17:51
+ Bi,Cu,Fe,Pb,Se,Tl,U,V,Zn	1110384-2 10X	1110384-2	10	11/18/2011	17:53
+ Pb	1110384-5 10X	1110384-5	10	11/18/2011	17:55
+ Pb	1110384-6 10X	1110384-6	10	11/18/2011	17:56
+ Fe,Pb,Se,Tl,U,V	1111160-3 5X	1111160-3	5	11/18/2011	17:58
+ Fe,Pb,Se,Tl,U,V	1111160-4 5X	1111160-4	5	11/18/2011	18:00
+ Fe,Pb,Se,Tl,U,V	1111160-5 5X	1111160-5	5	11/18/2011	18:02
+ Na	1111040-1 1000X	1111040-1	1000	11/18/2011	18:04
+ Na	1111040-3 1000X	1111040-3	1000	11/18/2011	18:06
	CCV	CCV8	1	11/18/2011	18:08
	CCB	CCB8	1	11/18/2011	18:10
+ Na,Sr	1111040-4 1000X	1111040-4	1000	11/18/2011	18:12
+ Na,Sr	1111040-5 1000X	1111040-5	1000	11/18/2011	18:14
+ Na	1111040-7 1000X	1111040-7	1000	11/18/2011	18:16
+ Na,Sr	1111051-1 1000X	1111051-1	1000	11/18/2011	18:17
+ Na,Sr	1111051-2 1000X	1111051-2	1000	11/18/2011	18:19
+ B,Ba,K,Li,Mo,Sb,Si,Ti,Zn,Zr	1111160-2A	1111160-2A	1	11/18/2011	18:21
	IP111117-2MB	IP111117-2MB	1	11/18/2011	18:23
	IP111117-2RVS	IP111117-2	1	11/18/2011	18:25
	IP111117-2LCS	IP111117-2LCS	1	11/18/2011	18:27
	1111162-1	1111162-1	1	11/18/2011	18:32
	CCV	CCV9	1	11/18/2011	18:34
	CCB	CCB9	1	11/18/2011	18:36
	1111162-1D	1111162-1DUP	1	11/18/2011	18:38

Data Package ID:

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Inst Sample Name	Lab ID	DF	Date Analyzed	Time Analyzed
	1111162-1L 5X	1111162-1SER	5	11/18/2011	18:40
	1111162-1MS	1111162-1MS	1	11/18/2011	18:42
	1111162-1MSD	1111162-1MSD	1	11/18/2011	18:44
	1111162-2	1111162-2	1	11/18/2011	18:46
	1111162-3	1111162-3	1	11/18/2011	18:48
	1111162-4	1111162-4	1	11/18/2011	18:49
	1111162-5	1111162-5	1	11/18/2011	18:51
	1111162-6	1111162-6	1	11/18/2011	18:53
	1111162-7	1111162-7	1	11/18/2011	18:55
	CCV	CCV10	1	11/18/2011	18:57
	CCB	CCB10	1	11/18/2011	18:59
	1111162-8	1111162-8	1	11/18/2011	19:01
	1111162-9	1111162-9	1	11/18/2011	19:03
	1111162-10	1111162-10	1	11/18/2011	19:05
	1111162-11	1111162-11	1	11/18/2011	19:07
	1111162-12	1111162-12	1	11/18/2011	19:09
	1111162-13	1111162-13	1	11/18/2011	19:11
	1111162-14	1111162-14	1	11/18/2011	19:12
	1111162-15	1111162-15	1	11/18/2011	19:14
	IP111118-2MB	IP111118-2MB	1	11/18/2011	19:16
	IP111118-2RVS	IP111118-2	1	11/18/2011	19:18
	CCV	CCV11	1	11/18/2011	19:20
	CCB	CCB11	1	11/18/2011	19:22
	IP111118-2LCS	IP111118-2LCS	1	11/18/2011	19:24
	1111071-1	1111071-1	1	11/18/2011	19:26
	1111071-1D	1111071-1DUP	1	11/18/2011	19:28
	1111071-1L 5X	1111071-1SER	5	11/18/2011	19:30
	1111071-1MS	1111071-1MS	1	11/18/2011	19:32
	1111071-1MSD	1111071-1MSD	1	11/18/2011	19:34
- Na,Sr	1111104-1 10X	1111104-1	10	11/18/2011	19:36
	1111170-1	1111170-1	1	11/18/2011	19:38
	1111171-1	1111171-1	1	11/18/2011	19:40
	1111173-1	1111173-1	1	11/18/2011	19:42
	CCV	CCV12	1	11/18/2011	19:44
	CCB	CCB12	1	11/18/2011	19:46

Data Package ID:

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Inst Sample Name	Lab ID	DF	Date Analyzed	Time Analyzed
	1111174-1	1111174-1	1	11/18/2011	19:48
	1111180-1	1111180-1	1	11/18/2011	19:50
	1111181-1	1111181-1	1	11/18/2011	19:52
	1111182-1	1111182-1	1	11/18/2011	19:54
	1111183-1	1111183-1	1	11/18/2011	19:56
	1111207-1	1111207-1	1	11/18/2011	19:58
	1111209-1	1111209-1	1	11/18/2011	20:00
	1111210-1	1111210-1	1	11/18/2011	20:02
- Na	1111232-1	1111232-1	1	11/18/2011	20:04
	1111233-1	1111233-1	1	11/18/2011	20:05
	CCV	CCV13	1	11/18/2011	20:08
	CCB	CCB13	1	11/18/2011	20:10
	1111234-1	1111234-1	1	11/18/2011	20:12
- Na	1111235-1	1111235-1	1	11/18/2011	20:14
- S	1111260-1	1111260-1	1	11/18/2011	20:15
	1111261-1	1111261-1	1	11/18/2011	20:17
+ Sb	1111162-1A	1111162-1A	1	11/18/2011	20:19
	IP111118-3MB	IP111118-3MB	1	11/18/2011	20:21
	IP111118-3RVS	IP111118-3	1	11/18/2011	20:23
	IP111118-3LCS	IP111118-3LCS	1	11/18/2011	20:25
	1111092-9	1111092-9	1	11/18/2011	20:26
	1111092-10	1111092-10	1	11/18/2011	20:28
	CCV	CCV14	1	11/18/2011	20:31
	CCB	CCB14	1	11/18/2011	20:33
- Na,S	1111106-22	1111106-22	1	11/18/2011	20:35
- Na,S	1111106-22D	1111106-22DUP	1	11/18/2011	20:37
- Na,S	1111106-22L 5X	1111106-22SER	5	11/18/2011	20:39
- Na,S	1111106-22MS	1111106-22MS	1	11/18/2011	20:41
- Na,S	1111106-22MSD	1111106-22MSD	1	11/18/2011	20:43
	1111106-35	1111106-35	1	11/18/2011	20:45
	1111106-48	1111106-48	1	11/18/2011	20:46
- S	1111106-61	1111106-61	1	11/18/2011	20:48
	1111134-1 10X	1111134-1	10	11/18/2011	20:50
	1111134-2 10X	1111134-2	10	11/18/2011	20:52
	CCV	CCV15	1	11/18/2011	20:55

Data Package ID:

ALS Environmental -- FC
LIMS Version: 6.540

Date Printed: Monday, November 21, 2011

#Name?

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Inst Sample Name	Lab ID	DF	Date Analyzed	Time Analyzed
	CCB	CCB15	1	11/18/2011	20:57
	1111134-3 10X	1111134-3	10	11/18/2011	20:59
	1111161-1 10X	1111161-1	10	11/18/2011	21:01
	1111161-2 10X	1111161-2	10	11/18/2011	21:02
	1111161-3 10X	1111161-3	10	11/18/2011	21:04
	1111161-4 10X	1111161-4	10	11/18/2011	21:06
- S	1111172-1	1111172-1	1	11/18/2011	21:08
- S	1111172-2	1111172-2	1	11/18/2011	21:10
- S	1111172-3	1111172-3	1	11/18/2011	21:12
- S	1111172-4	1111172-4	1	11/18/2011	21:14
- Ca,Na,S,Sr	1111172-5	1111172-5	1	11/18/2011	21:16
	CCV	CCV16	1	11/18/2011	21:18
	CCB	CCB16	1	11/18/2011	21:20
- Na,S,Sr	1111172-6	1111172-6	1	11/18/2011	21:22
- S	1111172-10	1111172-10	1	11/18/2011	21:24
+ Na,Sr	1111104-1 500X	1111104-1	500	11/18/2011	21:26
+ Na	1111232-1 5X	1111232-1	5	11/18/2011	21:28
+ Na	1111235-1 5X	1111235-1	5	11/18/2011	21:30
- Na,S	1111238-1 5X	1111238-1	5	11/18/2011	21:31
- Na,S	1111238-3 5X	1111238-3	5	11/18/2011	21:33
- Na,S	1111238-3L 25X	1111238-3SER	25	11/18/2011	21:35
+ Ca,K,Mg	1111238-3A 5X	1111238-3A	5	11/18/2011	21:37
+ Na,S	1111106-22 5X	1111106-22	5	11/18/2011	21:39
	CCV	CCV17	1	11/18/2011	21:41
	CCB	CCB17	1	11/18/2011	21:43
+ Na,S	1111106-22D 5X	1111106-22DUP	5	11/18/2011	21:45
+ Na,S	1111106-22L 25X	1111106-22SER	25	11/18/2011	21:47
+ Na,S	1111106-22MS 5X	1111106-22MS	5	11/18/2011	21:49
+ Na,S	1111106-22MSD 5X	1111106-22MSD	5	11/18/2011	21:51
	1111134-1	1111134-1	1	11/18/2011	21:53
	1111134-2	1111134-2	1	11/18/2011	21:55
	1111134-3	1111134-3	1	11/18/2011	21:57
	1111161-3	1111161-3	1	11/18/2011	21:59
+ Ca,Na,Sr	1111172-5 10X	1111172-5	10	11/18/2011	22:01
+ Na	1111238-1 25X	1111238-1	25	11/18/2011	22:03

Data Package ID:

ICPTrace2 Run Log -- 11/18/2011

Instrument ID: ICPTrace2
File Name: 111118A.
AnalRunID: IT111118-2A1
CalibRefID: IT111118-2A1

Comment	Inst Sample Name	Lab ID	DF	Date Analyzed	Time Analyzed
	CCV	CCV18	1	11/18/2011	22:06
	CCB	CCB18	1	11/18/2011	22:08
+ Na,S	1111238-3 25X	1111238-3	25	11/18/2011	22:09
+ Na,S	1111238-3L 125X	1111238-3SER	125	11/18/2011	22:11
+ Na	1111238-3A 25X	1111238-3A	25	11/18/2011	22:13
+ Na,Sr	1111172-6 10X	1111172-6	10	11/18/2011	22:15
+ K,Li	1111106-22A	1111106-22A	1	11/18/2011	22:17
	CRI	CRI2	1	11/18/2011	22:19
	ICSA	ICSA2	1	11/18/2011	22:21
	ICSAB	ICSAB2	1	11/18/2011	22:23
	CCV	CCV19	1	11/18/2011	22:25
	CCB	CCB19	1	11/18/2011	22:27

Data Package ID:

Sample Id1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
MIXBHIGH	1.99971	0.02186	4.99825	9.98100	H10.01097	0.98378	0.00160	-0.08880	4.92258	4.93748	9.84637	H10.10540
MIXAHIGH	0.00013	496.87783	0.00058	-0.00711	-0.00063	0.00099	0.00460	495.91775	-0.00056	0.00046	0.00110	-0.00868
MIXCHIGH	L-0.01142	0.35042	-0.00600	0.00387	-0.00140	0.00505	H5.02860	-0.04893	-0.00170	0.00581	-0.00467	L-0.01480
ICV	0.09273	25.87087	0.24952	0.49612	0.50081	0.24009	0.25154	24.40226	0.24545	0.24536	0.49554	0.49719
ICB	-0.00038	-0.05348	-0.00153	-0.00549	-0.00102	-0.00069	-0.00105	-0.06807	-0.00060	-0.00027	-0.00050	-0.00034
CRI	0.01852	0.41194	0.01411	0.40965	0.42181	0.01121	0.04938	5.08559	0.01091	0.10172	0.02126	0.05226
ICSA	0.00000	276.80847	-0.00242	-0.00679	-0.00098	0.00001	0.00763	264.12735	-0.00028	0.00083	-0.00166	-0.00317
ICSAB	0.18859	221.98940	0.10555	1.01829	0.52091	0.47692	0.53080	263.58671	0.97996	0.47192	0.47082	0.53746
CCV	0.19812	53.49136	0.51167	1.02399	1.04891	0.48567	0.53182	48.57740	0.49629	0.48712	0.98792	1.05107
CCB	-0.00064	0.00424	-0.00053	-0.00480	-0.00063	-0.00010	0.00146	-0.03899	-0.00059	-0.00023	-0.00072	-0.00020
F111115-1LCS	0.08994	2.12278	1.96223	0.48721	2.03543	0.04566	-0.00301	36.91510	0.04706	0.47581	0.19085	0.25298
1111179-1	0.00010	-0.00361	-0.00084	0.03128	0.09890	-0.00034	-0.00001	5.72952	-0.00047	-0.00040	-0.00058	0.00026
1111184-1	-0.00066	-0.04013	0.00026	0.01823	0.07110	-0.00044	-0.00366	55.16293	-0.00089	-0.00102	-0.00122	0.00017
IP111116-5MB	-0.00087	-0.04664	-0.00216	-0.00679	-0.00144	-0.00055	-0.00348	-0.08016	-0.00076	-0.00064	-0.00136	-0.00071
IP111116-5LCS	0.08976	2.14004	2.00259	0.49933	2.01469	0.04807	0.00333	37.04158	0.04731	0.47585	0.19166	0.25269
1111037-3	-0.00032	-0.02511	0.00169	0.00961	0.15459	-0.00058	-0.00209	120.61117	-0.00066	-0.00029	-0.00084	-0.00006
1111037-3D	-0.00045	-0.02183	-0.00326	0.00973	0.15457	-0.00057	-0.00045	120.29423	-0.00059	-0.00043	-0.00073	-0.00034
1111037-3L 5X	-0.00058	0.27331	-0.00369	-0.00332	0.03076	-0.00060	0.00102	23.61788	-0.00082	-0.00077	-0.00123	-0.00099
1111037-3MS	0.08917	2.09624	1.98834	0.51809	2.16550	0.04738	0.00080	156.73639	0.04630	0.46406	0.18571	0.25487
1111037-3MSD	0.08886	2.12174	1.98401	0.51614	2.16606	0.04741	-0.00137	156.49894	0.04650	0.46451	0.18606	0.25663
CCV	0.19866	53.60078	0.51151	1.02702	1.05306	0.48446	0.53020	48.42004	0.49823	0.48775	0.98325	1.06052
CCB	-0.00017	0.00158	-0.00190	-0.00545	-0.00086	-0.00009	-0.00287	-0.05742	-0.00062	-0.00061	-0.00064	-0.00071
1111040-1 10X	-0.00034	-0.03849	-0.00032	3.07628	3.19849	-0.00029	0.00562	H662.00407	-0.00065	0.00408	0.00287	-0.00109
1111040-3 10X	-0.00063	-0.04989	0.00569	4.87093	2.39049	-0.00047	-0.00203	H1030.32955	-0.00069	0.00110	-0.00069	-0.00212
1111040-4 10X	-0.00096	1.40800	0.00084	4.18885	H19.53721	-0.00043	0.00239	H1043.45932	-0.00112	0.00990	-0.00131	-0.00296
1111040-5 10X	-0.00078	2.19435	0.00111	4.42644	H11.14385	-0.00052	-0.00420	H950.36071	-0.00119	0.00541	-0.00110	-0.00291
1111040-7 10X	-0.00071	-0.03589	0.00095	3.11062	2.94776	-0.00040	0.00050	H669.83446	-0.00100	0.00284	0.00236	-0.00083
1111051-1 10X	-0.00044	1.10653	-0.00026	4.11443	H12.27889	-0.00067	0.00109	H904.36273	-0.00107	0.00558	-0.00081	-0.00259
1111051-2 10X	-0.00122	1.23283	0.00190	4.41721	H13.10118	-0.00066	0.00413	H988.55379	-0.00131	0.00577	-0.00145	-0.00268
1111059-9	-0.00053	-0.03226	0.00090	-0.00130	-0.00038	-0.00038	-0.00210	-0.04360	-0.00084	-0.00023	-0.00094	-0.00117
1111059-10	-0.00034	-0.02525	-0.00163	-0.00408	-0.00129	-0.00030	-0.00444	-0.07512	-0.00117	-0.00102	-0.00157	-0.00142
1111078-2	-0.00014	0.20860	-0.00126	0.00416	0.12119	-0.00016	0.00156	34.10144	-0.00057	-0.00031	0.00099	-0.00089
CCV	0.19894	53.55572	0.51751	1.03112	1.05279	0.48520	0.53743	48.14741	0.50064	0.48614	0.98074	1.04769
CCB	-0.00079	0.01523	-0.00348	-0.00420	-0.00090	0.00009	-0.00054	-0.06059	-0.00086	-0.00085	-0.00106	-0.00148
1111078-8	-0.00078	-0.01377	0.00090	0.00973	0.17789	-0.00006	-0.00219	118.47972	-0.00078	-0.00049	-0.00123	-0.00134
1111078-14	-0.00098	-0.01015	-0.00226	0.00996	0.17908	-0.00003	-0.00150	120.77846	-0.00087	-0.00060	-0.00126	-0.00119
1111078-19	-0.00055	5.07491	0.00011	0.01041	0.10749	0.00002	-0.00075	60.00337	-0.00067	0.00105	0.00797	0.00102
1111078-35	-0.00067	0.01397	-0.00095	0.06130	0.14520	-0.00016	-0.00177	137.57747	-0.00105	-0.00040	-0.00132	0.02228
IP111117-1MB	-0.00030	-0.02778	-0.00221	-0.00545	-0.00127	-0.00038	-0.00183	-0.03050	-0.00079	-0.00061	-0.00056	0.00048
IP111117-1RVS	0.00937	1.00772	0.05104	0.04570	0.04945	0.00982	0.10498	4.85649	0.01944	0.01990	0.05001	0.04915
ZZZ	0.08700	2.08689	1.92969	0.47346	2.01608	0.04863	-0.00370	36.63185	0.04709	0.47628	0.19290	0.24790
1110384-1	0.07236	40.76996	0.07386	0.00668	2.29228	0.00421	0.02924	109.42540	1.13739	0.04948	0.03350	H10.96102
1110384-2	0.06441	40.55275	0.21090	0.00610	3.41660	0.00406	0.02480	144.58821	0.93226	0.05565	0.04231	H10.37268
1110384-3	0.12288	15.61413	0.07739	0.00645	0.33570	0.00498	0.00244	288.65029	0.00105	0.01621	0.08242	0.20778
CCV	0.20163	54.09210	0.52451	1.04180	1.05545	0.49315	0.55070	49.56853	0.51175	0.49675	1.00002	1.05333
CCB	-0.00048	0.01731	-0.00195	-0.00572	-0.00071	0.00018	0.00068	-0.04590	-0.00038	-0.00082	-0.00047	-0.00130
1110384-4	0.08136	13.41978	0.06127	0.00755	0.42974	0.00369	0.00289	351.50608	-0.00016	0.01021	0.05821	0.12040
1110384-5	0.03815	24.30534	0.13198	0.73246	2.72037	0.00388	0.01669	5.03491	0.02344	0.04340	0.12473	1.72547
1110384-6	0.05565	16.28405	0.14475	0.00557	0.23016	0.00389	0.02830	9.00791	0.05435	0.04586	0.08757	2.94648
1111160-2	-0.00220	116.57146	0.05578	0.58429	2.58627	0.00742	0.00614	194.58889	0.00071	0.05315	0.08600	0.12024

Sample Id1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
1111160-2D	-0.00220	115.50253	0.05816	0.23525	1.19389	0.00741	0.00866	186.78211	0.00045	0.05288	0.08435	0.11815
1111160-2L 5X	-0.00072	22.66631	0.00927	0.10121	0.47943	0.00165	0.00151	36.78690	-0.00038	0.01001	0.01632	0.02197
1111160-2MS	0.08289	170.17872	1.91519	0.39074	3.00388	0.05365	0.00582	229.17971	0.04657	0.49477	0.28405	0.37414
1111160-2MSD	0.08781	176.25969	1.99815	0.37149	3.06660	0.05566	0.00677	227.21818	0.04773	0.51556	0.29454	0.38929
1111160-3	-0.00252	139.58495	0.06691	0.01057	1.17131	0.01007	0.01008	165.06504	0.00091	0.07147	0.10535	0.15781
1111160-4	-0.00213	135.11675	0.05847	0.00484	1.12522	0.00983	0.01028	148.15322	0.00104	0.06775	0.10222	0.14830
CCV	0.19951	53.20750	0.51215	1.02621	1.03729	0.48310	0.53832	48.72079	0.50596	0.48797	0.98224	1.03700
CCB	-0.00049	0.02845	0.00258	-0.00580	-0.00069	0.00018	-0.00305	-0.04130	-0.00044	-0.00044	-0.00073	-0.00112
1111160-5	-0.00279	128.35534	0.06991	0.00874	1.24186	0.01018	0.01235	164.54058	0.00076	0.07510	0.10385	0.17116
1111160-6	-0.00150	46.73771	0.05109	-0.00046	0.24603	0.00335	-0.00006	72.87773	-0.00043	0.02104	0.02458	0.03591
1111160-7	-0.00184	86.11274	0.05363	0.00782	0.55998	0.00624	0.00874	155.93577	0.00042	0.03818	0.05680	0.08343
1111160-8	-0.00239	89.25777	0.06559	0.00561	0.59699	0.00653	0.00339	144.39299	-0.00005	0.03988	0.06090	0.08770
1111160-9	-0.00170	26.09060	0.04614	-0.00076	0.12169	0.00366	-0.00026	110.67098	-0.00082	0.01336	0.01131	0.01880
1111160-10	-0.00132	31.48964	0.04504	-0.00042	0.12851	0.00415	0.00504	71.08080	0.00130	0.01421	0.01385	0.04097
1111160-11	-0.00198	29.13145	0.03671	-0.00065	0.12365	0.00390	-0.00041	74.04425	-0.00018	0.01307	0.01302	0.02618
1111160-12	-0.00254	33.84381	0.05489	0.00122	0.21985	0.00566	0.00072	142.61462	-0.00090	0.01687	0.01764	0.02354
1111160-13	-0.00156	45.31843	0.04994	-0.00458	0.18574	0.00382	0.00442	82.33526	-0.00054	0.01820	0.01736	0.02720
1111160-14	0.00266	69.31225	0.12559	0.00607	0.44854	0.00548	0.00835	133.89438	0.04726	0.04195	0.04574	0.61889
CCV	0.19753	53.04881	0.51491	1.01986	1.03896	0.47655	0.53937	47.94277	0.50145	0.48186	0.96745	1.04587
CCB	-0.00048	0.04306	-0.00321	-0.00549	-0.00065	0.00035	0.00024	-0.03208	-0.00058	-0.00088	-0.00051	-0.00125
1111160-15	-0.00179	145.39032	0.05621	0.00858	1.04073	0.00893	0.00888	151.10931	0.00177	0.06525	0.10451	0.17069
1111040-1 100X	-0.00100	0.04332	-0.00190	0.29282	0.32782	0.00006	-0.00305	61.19075	-0.00083	-0.00059	-0.00117	-0.00166
1111040-3 100X	-0.00009	0.01163	-0.00479	0.48824	0.25846	0.00002	-0.00279	101.76878	-0.00099	-0.00031	-0.00128	-0.00166
1111040-4 100X	-0.00089	0.14233	-0.00016	0.42455	2.14975	0.00007	-0.00202	104.30579	-0.00083	-0.00031	-0.00178	-0.00215
1111040-5 100X	-0.00038	0.22842	-0.00253	0.43819	1.19311	0.00019	-0.00149	91.28817	-0.00102	-0.00038	-0.00146	-0.00139
1111040-7 100X	-0.00108	0.01378	-0.00226	0.29492	0.30176	0.00025	-0.00375	60.99601	-0.00085	-0.00049	-0.00090	-0.00170
1111051-1 100X	-0.00086	0.13151	-0.00442	0.42241	1.36568	0.00034	-0.00219	88.47090	-0.00079	-0.00024	0.00081	-0.00183
1111051-2 100X	-0.00045	0.14036	-0.00479	0.43448	1.39636	0.00040	-0.00115	90.55300	-0.00092	-0.00023	-0.00159	-0.00193
CCV	0.20122	54.05090	0.52891	1.04773	1.06131	0.48863	0.55515	49.07724	0.51377	0.49522	0.98834	1.07098
CCB	0.00027	0.05307	-0.00363	-0.00511	-0.00069	0.00053	0.00016	-0.04360	-0.00032	-0.00030	-0.00044	-0.00148
IP111117-1LCS	0.08749	2.20669	1.98000	0.48454	2.07333	0.04904	-0.00572	36.26413	0.04646	0.47607	0.18979	0.25760
1110384-1 10X	0.00629	3.95297	0.00653	-0.00519	0.23396	0.00085	-0.00047	10.58145	0.11493	0.00439	0.00218	1.12350
1110384-2 10X	0.00504	3.73424	0.02022	-0.00564	0.33073	0.00077	0.00299	13.16203	0.08959	0.00458	0.00295	1.00804
1110384-5 10X	0.00381	2.24041	0.01138	0.06050	0.25802	0.00069	-0.00023	0.41708	0.00144	0.00348	0.01120	0.16274
1110384-6 10X	0.00492	1.55906	0.00922	-0.00587	0.02110	0.00074	0.00281	0.79494	0.00467	0.00343	0.00711	0.28968
1111160-3 5X	-0.00095	26.96504	0.01206	-0.00389	0.23559	0.00230	-0.00229	32.04693	-0.00041	0.01373	0.02089	0.02918
1111160-4 5X	-0.00105	26.47965	0.01343	-0.00488	0.22874	0.00230	0.00218	29.59310	-0.00072	0.01303	0.02062	0.02768
1111160-5 5X	-0.00097	24.33448	0.01280	-0.00480	0.24409	0.00229	0.00123	31.15607	-0.00059	0.01412	0.02009	0.03128
1111040-1 1000X	-0.00097	0.01480	-0.00405	0.02239	0.03207	0.00023	-0.00271	6.08404	-0.00072	-0.00111	-0.00156	-0.00234
1111040-3 1000X	-0.00089	0.00783	-0.00042	0.04341	0.02570	0.00016	-0.00115	10.40561	-0.00077	-0.00074	-0.00150	-0.00207
CCV	0.19979	53.22129	0.52207	1.03747	1.04370	0.48153	0.54918	48.51925	0.50762	0.48650	0.97528	1.05682
CCB	-0.00074	0.02953	0.00026	-0.00599	-0.00129	0.00047	-0.00184	-0.08376	-0.00080	-0.00106	-0.00123	-0.00252
1111040-4 1000X	-0.00035	0.05799	-0.00305	0.03719	0.22459	0.00063	-0.00244	10.53177	-0.00074	-0.00067	-0.00131	-0.00184
1111040-5 1000X	-0.00123	0.06063	-0.00253	0.03849	0.12407	0.00066	-0.00332	9.26493	-0.00085	-0.00147	-0.00148	-0.00216
1111040-7 1000X	-0.00050	0.03131	-0.00010	0.02365	0.02986	0.00052	-0.00175	6.11226	-0.00077	-0.00094	-0.00100	-0.00216
1111051-1 1000X	-0.00071	0.03742	-0.00600	0.03700	0.14084	0.00049	-0.00045	9.04328	-0.00066	-0.00072	-0.00118	-0.00207
1111051-2 1000X	-0.00071	0.03343	-0.00411	0.03074	0.12526	0.00041	-0.00280	8.10233	-0.00073	-0.00140	-0.00123	-0.00270
1111160-2A	-0.00280	110.65996	2.09558	0.52799	2.81759	0.05432	0.00561	218.10189	0.04852	0.51485	0.26196	0.37084
IP111117-2MB	-0.00089	0.03702	-0.00400	-0.00618	-0.00104	0.00038	-0.00306	-0.04274	-0.00059	-0.00123	-0.00082	-0.00183
IP111117-2RVS	0.00913	1.03072	0.04641	0.04196	0.04899	0.00969	0.09977	4.62370	0.01896	0.01804	0.04777	0.05089

Sample Id1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
IP111117-2LCS	0.08782	2.09502	1.88770	0.46291	1.99128	0.04545	-0.00055	35.72134	0.04590	0.46385	0.18661	0.25073
1111162-1	-0.00249	80.05609	0.05489	0.01457	1.04952	0.00708	0.00628	175.95062	0.00039	0.05849	0.06883	0.10650
CCV	0.19797	52.35663	0.51247	1.01434	1.02072	0.47576	0.53669	48.35025	0.50379	0.48099	0.96905	1.03291
CCB	-0.00048	0.02995	-0.00369	-0.00534	-0.00104	0.00040	-0.00010	-0.06721	-0.00085	-0.00082	-0.00079	-0.00180
1111162-1D	-0.00195	81.65905	0.06005	0.01522	1.06612	0.00761	0.00723	185.14571	0.00045	0.06128	0.07055	0.11182
1111162-1L 5X	-0.00101	15.73874	0.00900	-0.00198	0.21428	0.00198	0.00097	34.41269	-0.00046	0.01147	0.01393	0.01944
1111162-1MS	0.08835	120.08905	1.94761	0.34071	3.04486	0.05218	0.00505	211.98998	0.04667	0.51215	0.26975	0.37353
1111162-1MSD	0.08858	123.10727	1.94907	0.33731	3.06069	0.05226	0.00814	212.21317	0.04653	0.51307	0.27246	0.37448
1111162-2	-0.00159	48.83675	0.03961	0.01053	0.64875	0.00497	0.00014	125.83422	0.00024	0.03397	0.04167	0.05764
1111162-3	-0.00184	51.56705	0.03792	0.00954	0.65337	0.00509	0.00578	124.53422	0.00000	0.03580	0.04400	0.06061
1111162-4	-0.00135	39.41830	0.02265	0.00042	0.17631	0.00403	0.00139	57.05332	-0.00035	0.01515	0.01647	0.03070
1111162-5	-0.00110	31.59982	0.02444	0.00256	0.16168	0.00356	0.00170	79.81215	-0.00001	0.01456	0.01641	0.02517
1111162-6	-0.00188	45.49814	0.05384	0.00259	0.23547	0.00485	0.00302	99.20077	-0.00039	0.02327	0.03543	0.03267
1111162-7	-0.00161	37.87133	0.02934	0.00309	0.15175	0.00365	0.00235	44.94355	-0.00038	0.01291	0.01646	0.02097
CCV	0.19812	52.40565	0.51374	1.01476	1.02508	0.47405	0.53637	47.86991	0.50126	0.47930	0.96089	1.03989
CCB	-0.00051	0.05276	-0.00147	-0.00522	-0.00073	0.00052	-0.00045	-0.04475	-0.00057	-0.00051	-0.00047	-0.00162
1111162-8	-0.00105	36.53262	0.03850	0.00450	0.59686	0.00452	0.00159	109.14479	0.00011	0.03904	0.03495	0.05246
1111162-9	-0.00182	56.29993	0.03924	0.01308	0.77842	0.00556	0.00452	123.04918	0.00016	0.04107	0.04962	0.07542
1111162-10	-0.00088	35.07189	0.02149	0.00515	0.38224	0.00362	0.00162	76.73133	0.00006	0.02216	0.02888	0.03730
1111162-11	-0.00123	41.36234	0.03129	0.01087	0.47423	0.00427	0.00330	145.13822	-0.00029	0.03335	0.03578	0.04348
1111162-12	-0.00128	60.74405	0.03545	0.00954	0.62082	0.00495	0.00095	118.43909	0.00003	0.03573	0.05017	0.06224
1111162-13	-0.00257	107.73541	0.05468	0.00637	0.96361	0.00845	0.00816	111.08815	0.00042	0.06094	0.08714	0.12032
1111162-14	-0.00192	106.94015	0.05995	0.00870	1.07082	0.00861	0.00901	213.84793	0.00075	0.06414	0.08816	0.12705
1111162-15	-0.00220	51.40008	0.04393	0.00683	0.51188	0.00508	0.00136	92.70954	0.00015	0.03357	0.07011	0.06084
IP111118-2MB	-0.00071	0.07224	-0.00037	-0.00759	-0.00077	0.00035	0.00076	0.01341	-0.00089	-0.00071	-0.00097	-0.00207
IP111118-2RVS	0.00942	1.06012	0.04730	0.04516	0.04870	0.01012	0.10245	4.67579	0.01918	0.01904	0.04691	0.04826
CCV	0.19854	52.62592	0.51549	1.01622	1.02639	0.47397	0.54054	47.91404	0.50363	0.48052	0.96299	1.04531
CCB	-0.00033	0.03525	0.00163	-0.00511	-0.00067	0.00028	0.00051	-0.04778	-0.00057	-0.00037	-0.00054	-0.00121
IP111118-2LCS	0.08903	2.16544	2.03039	0.50177	2.03142	0.04857	-0.00537	36.49852	0.04683	0.47421	0.18719	0.25400
1111071-1	-0.00004	0.08891	0.00069	0.01419	0.04647	0.00033	-0.00572	46.10766	-0.00051	-0.00079	-0.00048	0.00543
1111071-1D	-0.00063	0.08974	-0.00384	0.01305	0.04543	0.00042	-0.00477	45.17340	-0.00047	-0.00062	-0.00108	0.00479
1111071-1L 5X	-0.00022	0.03164	-0.00284	-0.00313	0.00812	0.00038	-0.00019	8.94783	-0.00085	-0.00049	-0.00109	-0.00035
1111071-1MS	0.09146	2.26324	2.05783	0.53193	2.09625	0.04897	-0.00195	83.65286	0.04770	0.47496	0.18795	0.26713
1111071-1MSD	0.09135	2.28682	2.07236	0.53670	2.12041	0.04934	-0.00038	84.36862	0.04789	0.47765	0.19040	0.26954
1111104-1 10X	-0.00022	0.00438	-0.00084	5.10507	0.29870	0.00020	0.00232	28.18293	-0.00061	-0.00071	-0.00101	-0.00111
1111170-1	-0.00050	0.00713	-0.00405	0.05718	0.02543	0.00027	0.00007	16.09705	-0.00113	-0.00088	-0.00122	-0.00134
1111171-1	-0.00076	0.10879	-0.00421	0.05703	0.04688	0.00023	-0.00434	44.40672	-0.00065	-0.00075	-0.00117	-0.00011
1111173-1	-0.00070	0.01382	-0.00395	0.01133	0.04738	0.00017	-0.00184	37.53107	-0.00080	-0.00095	-0.00131	-0.00147
CCV	0.19850	52.84415	0.51024	1.01710	1.03137	0.47746	0.53823	47.77671	0.49802	0.48075	0.96572	1.04586
CCB	-0.00041	0.02936	0.00237	-0.00477	-0.00079	0.00030	-0.00210	-0.05123	-0.00052	-0.00082	-0.00075	-0.00130
1111174-1	-0.00074	0.03979	-0.00253	0.04040	0.04138	0.00035	-0.00063	78.20552	-0.00075	-0.00086	-0.00128	-0.00097
1111180-1	-0.00072	0.01867	0.00132	0.06874	0.12251	0.00041	-0.00426	152.31422	-0.00089	-0.00044	-0.00119	0.00020
1111181-1	-0.00086	0.02893	-0.00200	0.00214	0.05326	0.00044	-0.00295	56.99522	-0.00114	-0.00084	-0.00176	0.00375
1111182-1	-0.00082	0.03866	-0.00437	0.00843	0.03859	0.00051	-0.00477	69.82753	-0.00088	-0.00107	-0.00117	0.00479
1111183-1	-0.00061	0.02373	-0.00100	0.08763	0.06362	0.00055	-0.00253	98.98430	-0.00055	-0.00100	-0.00126	-0.00093
1111207-1	0.00001	0.01890	-0.00453	0.03197	0.05195	0.00040	0.00241	65.40850	-0.00096	-0.00067	-0.00030	0.02828
1111209-1	-0.00058	0.02262	-0.00374	0.19311	0.08135	0.00040	-0.00253	85.50408	-0.00105	-0.00067	-0.00117	-0.00034
1111210-1	-0.00071	0.01331	-0.00369	0.04730	0.07037	0.00033	0.00059	99.42399	-0.00091	-0.00113	-0.00120	-0.00124
1111232-1	-0.00040	0.01641	-0.00479	0.31921	-0.00052	0.00019	0.00138	-0.01683	-0.00071	-0.00092	-0.00073	0.00107
1111233-1	-0.00107	0.01134	-0.00142	0.20860	0.04347	0.00018	-0.00236	82.24135	-0.00070	-0.00065	-0.00126	-0.00138

Sample Id1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
CCV	0.19887	52.67679	0.51443	1.01587	1.02437	0.47931	0.53326	48.33672	0.50263	0.48285	0.97278	1.03784
CCB	-0.00022	0.03352	0.00200	-0.00477	-0.00083	0.00031	0.00120	-0.04792	-0.00064	-0.00064	-0.00050	-0.00144
1111234-1	-0.00081	0.08526	0.00316	0.05390	0.03568	0.00024	-0.00105	51.44877	-0.00078	-0.00094	-0.00157	0.00121
1111235-1	-0.00061	0.02437	-0.00311	0.73823	0.04088	0.00039	-0.00200	23.33323	-0.00083	-0.00027	-0.00106	0.00093
1111260-1	-0.00102	0.02871	-0.00042	0.26293	0.01735	0.00048	-0.00087	53.39166	-0.00084	-0.00079	-0.00134	0.00498
1111261-1	-0.00069	0.02343	-0.00158	0.09900	0.10995	0.00050	0.00223	65.60527	-0.00068	-0.00056	-0.00095	-0.00229
1111162-1A	-0.00232	81.05411	2.05273	0.51289	3.08409	0.05305	0.00289	170.30664	0.04798	0.52615	0.25432	0.37268
IP111118-3MB	-0.00053	0.02980	-0.00084	-0.00664	-0.00115	0.00036	-0.00444	-0.07325	-0.00119	-0.00085	-0.00120	-0.00271
IP111118-3RVS	0.00892	1.06207	0.05120	0.04375	0.04861	0.01015	0.10263	4.67811	0.01878	0.01814	0.04702	0.04867
IP111118-3LCS	0.08929	2.14000	2.00871	0.49673	1.99827	0.04801	-0.00696	36.67767	0.04652	0.47083	0.18689	0.25223
1111092-9	-0.00093	0.02554	0.00090	0.04570	0.11684	0.00024	-0.00530	34.86481	-0.00051	-0.00113	0.00089	-0.00056
1111092-10	-0.00086	0.00883	-0.00084	0.04513	0.11744	0.00022	-0.00288	35.10950	-0.00091	-0.00075	0.00071	-0.00066
CCV	0.19779	52.37920	0.51331	1.01052	1.01665	0.47579	0.52942	47.96779	0.49836	0.47984	0.96597	1.03285
CCB	-0.00040	0.03665	-0.00232	-0.00545	-0.00077	0.00042	-0.00071	-0.04979	-0.00036	-0.00106	-0.00118	-0.00206
1111106-22	-0.00062	0.02068	-0.00090	0.42501	0.02155	0.00045	-0.00252	40.03943	-0.00073	-0.00082	-0.00135	0.00042
1111106-22D	-0.00069	0.01919	-0.00132	0.40900	0.02116	0.00045	-0.00114	39.08557	-0.00070	-0.00123	-0.00075	0.00024
1111106-22L 5X	-0.00017	0.02321	-0.00142	0.07896	0.00333	0.00042	-0.00366	8.02206	-0.00067	-0.00053	-0.00081	-0.00158
1111106-22MS	0.08987	2.19451	2.04563	0.93655	2.02901	0.04780	-0.00417	75.73668	0.04698	0.46284	0.18071	0.26031
1111106-22MSD	0.09042	2.19706	2.05403	0.94501	2.02943	0.04799	-0.00452	76.01224	0.04662	0.46516	0.18156	0.26044
1111106-35	-0.00053	0.02851	-0.00110	-0.00542	-0.00036	0.00052	-0.00487	-0.02661	-0.00067	-0.00095	-0.00097	-0.00207
1111106-48	-0.00043	0.01925	-0.00442	-0.00683	-0.00127	0.00034	-0.00166	-0.06706	-0.00078	-0.00119	-0.00110	-0.00189
1111106-61	-0.00078	0.01769	-0.00163	0.05745	0.02616	0.00037	-0.00392	42.39860	-0.00092	-0.00088	-0.00067	-0.00143
1111134-1 10X	-0.00030	0.01452	-0.00363	0.13219	0.01916	0.00027	-0.00184	1.12314	-0.00075	-0.00031	0.00057	-0.00167
1111134-2 10X	-0.00035	0.01074	-0.00163	0.27301	0.04259	0.00019	-0.00453	0.77173	-0.00079	-0.00086	0.00120	-0.00207
CCV	0.19887	52.77370	0.51162	1.01852	1.02584	0.47655	0.53960	48.06303	0.50382	0.48155	0.96833	1.04667
CCB	-0.00022	0.04517	-0.00084	-0.00511	-0.00092	0.00054	-0.00054	-0.05670	-0.00038	-0.00057	-0.00083	-0.00207
1111134-3 10X	-0.00045	0.02687	-0.00632	0.13216	0.01916	0.00046	-0.00219	1.09530	-0.00061	-0.00086	0.00015	-0.00202
1111161-1 10X	-0.00063	0.03404	-0.00505	0.67938	0.12149	0.00056	-0.00271	3.21183	-0.00090	-0.00088	-0.00032	-0.00233
1111161-2 10X	-0.00013	0.04222	-0.00163	3.77067	0.25784	0.00063	-0.00106	9.36847	-0.00061	-0.00062	0.00062	-0.00220
1111161-3 10X	-0.00014	0.03337	-0.00484	0.45886	0.01439	0.00052	-0.00340	0.59964	-0.00075	-0.00048	-0.00084	-0.00248
1111161-4 10X	-0.00063	0.02976	-0.00258	0.67001	0.12015	0.00045	0.00120	3.17260	-0.00064	-0.00044	0.00016	-0.00234
1111172-1	-0.00071	0.01945	-0.00137	0.09129	0.03738	0.00051	-0.00132	130.78129	-0.00104	-0.00066	-0.00133	-0.00216
1111172-2	-0.00042	0.02703	0.00184	0.13689	0.01701	0.00036	-0.00132	14.69048	-0.00080	-0.00069	0.00057	-0.00048
1111172-3	-0.00135	0.01739	-0.00205	0.33788	0.02262	0.00044	-0.00375	155.11488	-0.00070	-0.00133	-0.00126	-0.00097
1111172-4	-0.00069	0.00785	-0.00100	0.11231	0.02207	0.00034	-0.00184	108.43553	-0.00089	-0.00051	-0.00053	-0.00139
1111172-5	-0.00061	0.00543	0.00258	0.64320	0.02528	0.00045	0.00085	H514.48691	-0.00084	0.00005	0.10358	0.00029
CCV	0.19862	52.95608	0.51629	1.02074	1.02778	0.47497	0.53702	47.96096	0.50031	0.48214	0.96309	1.05221
CCB	-0.00115	0.04698	-0.00163	-0.00500	-0.00098	0.00058	-0.00150	-0.02834	-0.00081	-0.00106	-0.00082	-0.00215
1111172-6	-0.00073	0.02421	-0.00084	0.63311	0.02674	0.00071	0.00223	498.01998	-0.00097	-0.00012	0.10288	-0.00038
1111172-10	-0.00058	0.03975	-0.00374	0.12300	0.04849	0.00073	-0.00071	65.62838	-0.00059	-0.00081	0.00366	-0.00221
1111104-1 500X	-0.00130	0.03807	-0.00168	0.09720	0.00493	0.00068	-0.00280	0.63336	-0.00089	-0.00170	-0.00206	-0.00251
1111232-1 5X	-0.00052	0.03974	-0.00542	0.05707	-0.00129	0.00067	-0.00098	-0.05166	-0.00076	-0.00082	-0.00126	-0.00197
1111235-1 5X	-0.00092	0.03172	-0.00432	0.14074	0.00722	0.00056	-0.00253	4.62834	-0.00098	-0.00129	-0.00145	-0.00198
1111238-1 5X	-0.00035	0.02418	-0.00226	-0.00603	0.00264	0.00053	-0.00002	60.97097	-0.00066	-0.00026	-0.00095	-0.00184
1111238-3 5X	-0.00082	0.01947	-0.00211	-0.00664	0.00171	0.00047	-0.00149	47.79845	-0.00072	-0.00102	-0.00162	-0.00184
1111238-3L 25X	-0.00081	0.01682	-0.00016	-0.00660	-0.00090	0.00031	-0.00245	9.55425	-0.00099	-0.00143	-0.00168	-0.00238
1111238-3A 5X	-0.00108	0.01892	-0.00205	-0.00629	0.00173	0.00040	-0.00063	83.80252	-0.00103	-0.00061	-0.00104	-0.00188
1111106-22 5X	-0.00092	0.01093	0.00116	0.07725	0.00316	0.00025	-0.00340	7.91729	-0.00060	-0.00077	-0.00138	-0.00171
CCV	0.19769	52.96682	0.52032	1.02242	1.03487	0.47531	0.54397	47.63196	0.50046	0.48087	0.96136	1.05939
CCB	-0.00037	0.03533	-0.00326	-0.00610	-0.00133	0.00054	-0.00332	-0.08376	-0.00081	-0.00133	-0.00140	-0.00238

Sample Id1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
1111106-22D 5X	-0.00007	0.05183	-0.00200	0.07729	0.00356	0.00075	-0.00123	7.95567	-0.00061	-0.00053	-0.00103	-0.00162
1111106-22L 25X	-0.00071	0.04063	-0.00168	0.01064	-0.00031	0.00066	-0.00019	1.57204	-0.00076	-0.00071	-0.00100	-0.00244
1111106-22MS 5X	0.01727	0.45978	0.40533	0.17898	0.41350	0.01049	-0.00386	15.30769	0.00866	0.09566	0.03700	0.05038
1111106-22MSD 5X	0.01788	0.45304	0.40449	0.18127	0.41059	0.01039	0.00204	15.43975	0.00900	0.09607	0.03768	0.04987
1111134-1	-0.00057	0.44020	-0.00584	2.01950	2.63635	0.00072	-0.00130	12.58728	-0.00085	0.00274	0.01618	0.00046
1111134-2	-0.00114	0.44035	0.00016	3.48546	2.60555	0.00064	-0.00079	9.00878	-0.00053	0.00094	0.02465	-0.00203
1111134-3	-0.00102	0.41049	0.00048	1.93561	2.48472	0.00060	-0.00252	12.45334	-0.00097	0.00294	0.01540	-0.00077
1111161-3	-0.00033	0.03285	-0.00711	4.70150	0.16064	0.00048	-0.00522	6.80245	-0.00059	-0.00007	-0.00019	-0.00299
1111172-5 10X	-0.00062	0.01583	-0.00110	0.06580	0.00152	0.00035	-0.00331	46.16911	-0.00069	-0.00119	0.01054	-0.00239
1111238-1 25X	-0.00048	0.01839	-0.00411	-0.00164	-0.00046	0.00038	-0.00340	12.44511	-0.00068	-0.00105	-0.00139	-0.00239
CCV	0.19754	52.97326	0.51554	1.02154	1.03018	0.47248	0.54404	47.51412	0.50039	0.47952	0.95788	1.05776
CCB	-0.00028	0.04597	-0.00574	-0.00332	-0.00098	0.00067	-0.00002	-0.07541	-0.00054	-0.00023	-0.00064	-0.00189
1111238-3 25X	-0.00110	0.04663	-0.00179	-0.00507	-0.00044	0.00074	0.00197	9.64848	-0.00082	-0.00106	-0.00139	-0.00229
1111238-3L 125X	-0.00032	0.04508	-0.00611	-0.00519	-0.00121	0.00067	-0.00115	1.84521	-0.00110	-0.00119	-0.00147	-0.00266
1111238-3A 25X	-0.00146	0.03947	-0.00300	-0.00675	-0.00073	0.00074	-0.00263	45.57910	-0.00073	-0.00157	-0.00219	-0.00269
1111172-6 10X	-0.00061	0.03348	-0.00316	0.05932	0.00160	0.00063	-0.00150	48.67319	-0.00075	-0.00064	0.01096	-0.00229
1111106-22A	-0.00066	2.18175	2.00720	0.91393	1.99569	0.04702	0.00170	77.30267	0.04668	0.46163	0.18086	0.25731
CRI	0.01930	0.48977	0.01259	0.41374	0.42141	0.01201	0.05423	4.95114	0.01078	0.09965	0.02060	0.05167
ICSA	-0.00046	276.24249	-0.00532	-0.00629	-0.00106	0.00116	0.00953	256.01380	-0.00022	0.00059	-0.00180	-0.00616
ICSAB	0.18791	217.56728	0.09780	1.00611	0.50785	0.46087	0.54017	257.03943	0.98904	0.46091	0.45527	0.53455
CCV	0.19826	52.81041	0.51899	1.01568	1.02205	0.47238	0.53855	47.83356	0.50063	0.47934	0.96026	1.04914
CCB	-0.00084	0.09363	-0.00374	-0.00519	-0.00088	0.00073	-0.00340	-0.01035	-0.00049	-0.00095	-0.00101	-0.00220

Sample Id1	Fe	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Pb I	Pb II
MIXBHIGH	-0.02207	-0.15973	-0.00450	-0.11375	9.82843	9.90202	-0.10352	9.92934	49.56521	9.89083	9.90354	9.88448
MIXAHIGH	194.12482	249.33006	9.78042	493.24672	L-0.01386	0.00150	149.48137	-0.00030	0.01252	-0.00375	L-0.01670	0.00272
MIXCHIGH	-0.00441	-0.12654	-0.00412	-0.26814	0.00369	-0.00202	-0.12738	-0.00093	0.00445	0.00375	L-0.01721	0.01421
ICV	10.14157	22.91060	0.24075	25.21436	0.50557	0.49229	23.32632	0.47369	2.50807	0.50936	0.49846	0.51480
ICB	-0.00798	-0.16347	-0.00157	-0.04191	-0.00067	-0.00055	-0.17080	-0.00109	-0.01330	-0.00139	-0.00205	-0.00107
CRI	0.20410	3.76500	0.01632	5.24838	0.03257	0.02033	4.13520	0.07929	0.19189	0.00770	0.00557	0.00876
ICSA	111.19653	-0.22310	-0.00141	274.19118	0.00213	-0.00063	-0.13453	0.00080	-0.00613	-0.00244	L-0.01218	0.00241
ICSAB	111.61853	-0.23320	1.14131	275.71317	0.49617	0.97704	-0.14312	0.92383	1.00900	0.04943	0.03499	0.05664
CCV	20.58671	49.78911	0.54200	51.03779	1.00152	0.99281	49.58516	0.96095	5.11664	1.02611	1.01174	1.03328
CCB	0.00278	-0.23096	-0.00173	-0.01349	-0.00031	0.00002	-0.15591	-0.00099	-0.01250	-0.00120	-0.00183	-0.00089
F111115-1LCS	0.97512	38.30878	0.48635	37.93310	0.49136	0.97518	37.30691	0.46995	-0.00739	0.50016	0.49198	0.50424
1111179-1	-0.00263	2.10025	0.00355	1.32663	0.00392	0.00019	H162.37611	-0.00018	-0.00329	0.00044	0.00083	0.00025
1111184-1	-0.01304	1.78263	0.00062	14.51913	0.21864	-0.00030	22.93489	-0.00015	-0.01250	0.00001	L-0.00326	0.00165
IP111116-5MB	-0.01767	-0.25116	-0.00203	-0.06541	-0.00095	-0.00145	-0.18160	-0.00168	-0.01410	-0.00100	-0.00060	-0.00119
IP111116-5LCS	0.96710	36.11845	0.49764	37.98396	0.49242	0.96678	37.05491	0.46711	-0.00841	0.50278	0.49695	0.50569
1111037-3	0.00427	0.70728	0.00810	10.47089	-0.00012	-0.00096	7.03308	-0.00045	0.01855	-0.00103	0.00192	-0.00250
1111037-3D	0.00617	0.68942	0.00803	10.45647	-0.00017	-0.00239	7.04728	-0.00096	0.02242	-0.00043	-0.00087	-0.00020
1111037-3L 5X	-0.01226	-0.09136	-0.00036	2.09121	-0.00081	-0.00055	1.09365	-0.00069	-0.00716	-0.00184	-0.00197	-0.00177
1111037-3MS	0.96536	40.04533	0.54894	48.34650	0.48071	0.95175	46.54739	0.45496	0.01935	0.49441	0.48917	0.49702
1111037-3MSD	0.96716	39.97771	0.54740	48.19673	0.47904	0.94772	46.61559	0.45805	0.01775	0.49507	0.49222	0.49649
CCV	20.50515	50.07778	0.54447	51.08141	0.99663	0.99117	49.64745	0.96336	5.15773	1.01950	1.00546	1.02651
CCB	-0.00483	-0.24854	-0.00184	-0.03453	-0.00058	-0.00083	-0.16749	-0.00168	-0.00386	-0.00154	-0.00100	-0.00182
1111040-1 10X	34.49938	76.86170	2.34788	50.27847	0.61325	0.00420	H391.14647	0.00845	-0.00317	0.00250	0.00488	0.00131
1111040-3 10X	8.51980	120.00247	3.85035	82.35382	0.40864	-0.00104	H350.84695	-0.00119	L-0.41296	-0.00300	-0.00142	L-0.00378
1111040-4 10X	11.52794	147.61461	4.85583	83.63414	0.35022	-0.00243	H351.45359	-0.00143	L-0.79325	-0.00336	L-0.00354	L-0.00327
1111040-5 10X	8.85138	134.74012	4.18098	75.18923	0.34768	-0.00128	H357.64905	-0.00149	L-0.81827	-0.00237	-0.00273	-0.00218
1111040-7 10X	34.91948	77.64272	2.30985	51.09481	0.62368	0.00477	H396.18406	0.00860	-0.12256	0.00110	-0.00159	0.00244
1111051-1 10X	5.84450	128.16476	3.93228	69.14306	0.24940	-0.00202	H369.19790	0.00248	L-0.82472	-0.00157	-0.00121	-0.00175
1111051-2 10X	6.10758	135.91788	4.14821	74.42281	0.26707	-0.00173	H366.19536	-0.00177	L-0.94490	-0.00180	-0.00165	-0.00188
1111059-9	-0.00340	-0.24268	-0.00151	-0.06407	-0.00099	-0.00153	0.01860	-0.00072	-0.04628	-0.00270	-0.00111	L-0.00349
1111059-10	-0.01607	-0.25915	-0.00166	-0.07033	-0.00113	-0.00296	-0.08731	-0.00213	-0.02752	0.00091	-0.00282	0.00276
1111078-2	0.11450	0.77647	0.00235	4.46951	0.11249	-0.00112	4.97151	0.00560	0.06781	-0.00051	0.00093	-0.00123
CCV	20.43845	50.04630	0.53172	50.96233	0.99313	0.99528	48.97894	0.98783	5.11102	1.01535	1.00245	1.02180
CCB	-0.00501	-0.26114	-0.00161	-0.03654	-0.00058	0.00031	-0.14346	-0.00106	-0.01637	0.00055	-0.00125	0.00145
1111078-8	0.09569	1.01083	0.00777	12.67813	0.00052	-0.00120	7.11256	-0.00096	-0.00465	0.00027	-0.00151	0.00117
1111078-14	-0.00971	1.03282	0.00784	12.82180	0.00029	-0.00223	7.14136	-0.00088	0.00206	-0.00134	-0.00294	-0.00054
1111078-19	3.83002	1.66532	0.00300	6.36999	0.78225	-0.00096	3.16009	0.00480	0.15739	0.00155	0.00036	0.00215
1111078-35	0.49553	2.24591	0.00606	23.26533	0.38099	-0.00165	6.88886	0.00521	-0.03081	0.00490	0.00330	0.00569
IP111117-1MB	0.03733	-0.23457	-0.00189	-0.05847	-0.00044	-0.00153	-0.16365	-0.00188	-0.01421	-0.00013	-0.00160	0.00060
IP111117-1RVS	1.03673	7.75346	0.03960	5.03062	0.05041	0.10110	8.26500	0.04936	1.00934	0.05168	0.05272	0.05117
ZZZ	1.02792	35.53066	0.47139	37.26088	0.49413	0.96765	35.94834	0.47812	9.44199	0.49466	0.48805	0.49796
1110384-1	H214.13503	14.30200	0.02372	14.86216	H10.77307	0.04861	1.06314	0.05112	2.29418	57.85451	H57.94586	H57.80891
1110384-2	H208.25198	12.74357	0.02876	18.07272	9.90129	0.06532	0.75378	0.05519	3.69016	59.51297	H59.49151	H59.52368
1110384-3	79.79178	5.49023	0.02020	15.29719	1.18870	0.00391	1.07222	0.04653	2.62660	0.44458	0.43482	0.44946
CCV	20.76334	50.30581	0.53600	51.45648	1.00605	1.00954	50.06014	1.01322	5.16335	1.03057	1.02128	1.03521
CCB	0.00118	-0.21599	-0.00149	-0.02759	-0.00021	0.00015	-0.15522	-0.00137	-0.01637	-0.00045	L-0.00373	0.00119
1110384-4	50.03558	4.75494	0.01959	12.15180	0.75905	0.00715	1.18584	0.03357	2.21030	0.10931	0.10812	0.10990
1110384-5	191.57406	15.88190	0.01199	14.47443	0.85289	0.19741	9.96588	0.11867	0.80502	29.38995	H29.45888	H29.35554
1110384-6	182.46058	4.73510	0.00664	9.42117	0.73243	0.24422	0.60491	0.09060	0.56487	25.03182	H25.08005	H25.00775
1111160-2	185.43292	46.35928	0.13542	42.14101	2.05144	0.00342	8.56749	0.10970	4.71900	0.14217	0.13125	0.14762

Sample Id1	Fe	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Pb I	Pb II
1111160-2D	173.15719	43.74308	0.13220	41.50245	1.90685	0.00301	1.93375	0.10731	4.75906	0.13517	0.12989	0.13780
1111160-2L 5X	34.28137	7.49231	0.01961	8.37843	0.42066	0.00011	1.08158	0.02243	0.92733	0.02764	0.02542	0.02874
1111160-2MS	188.42445	91.79309	0.72658	83.08846	2.37961	0.79567	43.67446	0.56945	13.99593	0.59775	0.58429	0.60447
1111160-2MSD	189.38454	95.50038	0.76231	85.35263	2.42796	0.82653	45.57038	0.59375	14.05624	0.61592	0.60080	0.62347
1111160-3	H226.73775	42.19134	0.17233	50.35944	2.19770	0.00625	1.04590	0.14210	5.09639	0.16556	0.15314	0.17177
1111160-4	H218.94144	37.02534	0.16228	49.73116	1.89056	0.00326	0.45994	0.13016	5.31127	0.20806	0.19743	0.21336
CCV	20.30477	49.57263	0.52526	50.64828	0.98702	0.99957	49.37721	0.99725	5.03379	1.00804	0.99976	1.01217
CCB	0.01069	-0.20339	-0.00165	-0.02804	-0.00031	-0.00034	-0.15895	-0.00113	-0.00625	-0.00046	-0.00237	0.00050
1111160-5	H240.29935	39.84553	0.17354	53.88682	2.25637	0.00305	0.78751	0.14105	5.58096	0.17578	0.16532	0.18100
1111160-6	94.97777	7.69132	0.05036	17.04548	1.23379	0.00027	0.09783	0.02911	1.70170	0.07597	0.07285	0.07752
1111160-7	148.17860	28.18753	0.09782	30.40824	2.36421	0.00486	0.28493	0.07052	4.15879	0.15485	0.15045	0.15704
1111160-8	159.17643	26.16999	0.10248	31.72327	2.12752	0.00309	0.33883	0.07395	3.92037	0.15424	0.14460	0.15905
1111160-9	73.35871	4.18270	0.03579	11.54652	1.63602	0.00604	0.36017	0.01064	1.45172	0.11408	0.11117	0.11554
1111160-10	79.90163	4.90764	0.03768	11.79221	1.29224	0.01202	0.06093	0.01187	1.93557	0.21159	0.21284	0.21096
1111160-11	77.43313	4.70007	0.03517	10.96085	1.30287	0.00915	0.05642	0.01040	1.86383	0.14898	0.14498	0.15098
1111160-12	92.24519	5.31215	0.04947	15.06114	2.13212	0.01476	0.95595	0.01633	1.70193	0.16749	0.16467	0.16890
1111160-13	96.20551	5.55132	0.05414	18.24584	1.14790	0.00048	0.45096	0.01475	2.07997	0.10165	0.09862	0.10316
1111160-14	166.08227	21.52576	0.07421	28.09837	2.92052	0.00346	0.36003	0.06711	3.96712	4.76306	4.76602	4.76158
CCV	19.95217	49.77104	0.52888	50.30269	0.97201	0.98618	49.44519	0.99281	5.05111	0.99292	0.99322	0.99277
CCB	0.01794	-0.23757	-0.00172	-0.02759	-0.00007	-0.00051	-0.16033	-0.00052	-0.00636	-0.00041	-0.00220	0.00048
1111160-15	H205.12295	43.83025	0.15665	48.69123	2.44937	0.00101	0.85695	0.13236	4.81865	0.26448	0.25520	0.26912
1111040-1 100X	3.56647	4.77892	0.18591	5.47695	0.06495	-0.00161	H189.28406	-0.00045	0.00262	-0.00049	-0.00203	0.00029
1111040-3 100X	0.97932	8.77651	0.35614	9.56231	0.04577	-0.00194	H283.16485	-0.00118	-0.04162	-0.00140	-0.00119	-0.00150
1111040-4 100X	1.31592	11.36570	0.47412	9.75772	0.03937	-0.00133	H280.41098	-0.00132	-0.07607	0.00055	-0.00165	0.00165
1111040-5 100X	0.98166	9.88827	0.39258	8.51880	0.03776	-0.00092	H271.77882	-0.00113	-0.07391	-0.00159	L-0.00309	-0.00084
1111040-7 100X	3.50565	4.84498	0.18863	5.47898	0.06426	-0.00083	H187.60412	-0.00045	-0.00648	-0.00108	-0.00258	-0.00034
1111051-1 100X	0.66785	9.85541	0.38263	8.00079	0.02778	-0.00182	H259.39613	0.02844	-0.06243	-0.00060	-0.00019	-0.00081
1111051-2 100X	0.64801	10.17162	0.39380	8.18926	0.02765	-0.00124	H263.15364	-0.00293	-0.06732	-0.00118	L-0.00306	-0.00024
CCV	20.42446	50.69133	0.54083	51.34891	0.99131	1.01221	49.98512	1.02423	5.16522	1.01506	1.01540	1.01489
CCB	0.00575	-0.25578	-0.00172	-0.02535	-0.00026	-0.00071	-0.15232	-0.00045	-0.01080	-0.00048	0.00082	-0.00113
IP111117-1LCS	1.01395	36.69093	0.49143	37.34970	0.48437	0.97943	36.88485	0.49855	9.44379	0.48579	0.48242	0.48747
1110384-1 10X	18.82256	0.85491	-0.00010	1.45429	1.08331	0.00449	-0.06575	0.00431	0.22286	5.24783	5.27837	5.23258
1110384-2 10X	17.48362	0.68205	0.00014	1.68614	0.95305	0.00555	-0.09193	0.00472	0.33508	4.97697	5.12823	4.90146
1110384-5 10X	15.83115	0.97834	-0.00096	1.31946	0.08101	0.01762	0.63426	0.01150	0.06440	2.59164	2.63677	2.56911
1110384-6 10X	15.02726	0.13661	-0.00134	0.85166	0.06932	0.02139	-0.10469	0.00826	0.04119	2.24992	2.29347	2.22818
1111160-3 5X	42.43797	6.84711	0.02545	10.11167	0.45378	0.00011	0.03069	0.02932	1.00751	0.03289	0.03095	0.03385
1111160-4 5X	41.68593	6.05226	0.02429	10.10154	0.39713	-0.00047	-0.05721	0.02740	1.04824	0.04148	0.03843	0.04300
1111160-5 5X	43.77559	6.29695	0.02501	10.46571	0.45262	-0.00014	-0.01225	0.02735	1.06930	0.03356	0.03149	0.03459
1111040-1 1000X	0.35629	0.07808	0.01158	0.50263	0.00576	-0.00178	19.00846	-0.00140	-0.00955	-0.00151	-0.00264	-0.00094
1111040-3 1000X	0.08843	0.35042	0.02456	0.95981	0.00397	-0.00194	32.69762	-0.00072	-0.01000	-0.00046	-0.00108	-0.00015
CCV	20.04796	49.81806	0.52983	50.63859	0.97672	0.99450	49.40902	1.00826	5.07076	1.00091	0.99732	1.00271
CCB	-0.01280	-0.28022	-0.00198	-0.06340	-0.00086	-0.00087	-0.17911	-0.00176	-0.01421	-0.00127	L-0.00389	0.00004
1111040-4 1000X	0.13092	0.50261	0.03362	0.99250	0.00351	-0.00071	32.47284	-0.00077	-0.01569	-0.00044	-0.00130	-0.00001
1111040-5 1000X	0.09153	0.40023	0.02740	0.84539	0.00314	-0.00047	31.51905	-0.00104	-0.01250	-0.00122	L-0.00409	0.00021
1111040-7 1000X	0.35224	0.05687	0.01185	0.51293	0.00586	-0.00063	19.36863	-0.00123	-0.01068	-0.00029	-0.00268	0.00090
1111051-1 1000X	0.05553	0.39336	0.02624	0.78830	0.00213	-0.00169	29.90512	0.00304	-0.02001	-0.00047	-0.00155	0.00007
1111051-2 1000X	0.04423	0.30723	0.02280	0.69717	0.00167	-0.00190	26.62638	-0.00171	-0.01864	-0.00092	L-0.00305	0.00014
1111160-2A	165.57580	81.69673	0.69875	76.73786	2.30745	0.96258	44.13355	0.59002	4.34168	0.61227	0.60842	0.61420
IP111117-2MB	0.06053	-0.27524	-0.00208	-0.05624	-0.00031	-0.00116	-0.17110	-0.00143	-0.01057	-0.00031	-0.00275	0.00092
IP111117-2RVS	1.00574	7.93829	0.03727	4.81939	0.04774	0.09578	8.21524	0.04887	0.92996	0.04820	0.04635	0.04912

Sample Id1	Fe	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Pb I	Pb II
IP111117-2LCS	0.99759	36.01730	0.46257	36.18008	0.47242	0.94846	35.66488	0.48454	-0.00670	0.47244	0.47328	0.47202
1111162-1	173.38887	16.58762	0.10237	45.93944	1.95116	0.00465	1.38016	0.09376	3.52486	0.11348	0.10794	0.11625
CCV	19.85609	48.88201	0.51731	49.95002	0.96754	0.98338	48.77364	0.99422	4.97051	0.98728	0.98389	0.98897
CCB	-0.00459	-0.23994	-0.00188	-0.05087	-0.00063	-0.00010	-0.17072	-0.00169	-0.01159	0.00002	-0.00249	0.00127
1111162-1D	179.29489	16.97459	0.10698	46.84462	2.07473	0.00481	1.46753	0.09689	3.67181	0.11578	0.11405	0.11664
1111162-1L 5X	32.73249	2.40825	0.01513	9.30413	0.40781	-0.00014	0.08792	0.01921	0.71305	0.02252	0.02113	0.02321
1111162-1MS	179.62291	61.63801	0.67851	85.53129	2.35960	0.88983	43.27234	0.56988	3.53333	0.57717	0.57535	0.57807
1111162-1MSD	185.35968	62.18868	0.68196	86.49476	2.39815	0.88736	43.45420	0.57645	3.55433	0.57834	0.57525	0.57989
1111162-2	110.17053	15.25358	0.05815	38.01165	1.72221	0.00739	0.23466	0.05468	3.14411	0.08011	0.07617	0.08208
1111162-3	114.90041	16.27336	0.06126	40.31183	1.63390	0.00531	0.23779	0.05689	3.19459	0.08329	0.08016	0.08485
1111162-4	80.85374	6.74236	0.04326	15.65799	1.38819	0.01861	0.00609	0.01472	2.06581	0.11043	0.10787	0.11171
1111162-5	72.13103	6.74777	0.03742	14.00305	1.49038	0.00600	0.04989	0.01460	2.17218	0.09073	0.09034	0.09093
1111162-6	96.34518	8.09744	0.05797	17.97226	1.88876	0.07633	0.19962	0.03364	2.38109	0.13241	0.13144	0.13290
1111162-7	86.86039	6.85895	0.04589	16.37533	1.06819	0.00817	0.01232	0.01109	1.83153	0.10704	0.10381	0.10866
CCV	19.73368	49.17781	0.52112	49.98853	0.96102	0.98219	48.91866	0.99201	5.01168	0.98537	0.98203	0.98704
CCB	0.01545	-0.23195	-0.00177	-0.03453	-0.00021	0.00093	-0.16436	-0.00098	-0.01580	-0.00047	-0.00074	-0.00034
1111162-8	110.82371	7.40234	0.05102	35.47358	1.44335	0.00404	0.23943	0.05372	2.56831	0.06626	0.06414	0.06731
1111162-9	124.72672	22.18827	0.06955	43.17946	1.58923	0.00391	0.51904	0.06638	3.87456	0.08656	0.08160	0.08904
1111162-10	82.69691	9.00212	0.03880	24.40912	1.32137	0.00154	0.09548	0.03186	2.56300	0.05780	0.05692	0.05824
1111162-11	94.45308	12.60502	0.04666	38.11173	1.64463	0.00089	0.15867	0.04782	2.78645	0.06730	0.06465	0.06862
1111162-12	109.74127	19.28546	0.06136	41.35880	1.40826	0.00027	0.18923	0.05824	3.27962	0.08246	0.07969	0.08384
1111162-13	185.90346	32.96069	0.11548	40.87492	2.04146	0.00248	0.57712	0.10152	3.43461	0.12997	0.12253	0.13368
1111162-14	191.46514	29.77558	0.12773	51.04587	2.43486	0.00318	0.69034	0.10459	4.41163	0.13394	0.12708	0.13736
1111162-15	109.36064	13.87543	0.06390	28.07424	1.44016	0.01558	0.25467	0.54504	2.67382	0.08898	0.08413	0.09140
IP111118-2MB	0.09635	-0.27174	-0.00203	-0.03744	0.00043	-0.00071	-0.18673	-0.00161	-0.01341	0.00005	-0.00024	0.00020
IP111118-2RVS	0.97117	7.70669	0.03897	4.88426	0.04733	0.09639	8.24226	0.04741	0.98314	0.04677	0.04722	0.04655
CCV	19.68984	49.29807	0.52306	50.07456	0.95962	0.97803	49.11933	0.99538	5.05625	0.98594	0.98651	0.98566
CCB	0.01087	-0.24193	-0.00180	-0.03386	-0.00021	-0.00001	-0.16312	-0.00084	-0.00727	0.00021	-0.00021	0.00042
IP111118-2LCS	0.95518	36.39430	0.49274	37.84242	0.47932	0.96971	37.22325	0.48578	-0.00966	0.49396	0.49043	0.49572
1111071-1	0.07879	1.49964	0.00428	12.84143	0.02604	0.01030	8.47676	-0.00072	0.16581	-0.00176	-0.00089	-0.00220
1111071-1D	0.07719	1.45251	0.00407	12.61001	0.02530	0.00985	8.34356	-0.00077	0.16285	-0.00079	-0.00236	0.00000
1111071-1L 5X	0.00236	0.00708	-0.00104	2.47801	0.00448	0.00035	1.34218	-0.00133	0.02139	-0.00175	-0.00154	-0.00186
1111071-1MS	1.04152	40.83984	0.53405	51.42116	0.50446	0.97803	48.10503	0.49224	0.17037	0.49606	0.49601	0.49609
1111071-1MSD	1.04824	41.18014	0.53921	51.83139	0.50973	0.99360	48.56713	0.49688	0.16741	0.49601	0.49860	0.49471
1111104-1 10X	2.30640	21.16347	2.02384	4.80099	0.07535	-0.00087	H426.08228	-0.00147	L-0.65459	0.00000	0.00131	-0.00065
1111170-1	0.18403	12.01040	-0.00137	7.53532	0.10208	-0.00047	3.74505	-0.00057	0.02799	0.00013	-0.00174	0.00105
1111171-1	0.15259	2.38672	-0.00086	18.49571	0.03243	0.00019	55.12858	-0.00104	0.06133	0.00039	-0.00088	0.00103
1111173-1	-0.01262	1.76049	0.00310	9.46214	-0.00053	-0.00030	17.07037	-0.00052	-0.02297	-0.00108	-0.00284	-0.00020
CCV	19.78916	49.26846	0.52473	50.42564	0.96735	0.98037	49.17956	0.98028	5.06480	0.99249	0.99108	0.99319
CCB	0.00302	-0.24517	-0.00183	-0.03453	-0.00035	-0.00104	-0.16260	-0.00228	-0.00841	-0.00028	-0.00265	0.00091
1111174-1	-0.01256	0.38000	0.00067	25.73215	-0.00072	-0.00108	3.40360	-0.00230	-0.00295	-0.00010	-0.00129	0.00049
1111180-1	0.38485	2.30936	0.00315	59.00613	0.37605	-0.00079	19.55041	0.00021	0.01093	-0.00117	-0.00194	-0.00078
1111181-1	-0.01042	0.06835	0.00056	25.59644	0.00006	-0.00157	41.91635	-0.00205	0.01536	-0.00039	-0.00100	-0.00008
1111182-1	-0.00994	1.06843	0.00304	24.11521	0.00250	-0.00157	23.76543	-0.00177	0.04153	-0.00095	-0.00221	-0.00031
1111183-1	0.03947	0.77997	0.00302	45.40526	0.00071	-0.00083	10.53078	-0.00149	0.00331	-0.00030	-0.00190	0.00051
1111207-1	-0.01078	1.37900	-0.00018	23.20949	-0.00072	-0.00153	4.78668	-0.00135	0.01912	0.00008	-0.00053	0.00038
1111209-1	0.00534	2.74567	0.00236	40.89052	0.03661	-0.00063	17.92669	-0.00116	0.03698	-0.00152	-0.00270	-0.00093
1111210-1	0.02121	7.45034	0.00284	47.88688	0.00135	0.00019	31.25370	-0.00086	0.00865	-0.00059	-0.00132	-0.00022
1111232-1	0.10908	0.00246	-0.00008	-0.03744	-0.00076	-0.00243	H200.18994	-0.00100	-0.00932	-0.00049	0.00063	-0.00105
1111233-1	0.23525	0.51846	-0.00099	28.33698	0.10282	-0.00178	3.51519	-0.00037	0.02208	-0.00010	-0.00284	0.00127

Sample Id1	Fe	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Pb I	Pb II
CCV	19.86248	48.85297	0.51991	50.38181	0.97099	0.97980	48.91687	0.99104	5.07837	0.99346	0.99301	0.99368
CCB	0.00278	-0.24992	-0.00191	-0.03251	-0.00040	0.00007	-0.16182	-0.00066	-0.00898	0.00050	-0.00031	0.00091
1111234-1	0.01907	5.63391	-0.00055	8.15125	0.03505	-0.00169	15.67343	0.00089	0.56362	-0.00033	L-0.00346	0.00123
1111235-1	0.24603	2.23928	0.01741	10.92999	0.04682	0.00551	H193.13667	-0.00162	0.00695	-0.00054	0.00042	-0.00102
1111260-1	0.08992	14.35845	0.01718	13.78163	0.01004	0.00641	81.15644	0.00067	2.65939	-0.00188	-0.00231	-0.00166
1111261-1	4.39809	2.53994	-0.00053	28.44628	0.53243	-0.00051	9.63695	-0.00120	0.49836	-0.00072	-0.00256	0.00020
1111162-1A	169.17966	16.26342	0.10188	45.16514	2.38132	0.96736	1.38641	0.58101	3.46430	0.59384	0.59438	0.59357
IP111118-3MB	0.00302	-0.28871	-0.00212	-0.06563	-0.00081	-0.00063	-0.18717	-0.00235	-0.01774	0.00013	-0.00228	0.00134
IP111118-3RVS	0.95949	7.71136	0.03922	4.91995	0.04747	0.09607	8.30708	0.04800	0.97891	0.04982	0.04726	0.05110
IP111118-3LCS	0.93385	36.19514	0.48869	37.65993	0.47455	0.95599	37.13559	0.48697	-0.00807	0.48563	0.48597	0.48546
1111092-9	0.00938	1.72572	0.00970	4.96709	0.03726	0.00375	20.90623	-0.00104	-0.00613	-0.00254	-0.00262	-0.00249
1111092-10	-0.01482	1.73735	0.00967	4.99133	0.03951	0.00248	20.91141	-0.00032	0.00081	0.00017	-0.00258	0.00154
CCV	19.73797	48.57610	0.51642	50.07087	0.96484	0.97737	48.72127	0.98137	5.01741	0.99133	0.98696	0.99351
CCB	0.00379	-0.24642	-0.00187	-0.03744	-0.00044	-0.00038	-0.16207	-0.00127	-0.01034	0.00085	L-0.00483	0.00369
1111106-22	-0.01625	0.81432	0.04391	16.36357	-0.00081	0.06200	H193.53172	-0.00047	-0.01512	-0.00075	-0.00112	-0.00056
1111106-22D	-0.01589	0.76423	0.04302	15.93549	-0.00021	0.06016	H186.53341	-0.00022	-0.01171	-0.00017	-0.00155	0.00052
1111106-22L 5X	-0.01732	-0.11569	0.00511	3.27364	-0.00095	0.01046	40.09154	-0.00104	-0.01398	-0.00066	0.00010	-0.00104
1111106-22MS	0.91721	49.54979	0.64450	53.21034	0.46257	1.01057	H220.10717	0.48104	-0.00852	0.48475	0.48154	0.48635
1111106-22MSD	0.91990	49.57648	0.64400	53.30299	0.46373	1.01934	H220.75517	0.48566	-0.00465	0.48295	0.48359	0.48263
1111106-35	-0.01143	-0.31515	-0.00208	-0.05154	-0.00081	-0.00010	-0.11193	-0.00138	-0.00648	-0.00009	-0.00205	0.00089
1111106-48	-0.01446	-0.29582	-0.00211	-0.06989	-0.00095	0.00015	-0.17483	-0.00103	-0.01273	-0.00023	-0.00193	0.00063
1111106-61	-0.01553	1.27975	0.03007	11.24634	-0.00081	0.00424	111.76061	-0.00152	-0.00363	0.00010	0.00109	-0.00040
1111134-1 10X	4.42059	-0.17245	0.00495	0.03283	0.06817	-0.00026	7.32078	0.00321	0.02685	-0.00046	0.00117	-0.00127
1111134-2 10X	2.66593	-0.19540	0.01219	-0.00387	0.03735	-0.00083	10.59577	-0.00064	0.18437	-0.00131	-0.00102	-0.00145
CCV	19.79072	49.07747	0.52292	50.32022	0.96512	0.98013	49.12813	0.99194	4.99823	0.98902	0.98999	0.98854
CCB	0.00201	-0.28621	-0.00199	-0.04147	-0.00040	-0.00087	-0.16431	-0.00140	-0.01102	0.00039	-0.00071	0.00093
1111134-3 10X	4.43952	-0.21062	0.00491	0.02679	0.06780	-0.00096	7.29936	0.00194	0.03220	0.00041	-0.00080	0.00102
1111161-1 10X	1.78527	-0.00515	0.07149	0.17405	0.01946	-0.00165	43.73995	-0.00032	0.08625	-0.00004	-0.00248	0.00118
1111161-2 10X	2.00318	1.05156	0.35157	0.58076	0.02406	-0.00137	H156.99668	-0.00076	-0.11211	-0.00022	-0.00149	0.00041
1111161-3 10X	2.79822	-0.20788	0.00286	-0.03050	0.02434	0.00187	3.48278	-0.00008	-0.01580	-0.00028	0.00000	-0.00042
1111161-4 10X	1.76206	-0.00702	0.07091	0.17069	0.01919	-0.00161	43.59209	-0.00086	0.08033	-0.00118	-0.00098	-0.00128
1111172-1	-0.01262	3.52903	0.02385	73.20514	0.00811	0.00694	33.19632	-0.00096	-0.01921	-0.00139	L-0.00481	0.00032
1111172-2	0.02847	1.14753	0.00355	6.67512	0.00149	0.00764	78.91210	0.00397	-0.00841	0.00159	0.00162	0.00158
1111172-3	0.01021	3.44968	0.03961	97.36969	0.00016	0.00371	130.17772	0.00016	-0.02263	0.00127	-0.00129	0.00255
1111172-4	0.04483	3.39816	0.02461	57.35845	-0.00067	0.00612	43.82851	-0.00081	-0.01967	-0.00046	-0.00132	-0.00003
1111172-5	1.20664	9.82861	0.05960	307.22770	0.00241	0.01153	H296.55721	0.25819	-0.01876	-0.00034	-0.00220	0.00059
CCV	19.73273	49.32409	0.52619	50.48355	0.96223	0.97910	49.29976	0.99376	5.03239	0.99008	0.99010	0.99006
CCB	0.00165	-0.27761	-0.00199	-0.02356	-0.00044	-0.00026	-0.14768	-0.00138	-0.01341	-0.00071	L-0.00409	0.00098
1111172-6	1.21366	9.74910	0.05908	299.29077	0.00406	0.00993	H288.16496	0.25315	-0.01307	-0.00024	-0.00072	0.00000
1111172-10	0.05916	2.51979	0.01987	48.75692	-0.00021	0.00739	50.68266	0.03266	-0.01694	0.00006	-0.00114	0.00066
1111104-1 500X	0.03204	-0.12093	0.02397	0.11743	0.00052	-0.00235	16.63845	-0.00232	-0.02467	0.00029	L-0.00484	0.00285
1111232-1 5X	0.00754	-0.30293	-0.00191	-0.04863	-0.00099	-0.00186	41.54285	-0.00104	-0.01705	0.00053	-0.00082	0.00120
1111235-1 5X	0.03579	0.06286	0.00092	2.19743	0.00861	0.00048	40.60415	-0.00071	-0.00886	-0.00086	L-0.00343	0.00042
1111238-1 5X	-0.01738	62.67949	-0.00193	22.42928	-0.00053	-0.00133	H296.25812	-0.00133	-0.00818	-0.00064	-0.00056	-0.00068
1111238-3 5X	-0.01767	48.63804	-0.00197	18.49910	-0.00076	-0.00231	H226.31251	-0.00203	-0.01102	-0.00086	L-0.00384	0.00063
1111238-3L 25X	-0.01904	7.43648	-0.00212	3.73699	-0.00104	-0.00100	49.23102	-0.00108	-0.00886	-0.00012	L-0.00349	0.00156
1111238-3A 5X	-0.01607	91.96081	0.59245	54.93430	0.00057	-0.00178	H252.30849	-0.00101	-0.01125	-0.00020	-0.00107	0.00023
1111106-22 5X	-0.01809	-0.10995	0.00499	3.24315	-0.00104	0.01087	39.48559	-0.00127	-0.01466	-0.00111	-0.00280	-0.00027
CCV	19.72539	49.60118	0.52912	50.43880	0.96097	0.97790	49.32003	0.99535	4.97004	0.98821	0.98900	0.98782
CCB	-0.01321	-0.31989	-0.00215	-0.06205	-0.00095	-0.00108	-0.17928	-0.00216	-0.01444	-0.00092	-0.00163	-0.00057

Sample Id1	Fe	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Pb I	Pb II
1111106-22D 5X	-0.00965	-0.12180	0.00522	3.27364	-0.00049	0.01099	39.73097	-0.00013	-0.00773	0.00061	0.00051	0.00066
1111106-22L 25X	-0.01541	-0.25528	-0.00094	0.61703	-0.00086	0.00138	7.47138	-0.00006	-0.00568	0.00048	-0.00150	0.00147
1111106-22MS 5X	0.17867	7.62413	0.10152	10.80990	0.09555	0.20614	47.89911	0.10068	-0.01614	0.09850	0.09568	0.09991
1111106-22MSD 5X	0.17909	7.58191	0.10063	10.80585	0.09592	0.20749	47.85269	0.10258	-0.01137	0.09897	0.10060	0.09816
1111134-1	47.46374	4.61331	0.10116	0.99496	0.68748	0.00404	94.36589	0.03090	0.47589	0.00205	0.00225	0.00195
1111134-2	28.11546	3.96416	0.21053	0.63650	0.38187	0.00285	128.16128	0.00352	2.05660	0.00132	-0.00003	0.00200
1111134-3	47.70800	4.25297	0.10094	0.98086	0.68772	0.00441	93.23777	0.03281	0.49391	0.00256	0.00110	0.00329
1111161-3	29.51618	1.18777	0.06627	0.28417	0.25258	0.03056	41.04148	0.00413	0.08716	-0.00058	0.00010	-0.00091
1111172-5 10X	0.12456	0.29612	0.00223	29.03511	-0.00063	-0.00014	33.89894	0.02635	-0.02137	-0.00146	-0.00226	-0.00105
1111238-1 25X	-0.01488	9.88107	-0.00202	4.64545	-0.00095	-0.00161	73.41841	-0.00161	-0.00659	-0.00016	-0.00031	-0.00008
CCV	19.64466	49.58724	0.52913	50.22034	0.95608	0.97366	49.42609	0.99439	5.06386	0.98627	0.98883	0.98500
CCB	-0.00941	-0.29482	-0.00204	-0.04818	-0.00067	-0.00001	-0.17364	-0.00094	-0.00909	0.00004	0.00170	-0.00079
1111238-3 25X	-0.01244	7.50604	-0.00196	3.77243	-0.00076	-0.00051	49.57905	-0.00071	-0.00807	0.00003	-0.00171	0.00089
1111238-3L 125X	-0.01541	0.92974	-0.00214	0.70434	-0.00090	-0.00128	9.23769	-0.00122	-0.01205	-0.00209	L-0.00432	-0.00098
1111238-3A 25X	-0.01613	47.88348	0.52308	40.53477	0.00025	-0.00243	89.40303	-0.00240	-0.01626	-0.00092	L-0.00636	0.00179
1111172-6 10X	0.12003	0.35803	0.00256	30.16341	-0.00040	-0.00034	36.25530	0.02840	-0.02069	-0.00085	-0.00132	-0.00061
1111106-22A	0.90930	51.89447	0.67101	55.04164	0.46021	1.00447	H218.34246	0.48390	-0.06174	0.47075	0.47857	0.46685
CRI	0.19100	3.75396	0.01523	5.18462	0.03082	0.02131	4.21679	0.08321	0.18460	0.00718	0.00606	0.00774
ICSA	105.05472	-0.30367	-0.00181	270.19279	0.00052	-0.00128	-0.14892	-0.00010	0.00172	-0.00099	L-0.01424	0.00563
ICSAB	105.47090	-0.26625	1.06931	269.00427	0.47067	0.95822	-0.15705	0.95921	0.98429	0.04795	0.03665	0.05359
CCV	19.70065	49.19546	0.52392	50.31953	0.95691	0.97329	49.24112	0.99291	5.01835	0.98069	0.98349	0.97929
CCB	0.01509	-0.27835	-0.00188	0.01672	-0.00053	-0.00051	-0.16434	-0.00125	-0.00932	-0.00226	L-0.00668	-0.00004

Sample Id1	S	Sb	Se	Se I	Se II	Si	Sn	Sr	Th	Ti	Tl	U
MIXBHIGH	-0.00023	1.99849	4.96340	4.98130	4.95447	49.63273	9.94090	9.95307	1.97721	9.88603	H5.00749	-0.08923
MIXAHIGH	0.00136	0.00723	-0.00607	L-0.02381	0.00279	-0.01626	0.00309	0.00569	-0.03272	-0.00142	0.00449	0.11053
MIXCHIGH	49.64920	0.00120	-0.00129	-0.00298	-0.00044	L-0.05564	0.02008	-0.00296	0.10399	0.00525	0.00379	49.78764
ICV	2.55499	0.23934	0.51709	0.51113	0.52007	2.54802	0.51504	0.24912	0.14226	0.25080	0.25225	2.45383
ICB	-0.03195	-0.00055	-0.00051	L-0.00513	0.00180	-0.01504	-0.00264	-0.00176	-0.01075	-0.00300	-0.00289	-0.03295
CRI	0.19966	0.11830	0.01255	0.01540	0.01113	0.10691	0.09935	0.02048	0.00420	0.01981	0.02398	0.18215
ICSA	0.03150	-0.00213	-0.00143	L-0.01828	0.00699	-0.01993	0.00247	-0.00033	-0.03702	-0.00077	0.00345	0.03242
ICSAB	1.10119	0.58046	0.05040	0.03859	0.05629	0.98769	1.05198	1.02251	0.00566	0.98929	0.10271	10.27392
CCV	5.29604	0.50306	1.06671	1.06385	1.06813	5.16204	1.05193	0.51799	0.30860	0.50608	0.53525	5.11756
CCB	-0.03195	-0.00084	-0.00091	-0.00318	0.00023	-0.01131	-0.00162	-0.00155	-0.00373	-0.00280	-0.00054	-0.03330
F111115-1LCS	-0.02402	0.48310	2.03927	2.02367	2.04706	2.04419	0.51168	0.50569	-0.02935	0.49200	2.08138	-0.05284
1111179-1	42.37807	-0.00354	0.00240	0.00275	0.00223	4.59823	0.00043	0.28550	-0.00414	-0.00257	0.00043	-0.03432
1111184-1	3.43293	-0.00127	-0.00278	-0.00274	-0.00280	4.23998	0.00043	1.14048	-0.01569	-0.00312	-0.00046	-0.04084
IP111116-5MB	-0.02878	-0.00312	-0.00270	-0.00482	-0.00165	-0.01573	0.00104	-0.00191	-0.00817	-0.00305	0.00211	-0.03534
IP111116-5LCS	-0.01926	0.48190	2.16020	2.13913	2.17072	2.07415	0.51168	0.50042	-0.03037	0.49211	2.09193	-0.03876
1111037-3	6.74562	-0.00410	0.00137	0.00092	0.00159	9.81523	-0.00121	0.16712	-0.01757	-0.00236	0.00676	-0.03845
1111037-3D	6.75201	-0.00215	0.00144	0.00609	-0.00088	9.81555	0.00002	0.16732	-0.01473	-0.00253	-0.00033	-0.03639
1111037-3L 5X	1.32510	-0.00201	-0.00232	0.00162	-0.00429	1.98910	0.00166	0.03305	-0.00664	-0.00282	0.00369	-0.03603
1111037-3MS	6.67063	0.47880	2.13601	2.12943	2.13929	11.63578	0.50636	0.66628	-0.03409	0.48215	2.08714	-0.04562
1111037-3MSD	6.60840	0.48223	2.15246	2.13366	2.16184	11.64792	0.50821	0.67146	-0.03620	0.48093	2.08452	-0.04871
CCV	5.36138	0.50520	1.06304	1.06616	1.06148	5.16279	1.05007	0.52013	0.31136	0.50456	0.54515	5.12243
CCB	-0.03512	-0.00342	-0.00228	-0.00279	-0.00203	-0.01220	-0.00182	-0.00169	-0.00376	-0.00286	-0.00141	-0.02952
1111040-1 10X	3.41225	-0.00176	-0.00055	0.00009	-0.00088	2.02267	0.00330	H37.97365	-0.02039	-0.00501	0.00253	-0.02418
1111040-3 10X	6.60202	-0.00257	-0.00119	-0.00212	-0.00073	1.63065	-0.00202	H46.79168	-0.03920	-0.00739	0.00307	-0.06141
1111040-4 10X	0.53289	-0.00368	-0.00312	-0.00487	-0.00225	0.55187	-0.00284	H52.36942	-0.04093	-0.00726	0.00574	-0.06140
1111040-5 10X	0.92496	-0.00508	-0.00369	L-0.00507	-0.00301	0.39839	-0.00162	H49.62221	-0.04074	-0.00666	0.00092	-0.06987
1111040-7 10X	3.37088	-0.00249	0.00002	L-0.00673	0.00338	2.04455	0.00228	H37.68866	-0.03176	-0.00540	-0.00150	-0.04643
1111051-1 10X	0.31232	-0.00190	-0.00227	-0.00231	-0.00225	0.08891	-0.00141	H50.59978	-0.04412	-0.00659	0.00410	-0.06439
1111051-2 10X	0.33136	-0.00238	-0.00451	-0.00386	-0.00484	0.10337	-0.00141	H51.67734	-0.03499	-0.00643	0.00351	-0.06766
1111059-9	-0.03354	-0.00367	-0.00386	-0.00273	-0.00441	-0.01612	-0.00572	0.00363	-0.00045	-0.00281	0.00469	-0.03089
1111059-10	-0.02878	-0.00429	-0.00115	-0.00306	-0.00020	-0.01748	0.00104	-0.00073	-0.00131	-0.00302	0.00057	-0.05216
1111078-2	3.86898	-0.00185	-0.00265	L-0.00666	-0.00064	9.75861	-0.00490	0.08274	-0.00691	0.00383	0.00101	-0.02994
CCV	5.33429	0.50204	1.05269	1.05546	1.05131	5.13370	1.05708	0.51222	0.30807	0.49976	0.52493	5.09599
CCB	-0.03671	-0.00114	0.00001	0.00111	-0.00054	-0.01522	-0.00428	-0.00171	-0.00355	-0.00281	-0.00442	-0.03501
1111078-8	6.60840	-0.00397	0.00068	0.00147	0.00029	9.17191	-0.00121	0.21591	-0.01983	-0.00365	0.00352	-0.04400
1111078-14	6.66584	-0.00331	-0.00218	-0.00155	-0.00250	9.27850	-0.00551	0.21764	-0.01298	-0.00358	0.00057	-0.05457
1111078-19	7.15101	-0.00321	-0.00077	-0.00047	-0.00091	16.62426	-0.00089	0.11012	-0.00584	0.24715	-0.00057	-0.02835
1111078-35	12.69387	-0.00195	-0.00004	-0.00247	0.00118	4.18434	0.00186	0.30071	-0.02391	-0.00276	0.00322	-0.02299
IP111117-1MB	-0.02402	-0.00472	-0.00209	-0.00350	-0.00138	-0.01093	0.00227	-0.00177	-0.00185	-0.00279	-0.00110	-0.03538
IP111117-1RVS	1.03610	0.09316	0.05217	0.05075	0.05288	0.27932	0.10280	0.04838	-0.01171	0.04764	0.10457	0.48679
ZZZ	9.76230	0.46735	1.90049	1.89389	1.90379	1.45103	0.51497	0.49533	-0.04051	0.48931	2.01480	9.91017
1110384-1	2.62813	0.00871	0.00401	L-0.02357	0.01779	14.37957	0.00652	0.32960	0.17947	0.39871	0.00521	0.11476
1110384-2	2.53432	0.00435	0.00758	L-0.01474	0.01872	12.44720	0.00604	0.37804	0.17795	0.63488	0.00755	0.11361
1110384-3	19.28568	0.00727	0.00193	L-0.00876	0.00727	16.69345	0.02392	1.10264	0.02429	0.40295	0.00624	-0.01279
CCV	5.34226	0.50660	1.06764	1.06943	1.06675	5.17714	1.08260	0.51854	0.32125	0.50260	0.54116	5.11194
CCB	-0.03354	-0.00525	0.00056	-0.00381	0.00274	-0.01427	-0.00060	-0.00157	0.00005	-0.00256	-0.00207	-0.03501
1110384-4	23.09879	0.00179	0.00238	-0.00456	0.00585	11.60040	0.00565	1.26528	0.01635	0.26053	-0.00042	-0.00935
1110384-5	1.34416	0.00860	0.00851	L-0.01694	0.02122	0.80172	0.00154	0.15162	0.02235	1.15197	0.01031	0.03537
1110384-6	2.08608	0.00448	0.01130	L-0.00718	0.02053	6.16540	0.00955	0.16746	0.02269	0.78099	0.00617	0.01891
1111160-2	7.86477	-0.00141	0.02006	L-0.00698	0.03356	0.67566	0.00783	0.67957	0.09389	0.14526	0.01093	0.31282

Sample Id1	S	Sb	Se	Se I	Se II	Si	Sn	Sr	Th	Ti	Tl	U
1111160-2D	7.73061	-0.00023	0.02157	-0.00497	0.03482	0.78891	0.01008	0.65457	0.08634	0.14909	0.00613	0.30951
1111160-2L 5X	1.50775	-0.00151	0.00433	0.00155	0.00572	0.12896	-0.00145	0.13666	0.01628	0.02685	0.00262	0.02918
1111160-2MS	16.74781	0.16148	1.89492	1.87706	1.90384	1.10385	0.49835	1.18808	0.06535	0.30618	1.94842	9.84770
1111160-2MSD	17.73329	0.16846	1.97017	1.95950	1.97550	1.19070	0.52074	1.21266	0.06386	0.29868	2.05568	10.37814
1111160-3	4.64759	0.00374	0.00678	L-0.01740	0.01885	16.14806	0.00751	0.79698	0.13052	0.42514	0.01447	0.05537
1111160-4	4.32589	0.00118	0.00214	L-0.02279	0.01459	10.54170	0.01440	0.67688	0.13113	0.31559	0.01236	0.06411
CCV	5.25141	0.50807	1.04681	1.04320	1.04861	5.08471	1.05256	0.51028	0.30875	0.49186	0.53556	5.02454
CCB	-0.02402	-0.00495	-0.00190	L-0.00538	-0.00015	-0.01580	0.00227	-0.00159	-0.00511	-0.00294	-0.00071	-0.03124
1111160-5	5.46339	0.00214	0.00232	L-0.02580	0.01636	10.10105	0.00989	0.77321	0.13440	0.31875	0.01217	0.06570
1111160-6	16.47582	-0.00129	0.10784	0.09896	0.11227	4.91344	-0.00060	0.28501	0.04701	0.17641	0.00487	0.45544
1111160-7	22.17507	-0.00189	0.10671	0.08870	0.11570	8.03459	0.00626	0.45716	0.06905	0.26862	0.00523	1.12489
1111160-8	21.12606	0.00075	0.07823	0.05702	0.08882	7.40827	0.00505	0.47499	0.07995	0.25240	0.00684	0.95187
1111160-9	35.87952	-0.00159	0.08796	0.07767	0.09310	4.54584	0.00467	0.34460	0.02855	0.22725	-0.00020	3.46793
1111160-10	23.47754	-0.00340	0.08726	0.07956	0.09110	4.84712	0.00427	0.19510	0.03248	0.21862	0.00679	3.00633
1111160-11	24.26943	-0.00464	0.08440	0.07173	0.09073	4.17450	0.00431	0.19343	0.04616	0.18319	0.00340	2.79838
1111160-12	37.08080	-0.00079	0.08011	0.07361	0.08335	5.41068	0.00711	0.39241	0.07769	0.24148	0.00139	7.36607
1111160-13	22.97742	-0.00176	0.07829	0.06979	0.08253	3.41291	0.00661	0.52989	0.04531	0.14226	0.00489	1.65247
1111160-14	H65.04280	0.00299	0.07015	0.05136	0.07952	7.33652	0.00505	0.34992	0.04363	0.24869	0.00809	0.88947
CCV	5.20679	0.50532	1.04597	1.05056	1.04368	5.03412	1.05113	0.51074	0.30317	0.48557	0.52754	5.03269
CCB	-0.02719	-0.00281	0.00293	0.00559	0.00159	-0.01528	-0.00510	-0.00155	0.00281	-0.00272	-0.00066	-0.03537
1111160-15	4.97256	0.00016	0.01118	L-0.02357	0.02852	10.22681	0.01155	0.68786	0.10483	0.30039	0.00984	0.21256
1111040-1 100X	0.27582	-0.00098	-0.00067	-0.00416	0.00108	0.19285	-0.00408	5.14802	-0.00548	-0.00337	0.00308	-0.03469
1111040-3 100X	0.57416	-0.00171	-0.00423	L-0.00758	-0.00256	0.15565	-0.00326	8.95585	-0.00874	-0.00338	-0.00340	-0.03259
1111040-4 100X	0.01088	-0.00274	-0.00438	L-0.00631	-0.00342	0.04009	-0.00203	H13.72249	-0.01020	-0.00333	0.00058	-0.04724
1111040-5 100X	0.05212	-0.00238	-0.00417	L-0.00518	-0.00366	0.02554	-0.00490	H10.41484	-0.00692	-0.00329	0.00260	-0.02882
1111040-7 100X	0.27741	-0.00336	-0.00276	L-0.00523	-0.00153	0.18389	-0.00469	5.16946	-0.00317	-0.00332	-0.00130	-0.03809
1111051-1 100X	-0.00340	-0.00492	-0.00169	-0.00238	-0.00134	-0.00681	-0.00531	H11.07674	-0.00680	-0.00353	-0.00399	-0.04782
1111051-2 100X	-0.00181	-0.00385	-0.00333	L-0.00553	-0.00224	-0.00582	-0.00039	H11.34942	-0.00082	-0.00339	-0.00059	-0.03545
CCV	5.34863	0.51660	1.06777	1.08125	1.06104	5.12552	1.07623	0.52198	0.31999	0.49306	0.54804	5.12971
CCB	-0.03195	-0.00134	-0.00312	L-0.00564	-0.00186	-0.01750	-0.00285	-0.00135	0.00729	-0.00265	0.00084	-0.03090
IP111117-1LCS	9.73830	0.48556	1.92558	1.94774	1.91451	1.67408	0.52484	0.51125	-0.02961	0.47649	2.09764	10.12625
1110384-1 10X	0.22664	-0.00059	-0.00111	-0.00469	0.00067	1.21235	-0.00474	0.03239	0.02463	0.03580	0.00198	-0.02998
1110384-2 10X	0.20284	-0.00249	-0.00131	L-0.00831	0.00219	1.03774	0.00036	0.03538	0.02094	0.05643	-0.00189	-0.02186
1110384-5 10X	0.09020	-0.00229	-0.00255	L-0.00882	0.00058	0.04407	-0.00380	0.01292	0.00927	0.10685	0.00158	-0.02691
1110384-6 10X	0.16159	-0.00381	-0.00272	L-0.00558	-0.00129	0.48724	-0.00089	0.01480	0.00588	0.07173	-0.00171	-0.03598
1111160-3 5X	0.88844	0.00028	-0.00053	L-0.00733	0.00286	2.71876	-0.00069	0.16082	0.02900	0.07597	0.00247	-0.01173
1111160-4 5X	0.84241	-0.00168	-0.00223	L-0.01255	0.00292	1.93843	0.00220	0.13784	0.03046	0.05997	0.00109	-0.01946
1111160-5 5X	1.01069	-0.00173	-0.00067	L-0.00699	0.00249	1.80263	0.00077	0.15214	0.02577	0.05938	0.00477	-0.02122
1111040-1 1000X	-0.00498	-0.00446	-0.00225	-0.00480	-0.00098	-0.00278	-0.00162	0.52489	0.00212	-0.00305	0.00078	-0.04281
1111040-3 1000X	0.02040	-0.00208	-0.00125	0.00003	-0.00188	-0.00696	-0.00141	0.94749	0.00123	-0.00316	-0.00068	-0.03713
CCV	5.25938	0.50977	1.04557	1.05492	1.04090	5.03584	1.06595	0.51322	0.32344	0.48564	0.53895	5.01061
CCB	-0.03036	-0.00440	-0.00005	-0.00255	0.00121	-0.02481	-0.00121	-0.00193	0.00568	-0.00311	-0.00112	-0.04221
1111040-4 1000X	-0.02878	-0.00244	-0.00075	-0.00244	0.00008	-0.01503	-0.00326	1.48292	0.00331	-0.00287	-0.00151	-0.03613
1111040-5 1000X	-0.02243	-0.00323	-0.00234	L-0.00685	-0.00009	-0.01793	-0.00121	1.10888	0.00462	-0.00303	-0.00078	-0.04057
1111040-7 1000X	-0.00340	-0.00176	-0.00035	0.00056	-0.00081	-0.00253	-0.00244	0.53429	0.00842	-0.00303	-0.00302	-0.03628
1111051-1 1000X	-0.03354	-0.00355	-0.00148	-0.00048	-0.00197	-0.02387	0.00063	1.17886	0.00385	-0.00315	0.00241	-0.03951
1111051-2 1000X	-0.03036	-0.00263	-0.00066	-0.00357	0.00079	-0.02348	-0.00756	1.05153	0.00588	-0.00304	0.00030	-0.04294
1111160-2A	7.11429	0.49891	2.19525	2.19532	2.19522	10.03314	0.52806	1.11027	0.13740	0.71233	2.08317	0.28103
IP111117-2MB	-0.03671	-0.00416	-0.00135	L-0.00515	0.00054	-0.01552	-0.00203	-0.00180	0.00752	-0.00302	-0.00550	-0.04569
IP111117-2RVS	0.94877	0.09289	0.04425	0.04090	0.04593	0.25293	0.09911	0.04825	0.00079	0.04471	0.09508	0.46827

Sample Id1	S	Sb	Se	Se I	Se II	Si	Sn	Sr	Th	Ti	Tl	U
IP111117-2LCS	-0.02085	0.46440	1.81563	1.82785	1.80953	1.58262	0.50884	0.49355	-0.02160	0.46576	2.03055	-0.04874
1111162-1	9.72390	0.00025	0.00826	L-0.01484	0.01980	7.56090	0.00283	0.69702	0.09986	0.21790	0.00260	0.15143
CCV	5.14624	0.50069	1.02826	1.03622	1.02429	4.96312	1.05525	0.50283	0.31130	0.47901	0.53153	4.89828
CCB	-0.03829	-0.00274	-0.00112	-0.00450	0.00057	-0.02488	-0.00551	-0.00179	0.00217	-0.00295	0.00373	-0.03535
1111162-1D	12.22240	-0.00019	0.00413	L-0.02392	0.01814	7.24879	0.01022	0.72435	0.10219	0.20791	0.00308	0.15427
1111162-1L 5X	1.94782	-0.00222	0.00182	-0.00365	0.00456	0.62675	0.00019	0.14234	0.02922	0.02590	0.00191	0.00483
1111162-1MS	10.78830	0.30088	1.84014	1.84350	1.83846	10.37950	0.50396	1.21068	0.09005	0.42252	2.00681	0.15679
1111162-1MSD	9.30962	0.30274	1.83299	1.81127	1.84383	9.75874	0.50131	1.21434	0.09624	0.40737	2.00568	0.16456
1111162-2	4.67785	0.00019	0.02888	0.01591	0.03536	3.77316	0.00042	0.35355	0.06304	0.18337	0.00037	0.26760
1111162-3	4.25742	-0.00218	0.02002	0.00120	0.02942	3.40099	0.00349	0.35611	0.05632	0.18536	0.00137	0.24343
1111162-4	11.20153	-0.00086	0.09934	0.08714	0.10543	2.53764	0.00174	0.19827	0.04787	0.10028	0.00379	1.59525
1111162-5	15.24059	-0.00281	0.19421	0.18745	0.19759	3.67278	0.00106	0.16980	0.03603	0.15826	0.00573	1.11519
1111162-6	13.84290	0.00102	0.20100	0.18977	0.20660	2.34470	0.00194	0.45231	0.04388	0.10661	0.00447	3.45400
1111162-7	11.85529	-0.00273	0.12540	0.10959	0.13330	2.52890	0.00172	0.10885	0.03802	0.11846	0.00010	1.25731
CCV	5.18608	0.49915	1.02853	1.03156	1.02702	4.95415	1.04846	0.50438	0.30277	0.47768	0.53100	4.93826
CCB	-0.03195	-0.00084	0.00057	0.00048	0.00062	-0.02128	-0.00264	-0.00162	0.00350	-0.00288	0.00059	-0.03365
1111162-8	2.72989	-0.00063	0.00207	L-0.01062	0.00840	1.94173	0.00188	0.36507	0.05550	0.16048	0.00690	0.09310
1111162-9	3.93583	-0.00023	0.00623	L-0.01220	0.01544	3.12993	0.00515	0.40242	0.06330	0.16603	0.00375	0.08466
1111162-10	4.10776	0.00156	0.01877	0.01101	0.02264	3.69563	0.00450	0.19639	0.04782	0.19010	0.00496	0.12083
1111162-11	2.24024	-0.00024	0.00282	L-0.00555	0.00701	5.45009	0.00263	0.29708	0.04504	0.21503	-0.00023	0.00263
1111162-12	2.52319	0.00053	0.00272	L-0.01257	0.01036	3.48203	0.00062	0.28852	0.05954	0.18216	0.00630	0.02414
1111162-13	3.96449	-0.00216	0.00223	L-0.02354	0.01509	3.83125	0.00393	0.51324	0.10419	0.15388	0.00458	0.03236
1111162-14	5.71207	0.00182	0.00277	L-0.02614	0.01720	4.12839	0.00247	0.62820	0.10010	0.17906	0.00087	0.03475
1111162-15	5.14783	-0.00163	0.02523	0.00435	0.03566	2.82321	-0.00035	0.32760	0.06928	0.13790	-0.00267	0.59947
IP111118-2MB	-0.03195	-0.00250	-0.00212	-0.00199	-0.00218	-0.02109	0.00330	-0.00160	0.00435	-0.00292	-0.00218	-0.03645
IP111118-2RVS	1.00593	0.09554	0.05337	0.05377	0.05316	0.27289	0.09993	0.04810	0.00106	0.04482	0.10323	0.46589
CCV	5.19245	0.50610	1.03330	1.04218	1.02886	4.96673	1.04599	0.50656	0.31235	0.47669	0.53770	4.93794
CCB	-0.03354	-0.00170	0.00116	0.00029	0.00159	-0.01831	-0.00142	-0.00161	0.00418	-0.00262	-0.00191	-0.03468
IP111118-2LCS	-0.03829	0.49126	2.15666	2.17627	2.14686	2.03747	0.51683	0.50235	-0.01933	0.47787	2.10469	-0.05386
1111071-1	10.44407	-0.00376	-0.00221	-0.00388	-0.00138	3.19613	-0.00039	0.13405	-0.01056	-0.00116	0.00173	-0.03095
1111071-1D	10.19756	-0.00351	-0.00255	L-0.00584	-0.00091	3.13586	-0.00101	0.13201	-0.00652	-0.00131	-0.00163	-0.03438
1111071-1L 5X	2.00026	-0.00267	-0.00020	-0.00027	-0.00016	0.61078	-0.00162	0.02512	0.00065	-0.00277	-0.00621	-0.03227
1111071-1MS	10.39604	0.49677	2.17546	2.19354	2.16642	5.21358	0.52012	0.64155	-0.01793	0.47671	2.13583	-0.04018
1111071-1MSD	10.46808	0.49936	2.18765	2.21254	2.17522	5.26003	0.52422	0.64886	-0.03419	0.48227	2.15045	-0.04122
1111104-1 10X	1.83978	-0.00354	-0.00025	-0.00181	0.00052	1.99087	-0.00408	H12.33614	-0.00325	-0.00273	0.00281	-0.03658
1111170-1	12.65698	-0.00397	-0.00160	-0.00244	-0.00118	5.86440	-0.00305	0.04760	-0.00373	-0.00286	-0.00147	-0.03685
1111171-1	34.77584	-0.00506	-0.00272	L-0.00554	-0.00132	6.52201	-0.00224	0.09898	-0.01713	0.00056	0.00160	-0.04507
1111173-1	8.77238	-0.00170	0.00139	0.00287	0.00065	11.10802	-0.00387	0.13297	-0.00653	-0.00313	-0.00078	-0.04427
CCV	5.25620	0.50194	1.04206	1.04914	1.03852	5.02450	1.05154	0.50619	0.30879	0.48622	0.52750	4.98431
CCB	-0.03829	-0.00483	0.00065	0.00105	0.00044	-0.01864	-0.00121	-0.00165	-0.00018	-0.00284	0.00194	-0.03192
1111174-1	8.64291	-0.00483	0.00144	0.00489	-0.00029	5.90449	-0.00367	0.09772	-0.02002	-0.00312	-0.00058	-0.04496
1111180-1	46.64182	-0.00348	0.00159	0.00390	0.00043	8.26772	0.00227	0.41076	-0.02986	-0.00345	-0.00099	-0.03562
1111181-1	26.81550	-0.00519	0.00277	0.00565	0.00133	8.46422	0.00207	0.10710	-0.01670	-0.00299	0.00143	-0.03912
1111182-1	14.65721	-0.00091	0.00025	-0.00066	0.00070	7.65565	0.00002	0.18466	-0.01666	-0.00310	0.00113	-0.03638
1111183-1	10.61858	-0.00219	0.00361	0.00552	0.00266	8.72414	0.00043	0.17508	-0.03621	-0.00358	0.00040	-0.04328
1111207-1	7.16218	-0.00098	-0.00091	-0.00292	0.00010	7.80964	-0.00203	0.15015	-0.01504	-0.00303	-0.00087	-0.02711
1111209-1	33.11816	-0.00225	0.00009	0.00092	-0.00032	6.82260	0.00104	0.19357	-0.02453	-0.00294	-0.00111	-0.04222
1111210-1	42.54091	-0.00304	0.00280	0.00129	0.00356	6.41539	-0.00039	0.19198	-0.03558	-0.00349	-0.00587	-0.04601
1111232-1	8.90826	-0.00221	0.00134	0.00072	0.00166	7.17306	0.00084	-0.00175	0.00315	-0.00250	0.00478	-0.03440
1111233-1	7.48308	-0.00392	-0.00006	-0.00372	0.00177	6.17138	-0.00080	0.12120	-0.02442	-0.00296	0.00210	-0.04272

Sample Id1	S	Sb	Se	Se I	Se II	Si	Sn	Sr	Th	Ti	Tl	U
CCV	5.26257	0.49920	1.03184	1.03962	1.02795	5.01909	1.05504	0.50546	0.31411	0.48467	0.53277	4.94333
CCB	-0.03988	-0.00256	-0.00228	-0.00286	-0.00199	-0.01889	-0.00142	-0.00167	0.00121	-0.00278	0.00174	-0.03089
1111234-1	9.66791	-0.00361	-0.00075	-0.00288	0.00032	5.69515	-0.00039	0.14043	-0.00445	-0.00100	-0.00166	-0.04738
1111235-1	20.73675	-0.00196	-0.00113	0.00083	-0.00211	4.38261	0.00412	0.15504	-0.00935	-0.00281	0.00180	-0.03655
1111260-1	H50.23666	-0.00109	0.00111	0.00293	0.00020	4.78383	-0.00101	0.41839	-0.00729	-0.00324	-0.00023	-0.03782
1111261-1	0.12034	-0.00293	0.00216	0.00211	0.00218	6.81769	0.00248	0.20849	-0.02049	-0.00311	0.00071	-0.03801
1111162-1A	9.63272	0.48980	2.01745	2.01815	2.01710	8.97435	0.52195	1.19463	0.10233	0.66690	2.05732	0.13575
IP111118-3MB	-0.02878	-0.00238	0.00104	0.00061	0.00125	-0.01977	-0.00203	-0.00191	0.00380	-0.00271	0.00209	-0.03261
IP111118-3RVS	1.01228	0.09762	0.05122	0.05296	0.05035	0.26720	0.09932	0.04810	-0.00449	0.04503	0.10632	0.46968
IP111118-3LCS	-0.02243	0.48328	2.10394	2.13809	2.08690	2.00785	0.50678	0.49512	-0.02670	0.46829	2.08418	-0.05281
1111092-9	10.42166	-0.00346	0.00137	-0.00104	0.00257	13.96639	0.00104	0.23564	-0.00730	-0.00207	0.00074	-0.04291
1111092-10	10.62018	-0.00353	-0.00011	-0.00324	0.00146	13.99226	0.00084	0.23669	-0.00429	-0.00322	-0.00122	-0.04015
CCV	5.18608	0.49535	1.03019	1.04222	1.02418	4.98585	1.04722	0.50132	0.30138	0.48044	0.53190	4.91590
CCB	-0.03671	-0.00439	-0.00033	-0.00180	0.00040	-0.02190	-0.00326	-0.00167	0.00784	-0.00271	-0.00202	-0.04257
1111106-22	H123.08553	-0.00350	0.01100	0.01084	0.01109	15.10991	0.00186	0.61838	-0.01298	-0.00324	0.00063	-0.01990
1111106-22D	H116.30389	-0.00088	0.00979	0.00863	0.01036	14.53380	0.00227	0.61426	-0.01103	-0.00363	-0.00517	-0.02436
1111106-22L 5X	24.25161	-0.00241	0.00194	0.00043	0.00270	2.98743	-0.00244	0.12389	0.00454	-0.00298	-0.00017	-0.02779
1111106-22MS	H121.57408	0.48616	2.21945	2.24801	2.20520	16.83295	0.52610	1.10836	-0.02291	0.45902	2.13744	-0.03426
1111106-22MSD	H122.22462	0.48902	2.22666	2.26239	2.20881	16.86934	0.52692	1.11001	-0.02412	0.45936	2.15196	-0.03221
1111106-35	0.00453	-0.00250	-0.00117	0.00004	-0.00178	-0.00398	-0.00428	-0.00139	0.00635	-0.00289	-0.00047	-0.03741
1111106-48	-0.04305	-0.00378	-0.00123	-0.00046	-0.00161	-0.01977	-0.00367	-0.00196	0.00456	-0.00305	-0.00487	-0.03123
1111106-61	H68.79365	-0.00234	0.01315	0.01480	0.01232	11.27905	0.00104	0.50087	-0.00605	-0.00316	-0.00002	-0.03672
1111134-1 10X	0.02674	-0.00202	0.00067	-0.00117	0.00159	0.07194	0.00166	0.17594	0.00201	-0.00299	-0.00266	-0.02772
1111134-2 10X	0.03626	-0.00418	-0.00135	-0.00312	-0.00047	0.15763	0.00145	0.17532	-0.00074	-0.00327	0.00090	-0.03957
CCV	5.23867	0.50272	1.03187	1.04656	1.02454	5.00109	1.05710	0.50605	0.30890	0.47977	0.52777	4.94028
CCB	-0.03512	-0.00238	0.00104	0.00036	0.00138	-0.02009	-0.00203	-0.00169	0.00419	-0.00297	0.00334	-0.03398
1111134-3 10X	0.01247	-0.00258	-0.00102	-0.00326	0.00010	0.06836	-0.00080	0.17671	0.00746	-0.00313	-0.00195	-0.03872
1111161-1 10X	0.07433	-0.00196	0.00085	-0.00314	0.00285	0.63354	0.00145	0.54078	0.00480	-0.00310	-0.00112	-0.04584
1111161-2 10X	1.50140	-0.00399	0.00353	0.00081	0.00489	2.96178	0.00330	1.46007	0.00672	-0.00310	-0.00148	-0.04049
1111161-3 10X	0.02516	-0.00377	-0.00092	L-0.00691	0.00207	0.05391	0.00145	0.06124	0.00884	-0.00314	-0.00420	-0.03623
1111161-4 10X	0.07116	-0.00246	-0.00132	L-0.00711	0.00157	0.62152	0.00268	0.53464	0.00362	-0.00309	0.00127	-0.03415
1111172-1	H110.61167	-0.00390	-0.00094	-0.00123	-0.00080	7.98892	0.00063	2.29511	-0.03532	-0.00353	-0.00372	-0.03981
1111172-2	H57.87422	-0.00202	0.00456	0.00641	0.00364	7.11488	0.00473	0.78542	-0.00520	-0.00295	-0.00031	-0.03606
1111172-3	H207.03757	-0.00295	0.00773	0.01183	0.00568	15.28535	0.00145	2.83293	-0.03727	-0.00337	-0.00032	-0.04738
1111172-4	H100.03508	-0.00508	0.00158	-0.00230	0.00352	10.65782	0.00043	1.84070	-0.03118	-0.00331	-0.00015	-0.03504
1111172-5	H725.18257	-0.00366	0.03474	0.03674	0.03374	10.85887	-0.00100	H13.95659	-0.04096	-0.00481	0.00714	-0.03824
CCV	5.49208	0.49650	1.04209	1.04926	1.03851	5.00723	1.04867	0.51065	0.30891	0.47834	0.53212	4.96164
CCB	0.01088	-0.00360	-0.00141	L-0.00640	0.00108	-0.02133	-0.00039	-0.00081	0.00185	-0.00307	-0.00012	-0.04325
1111172-6	H702.51897	-0.00410	0.03566	0.03547	0.03575	10.61645	-0.00039	H13.71555	-0.03000	-0.00458	0.00073	-0.04957
1111172-10	H60.49838	-0.00371	0.00037	-0.00287	0.00199	14.43294	0.00125	1.58329	-0.01992	-0.00322	-0.00535	-0.03677
1111104-1 500X	0.16476	-0.00385	-0.00460	L-0.00824	-0.00279	0.02772	-0.00223	0.27347	0.00856	-0.00313	-0.00046	-0.04979
1111232-1 5X	1.73651	-0.00275	-0.00059	-0.00104	-0.00037	1.39854	0.00125	-0.00105	0.00791	-0.00304	0.00073	-0.04737
1111235-1 5X	4.03771	-0.00157	-0.00053	-0.00249	0.00045	0.86016	-0.00510	0.03066	0.00466	-0.00307	-0.00230	-0.03813
1111238-1 5X	H264.31424	-0.00312	0.00126	0.00496	-0.00059	0.01192	0.00186	0.02320	-0.01536	-0.00347	-0.00277	-0.03603
1111238-3 5X	H195.64276	-0.00447	-0.00143	-0.00236	-0.00097	0.00927	-0.00101	0.01759	-0.01669	-0.00330	-0.00093	-0.04015
1111238-3L 25X	39.12607	-0.00360	-0.00208	-0.00047	-0.00289	-0.01868	-0.00039	0.00205	-0.00032	-0.00321	-0.00148	-0.04427
1111238-3A 5X	H195.80287	-0.00318	-0.00238	L-0.00691	-0.00012	0.00833	-0.00346	0.01757	-0.03149	-0.00297	-0.00068	-0.04324
1111106-22 5X	24.03780	-0.00399	-0.00046	-0.00431	0.00146	2.94292	-0.00141	0.12152	-0.00106	-0.00314	0.00133	-0.03088
CCV	5.27691	0.50277	1.04485	1.06118	1.03670	4.98982	1.05299	0.50882	0.31039	0.47895	0.53258	4.98607
CCB	-0.04623	-0.00262	-0.00002	L-0.00520	0.00257	-0.02329	-0.00162	-0.00191	0.00464	-0.00321	-0.00173	-0.04049

Sample Id1	S	Sb	Se	Se I	Se II	Si	Sn	Sr	Th	Ti	Tl	U
1111106-22D 5X	23.96492	-0.00399	-0.00006	-0.00021	0.00001	2.94736	-0.00203	0.12364	0.00173	-0.00299	-0.00462	-0.03260
1111106-22L 25X	4.88653	-0.00175	-0.00095	0.00080	-0.00182	0.58128	-0.00346	0.02357	0.00473	-0.00307	-0.00237	-0.03157
1111106-22MS 5X	24.11393	0.09522	0.41763	0.42309	0.41491	3.37250	0.10131	0.22546	-0.00255	0.09186	0.42490	-0.04509
1111106-22MSD 5X	24.13174	0.09713	0.41710	0.42133	0.41499	3.37800	0.10521	0.22470	-0.00432	0.09230	0.43142	-0.03033
1111134-1	0.45830	-0.00166	0.00525	0.00091	0.00741	1.02975	0.01005	1.82942	0.01168	-0.00083	-0.00154	-0.01687
1111134-2	0.67097	-0.00084	0.00058	0.00317	-0.00072	1.87095	0.00452	1.83626	0.00832	-0.00087	0.00133	-0.02772
1111134-3	0.46783	-0.00183	0.00381	0.00100	0.00520	1.05289	0.00719	1.82533	0.00942	-0.00110	0.00006	-0.01806
1111161-3	0.60590	-0.00083	0.01538	0.01191	0.01711	0.76867	0.02132	0.63898	0.00738	-0.00318	-0.00971	-0.01941
1111172-5 10X	H78.62267	-0.00451	0.00260	-0.00054	0.00417	1.06074	-0.00408	1.48641	-0.02759	-0.00347	-0.00281	-0.02995
1111238-1 25X	H54.09272	-0.00244	-0.00224	L-0.00608	-0.00033	-0.01743	-0.00059	0.00331	-0.00222	-0.00332	-0.00358	-0.03775
CCV	5.26257	0.50630	1.03697	1.05227	1.02933	4.97404	1.05340	0.50682	0.30827	0.47597	0.52954	4.97512
CCB	-0.02878	-0.00091	-0.00114	-0.00286	-0.00029	-0.02217	0.00104	-0.00179	0.00426	-0.00305	0.00068	-0.02951
1111238-3 25X	39.33932	-0.00360	0.00081	0.00225	0.00010	-0.01635	-0.00059	0.00214	0.00220	-0.00301	0.00223	-0.03947
1111238-3L 125X	7.75456	-0.00177	0.00159	0.00099	0.00189	-0.02399	-0.00531	-0.00111	0.00351	-0.00319	0.00183	-0.03740
1111238-3A 25X	40.41926	-0.00538	-0.00212	L-0.01083	0.00223	-0.02126	-0.00613	0.00228	-0.01288	-0.00289	-0.00193	-0.05731
1111172-6 10X	H83.27775	-0.00342	0.00080	-0.00288	0.00264	1.11588	-0.00223	1.53255	-0.01699	-0.00335	-0.00282	-0.04093
1111106-22A	H117.11229	0.48617	2.11038	2.17738	2.07693	16.18895	0.52097	1.07572	-0.02357	0.45194	2.12307	-0.03906
CRI	0.19649	0.12372	0.01468	0.01677	0.01364	0.09469	0.10140	0.02052	0.01602	0.01832	0.02114	0.16705
ICSA	0.02992	0.00357	-0.00244	L-0.01492	0.00379	-0.02971	0.00370	-0.00034	-0.03639	-0.00125	0.00558	0.02562
ICSAB	1.07579	0.58288	0.05028	0.04234	0.05424	0.93281	1.04815	0.99205	0.03750	0.92176	0.10334	9.88626
CCV	5.24982	0.49896	1.02636	1.04816	1.01548	4.95979	1.04805	0.50391	0.31170	0.47600	0.52958	4.93209
CCB	-0.02878	-0.00231	-0.00151	L-0.00798	0.00172	-0.02449	-0.00203	-0.00153	0.00304	-0.00296	-0.00297	-0.04498

Sample Id1	V	Zn	Zr
MIXBHIGH	4.95638	9.67145	L-0.07597
MIXAHIGH	-0.00770	-0.00869	0.00598
MIXCHIGH	L-0.01044	-0.00011	4.97028
ICV	0.24482	0.49905	0.49552
ICB	-0.00073	-0.00075	0.00089
CRI	0.10326	0.05109	0.05358
ICSA	-0.00649	-0.00207	0.00495
ICSAB	0.47656	0.92028	0.49308
CCV	0.49060	0.96358	1.00021
CCB	-0.00081	-0.00075	0.00061
F111115-1LCS	0.48746	0.47749	0.00353
1111179-1	-0.00030	0.00965	-0.00068
1111184-1	-0.00059	0.00305	-0.00030
IP111116-5MB	-0.00083	-0.00058	-0.00002
IP111116-5LCS	0.48544	0.47898	0.00187
1111037-3	-0.00038	0.00123	-0.00119
1111037-3D	-0.00044	0.00404	-0.00132
1111037-3L 5X	-0.00087	-0.00042	-0.00047
1111037-3MS	0.47673	0.45611	-0.00042
1111037-3MSD	0.47630	0.45793	-0.00039
CCV	0.48960	0.95142	0.99968
CCB	-0.00026	-0.00108	0.00068
1111040-1 10X	-0.00341	0.02665	0.00158
1111040-3 10X	-0.00171	0.10014	0.00167
1111040-4 10X	-0.00199	0.04279	0.00195
1111040-5 10X	-0.00169	0.21053	0.00189
1111040-7 10X	-0.00416	0.02766	0.00167
1111051-1 10X	-0.00127	0.06768	0.00196
1111051-2 10X	-0.00153	0.07340	0.00123
1111059-9	-0.00069	0.00094	-0.00023
1111059-10	-0.00134	0.00195	-0.00061
1111078-2	-0.00038	0.00178	-0.00176
CCV	0.48802	0.96340	1.00091
CCB	-0.00079	-0.00141	0.00063
1111078-8	-0.00061	-0.00158	-0.00077
1111078-14	-0.00083	0.00195	-0.00151
1111078-19	0.00525	0.01540	0.00382
1111078-35	-0.00083	0.09896	0.00050
IP111117-1MB	-0.00068	0.00027	-0.00024
IP111117-1RVS	0.04948	0.05070	0.04872
ZZZ	0.48685	0.48212	0.98519
1110384-1	0.08680	H62.89343	0.00719
1110384-2	0.10145	H64.42832	0.00546
1110384-3	0.06745	3.13635	0.01483
CCV	0.49665	0.99138	1.01155
CCB	-0.00083	-0.00007	0.00058
1110384-4	0.05274	1.60748	0.01185
1110384-5	1.71814	4.67401	0.01670
1110384-6	2.22255	4.68382	0.00365
1111160-2	0.21158	1.32851	0.04521

Sample Id1	V	Zn	Zr
1111160-2D	0.20838	0.75253	0.03168
1111160-2L 5X	0.04251	0.25415	0.00890
1111160-2MS	0.71709	1.07959	0.69069
1111160-2MSD	0.73796	1.02292	0.73399
1111160-3	0.18215	0.57027	0.05099
1111160-4	0.16097	0.55625	0.05054
CCV	0.48974	0.96323	0.99485
CCB	-0.00062	0.00010	0.00072
1111160-5	0.17374	0.60237	0.04721
1111160-6	0.25671	0.17434	0.03893
1111160-7	0.32527	0.32290	0.05379
1111160-8	0.29682	0.36251	0.05190
1111160-9	0.55753	0.10014	0.05911
1111160-10	0.57518	0.45748	0.05979
1111160-11	0.54674	0.15465	0.05860
1111160-12	0.87325	0.12537	0.08023
1111160-13	0.21243	0.15280	0.04115
1111160-14	0.33473	7.56369	0.03186
CCV	0.48317	0.93882	0.99107
CCB	-0.00079	0.00027	0.00036
1111160-15	0.21029	0.62637	0.04391
1111040-1 100X	-0.00130	0.00279	-0.00009
1111040-3 100X	-0.00060	0.01170	0.00023
1111040-4 100X	-0.00104	0.00615	-0.00012
1111040-5 100X	-0.00080	0.02766	0.00010
1111040-7 100X	-0.00119	0.00565	-0.00025
1111051-1 100X	-0.00099	0.00850	-0.00015
1111051-2 100X	-0.00117	0.00834	-0.00037
CCV	0.49558	0.96509	1.01472
CCB	-0.00028	0.00027	0.00042
IP111117-1LCS	0.48689	0.46018	1.00178
1110384-1 10X	0.00773	5.85340	0.00160
1110384-2 10X	0.00851	5.74978	0.00047
1110384-5 10X	0.16497	0.44415	0.00130
1110384-6 10X	0.21397	0.43166	0.00016
1111160-3 5X	0.03607	0.11847	0.01030
1111160-4 5X	0.03290	0.11830	0.01045
1111160-5 5X	0.03435	0.12032	0.00996
1111040-1 1000X	-0.00133	0.00027	-0.00066
1111040-3 1000X	-0.00102	0.00128	-0.00053
CCV	0.48723	0.94713	0.99990
CCB	-0.00093	-0.00108	-0.00021
1111040-4 1000X	-0.00095	-0.00040	-0.00038
1111040-5 1000X	-0.00130	0.00346	-0.00066
1111040-7 1000X	-0.00096	0.00027	-0.00074
1111051-1 1000X	-0.00053	0.00212	-0.00067
1111051-2 1000X	-0.00127	0.00128	-0.00086
1111160-2A	0.67023	0.86681	1.90498
IP111117-2MB	-0.00092	0.00296	0.00031
IP111117-2RVS	0.04762	0.04666	0.04856

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Sample Id1	V	Zn	Zr
IP111117-2LCS	0.47578	0.45242	0.00425
1111162-1	0.15505	0.37988	0.04129
CCV	0.48243	0.94814	0.98237
CCB	-0.00089	-0.00074	-0.00006
1111162-1D	0.15785	0.39051	0.04303
1111162-1L 5X	0.03135	0.08113	0.00759
1111162-1MS	0.64987	0.81566	0.06012
1111162-1MSD	0.65390	0.82819	0.05982
1111162-2	0.19689	0.25028	0.03012
1111162-3	0.19645	0.26679	0.03039
1111162-4	0.43825	0.15684	0.04383
1111162-5	0.40660	0.14253	0.04131
1111162-6	0.52048	0.19807	0.05575
1111162-7	0.66466	0.16087	0.03177
CCV	0.48138	0.93441	0.98411
CCB	-0.00025	-0.00141	0.00020
1111162-8	0.10716	0.23343	0.03694
1111162-9	0.13642	0.30672	0.02105
1111162-10	0.20545	0.17939	0.02067
1111162-11	0.09333	0.20700	0.01767
1111162-12	0.12263	0.24522	0.02769
1111162-13	0.18763	0.42525	0.03514
1111162-14	0.18260	0.44533	0.02901
1111162-15	0.26151	0.26021	0.03343
IP111118-2MB	-0.00056	0.00027	-0.00078
IP111118-2RVS	0.04753	0.04868	0.04772
CCV	0.48170	0.92933	0.98416
CCB	-0.00056	-0.00024	0.00032
IP111118-2LCS	0.48334	0.47065	0.00270
1111071-1	-0.00028	0.01792	-0.00045
1111071-1D	-0.00063	0.01775	-0.00067
1111071-1L 5X	-0.00075	0.00262	-0.00044
1111071-1MS	0.48488	0.48719	0.00044
1111071-1MSD	0.49069	0.49141	0.00087
1111104-1 10X	-0.00073	0.00161	-0.00064
1111170-1	-0.00063	0.02077	-0.00143
1111171-1	0.00000	0.01674	-0.00073
1111173-1	-0.00038	0.00128	-0.00228
CCV	0.48252	0.94357	0.98660
CCB	-0.00114	0.00010	0.00041
1111174-1	-0.00005	0.00615	0.00022
1111180-1	-0.00063	0.01993	0.00030
1111181-1	-0.00093	0.00766	-0.00104
1111182-1	-0.00050	0.00447	-0.00077
1111183-1	0.00069	0.11612	0.00014
1111207-1	-0.00007	0.00750	-0.00080
1111209-1	-0.00042	0.02346	-0.00021
1111210-1	-0.00046	0.09055	0.00060
1111232-1	-0.00085	0.00951	-0.00182
1111233-1	-0.00072	0.02581	-0.00019

Sample Id1	V	Zn	Zr
CCV	0.48487	0.95848	0.98594
CCB	-0.00069	-0.00024	0.00046
1111234-1	0.00046	-0.00040	-0.00077
1111235-1	-0.00070	0.11881	0.00049
1111260-1	-0.00098	0.02750	-0.00061
1111261-1	-0.00065	0.01086	-0.00005
1111162-1A	0.63048	0.82989	0.04008
IP111118-3MB	-0.00093	-0.00074	-0.00084
IP111118-3RVS	0.04779	0.04767	0.04774
IP111118-3LCS	0.47907	0.47065	0.00243
1111092-9	0.00275	0.00834	-0.00295
1111092-10	0.00256	0.00733	-0.00321
CCV	0.47992	0.95475	0.97986
CCB	-0.00116	0.00010	-0.00037
1111106-22	0.00440	0.00077	-0.00062
1111106-22D	0.00389	0.00262	-0.00161
1111106-22L 5X	0.00042	0.00027	-0.00094
1111106-22MS	0.47662	0.45343	-0.00156
1111106-22MSD	0.47775	0.45816	-0.00191
1111106-35	-0.00061	0.00212	-0.00099
1111106-48	-0.00065	0.00077	-0.00067
1111106-61	0.00052	0.00027	-0.00243
1111134-1 10X	-0.00081	0.01035	-0.00029
1111134-2 10X	-0.00105	0.00279	-0.00040
CCV	0.48274	0.94560	0.98518
CCB	-0.00069	-0.00057	0.00009
1111134-3 10X	-0.00120	0.01035	-0.00089
1111161-1 10X	-0.00136	0.00565	-0.00082
1111161-2 10X	-0.00042	0.00044	-0.00105
1111161-3 10X	-0.00078	0.00666	-0.00078
1111161-4 10X	-0.00133	0.00430	-0.00072
1111172-1	-0.00071	0.05271	0.00085
1111172-2	0.00793	0.01203	-0.00141
1111172-3	0.00065	0.07693	-0.00120
1111172-4	-0.00006	0.04178	-0.00035
1111172-5	0.00057	0.00783	0.00012
CCV	0.48179	0.94052	0.98512
CCB	-0.00075	-0.00108	0.00012
1111172-6	0.00061	0.00077	0.00074
1111172-10	0.00133	-0.00108	-0.00174
1111104-1 500X	-0.00142	-0.00091	-0.00156
1111232-1 5X	-0.00093	0.00178	-0.00130
1111235-1 5X	-0.00133	0.02481	-0.00094
1111238-1 5X	-0.00085	0.00061	0.00054
1111238-3 5X	-0.00102	0.00044	0.00036
1111238-3L 25X	-0.00112	-0.00108	-0.00086
1111238-3A 5X	-0.00077	0.00077	0.00124
1111106-22 5X	0.00013	-0.00007	-0.00081
CCV	0.48318	0.93594	0.99066
CCB	-0.00130	-0.00057	-0.00042

Sample Id1	V	Zn	Zr
1111106-22D 5X	0.00005	0.00094	0.00055
1111106-22L 25X	-0.00044	-0.00124	-0.00050
1111106-22MS 5X	0.09822	0.09324	0.00013
1111106-22MSD 5X	0.09970	0.09576	-0.00016
1111134-1	-0.00306	1.31422	0.00673
1111134-2	-0.00270	1.03633	0.00800
1111134-3	-0.00344	1.17892	0.00720
1111161-3	-0.00302	0.07659	-0.00033
1111172-5 10X	-0.00046	0.00044	0.00112
1111238-1 25X	-0.00104	-0.00040	-0.00071
CCV	0.48068	0.92662	0.98567
CCB	-0.00022	-0.00124	0.00017
1111238-3 25X	-0.00106	-0.00024	-0.00030
1111238-3L 125X	-0.00110	-0.00108	-0.00054
1111238-3A 25X	-0.00151	0.00044	0.00002
1111172-6 10X	-0.00113	-0.00024	0.00044
1111106-22A	0.47434	0.45343	0.00008
CRI	0.10154	0.04767	0.04976
ICSA	-0.00525	-0.00259	0.00469
ICSAB	0.46642	0.88832	0.48186
CCV	0.48002	0.93407	0.98324
CCB	-0.00099	-0.00024	-0.00010

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:20
SampleId1 : BLANK **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:23:04
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE1

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.073	0.174	0.171	0.051	0.014	0.474	0.105	0.031	0.081
#2	0.074	0.173	0.172	0.052	0.014	0.471	0.106	0.032	0.080
Mean	**0.074**	**0.173**	**0.172**	**0.052**	**0.014**	**0.472**	**0.105**	**0.031**	**0.080**
%RSD	0.769	0.326	0.453	2.471	1.032	0.419	0.673	0.225	0.970

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.076	0.131	0.048	0.033	0.497	0.076	0.073	0.009	0.060
#2	0.076	0.131	0.048	0.033	0.503	0.077	0.075	0.009	0.060
Mean	**0.076**	**0.131**	**0.048**	**0.033**	**0.500**	**0.077**	**0.074**	**0.009**	**0.060**
%RSD	0.279	0.270	0.295	0.430	0.834	0.738	1.338	0.000	0.473

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.101	0.151	0.077	1.639	0.474	0.010	0.143	0.339	0.221
#2	0.101	0.155	0.079	1.637	0.481	0.009	0.145	0.341	0.223
Mean	**0.101**	**0.153**	**0.078**	**1.638**	**0.478**	**0.009**	**0.144**	**0.340**	**0.222**
%RSD	0.561	1.573	1.179	0.078	1.051	2.245	0.837	0.395	0.734

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.218	0.065	0.022	0.410	0.142	0.208	0.102	0.090	0.017
#2	0.218	0.066	0.022	0.413	0.142	0.206	0.102	0.091	0.017
Mean	**0.218**	**0.065**	**0.022**	**0.411**	**0.142**	**0.207**	**0.102**	**0.091**	**0.017**
%RSD	0.227	1.192	0.953	0.464	0.100	0.753	0.208	1.091	1.237

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.173		
#2	0.173		
Mean	**0.173**	**0.000**	**0.000**
%RSD	0.082	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:20
SampleId1 : RL **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:25:02
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE2

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.080	0.208	0.184	0.150	0.023	0.566	0.111	0.136	0.089
#2	0.080	0.207	0.180	0.151	0.023	0.563	0.113	0.137	0.092
Mean	**0.080**	**0.207**	**0.182**	**0.150**	**0.023**	**0.565**	**0.112**	**0.137**	**0.091**
%RSD	0.177	0.273	1.551	0.141	0.000	0.426	1.578	0.155	1.950

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.081	0.144	0.052	0.091	0.951	0.498	0.142	0.012	0.077
#2	0.081	0.145	0.052	0.090	0.951	0.496	0.143	0.012	0.077
Mean	**0.081**	**0.145**	**0.052**	**0.091**	**0.951**	**0.497**	**0.142**	**0.012**	**0.077**
%RSD	0.262	0.489	0.406	0.545	0.059	0.228	0.248	0.597	0.000

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	1.601	0.182	0.106	1.672	0.501	0.012	0.155	0.346	0.236
#2	1.592	0.182	0.109	1.684	0.499	0.012	0.156	0.346	0.232
Mean	**1.596**	**0.182**	**0.107**	**1.678**	**0.500**	**0.012**	**0.155**	**0.346**	**0.234**
%RSD	0.434	0.039	2.567	0.472	0.325	0.000	0.501	0.102	1.087

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.283	0.069	0.189	0.439	0.289	0.217	0.125	0.100	0.020
#2	0.281	0.069	0.188	0.440	0.290	0.215	0.126	0.100	0.020
Mean	**0.282**	**0.069**	**0.189**	**0.439**	**0.289**	**0.216**	**0.125**	**0.100**	**0.020**
%RSD	0.601	0.103	0.225	0.177	0.269	0.720	1.015	0.354	0.354

	Zr	Pb	Se
	Reading	Reading	Reading
#1	0.229		
#2	0.231		
Mean	**0.230**	**0.000**	**0.000**
%RSD	0.677	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:20
SampleId1 : RL2 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:26:56
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE3

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.089	0.267	0.194	0.327	0.037	0.730	0.120	0.308	0.109
#2	0.091	0.266	0.194	0.328	0.037	0.724	0.120	0.309	0.107
Mean	**0.090**	**0.266**	**0.194**	**0.328**	**0.037**	**0.727**	**0.120**	**0.308**	**0.108**
%RSD	0.944	0.106	0.000	0.259	0.000	0.496	0.059	0.321	0.983

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.088	0.162	0.059	0.192	1.505	1.207	0.264	0.018	0.109
#2	0.089	0.164	0.058	0.192	1.498	1.196	0.264	0.018	0.109
Mean	**0.089**	**0.163**	**0.058**	**0.192**	**1.502**	**1.201**	**0.264**	**0.018**	**0.109**
%RSD	0.240	0.869	0.847	0.147	0.334	0.677	0.054	0.000	0.584

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	4.001	0.224	0.161	1.707	0.516	0.016	0.173	0.357	0.247
#2	3.963	0.225	0.159	1.712	0.517	0.016	0.174	0.357	0.249
Mean	**3.982**	**0.225**	**0.160**	**1.709**	**0.516**	**0.016**	**0.174**	**0.357**	**0.248**
%RSD	0.678	0.441	0.930	0.186	0.123	0.449	0.448	0.040	0.542

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.385	0.075	0.437	0.474	0.539	0.228	0.163	0.112	0.024
#2	0.385	0.075	0.434	0.477	0.541	0.229	0.163	0.113	0.024
Mean	**0.385**	**0.075**	**0.435**	**0.475**	**0.540**	**0.228**	**0.163**	**0.113**	**0.024**
%RSD	0.037	0.000	0.488	0.491	0.249	0.341	0.000	0.753	0.295

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.329		
#2	0.330		
Mean	**0.329**	**0.000**	**0.000**
%RSD	0.279	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:20
SampleId1 : B3 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:29:46
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE4

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.117	0.175	0.225	0.202	0.284	1.080	0.108	0.031	0.395
#2	0.116	0.176	0.227	0.201	0.286	1.083	0.108	0.032	0.394
Mean	**0.116**	**0.176**	**0.226**	**0.201**	**0.285**	**1.082**	**0.108**	**0.032**	**0.395**
%RSD	0.850	0.564	0.688	0.140	0.472	0.196	0.262	0.895	0.107

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.151	0.464	0.166	0.032	0.509	0.078	0.076	0.120	0.192
#2	0.152	0.462	0.168	0.033	0.502	0.077	0.075	0.120	0.193
Mean	**0.151**	**0.463**	**0.167**	**0.033**	**0.506**	**0.078**	**0.075**	**0.120**	**0.193**
%RSD	0.233	0.275	0.551	1.297	1.007	0.547	0.848	0.118	0.404

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading

#1	0.114	0.517	0.308	2.131	0.741	0.010	0.166	0.380	0.289
#2	0.187	0.516	0.305	2.126	0.734	0.011	0.164	0.383	0.288
Mean	**0.150**	**0.516**	**0.307**	**2.129**	**0.738**	**0.010**	**0.165**	**0.381**	**0.288**
%RSD	34.227	0.137	0.554	0.173	0.690	12.856	0.600	0.482	0.123

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.628	0.091	1.017	0.442	1.214	0.261	0.105	0.220	0.051
#2	0.630	0.091	1.023	0.439	1.219	0.267	0.103	0.219	0.052
Mean	**0.629**	**0.091**	**1.020**	**0.441**	**1.217**	**0.264**	**0.104**	**0.219**	**0.051**
%RSD	0.169	0.078	0.388	0.465	0.308	1.659	1.906	0.354	0.550

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.192		
#2	0.189		
Mean	**0.190**	**0.000**	**0.000**
%RSD	1.264	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:21
SampleId1 : B2 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:31:47
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE5

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.493	0.184	0.682	1.544	2.680	6.446	0.113	0.033	3.161
#2	0.491	0.183	0.686	1.537	2.660	6.425	0.113	0.034	3.152
Mean	**0.492**	**0.183**	**0.684**	**1.540**	**2.670**	**6.435**	**0.113**	**0.033**	**3.157**
%RSD	0.345	0.077	0.413	0.289	0.511	0.235	0.188	2.353	0.193

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.820	3.370	1.223	0.035	0.501	0.078	0.076	1.107	1.372
#2	0.817	3.360	1.213	0.036	0.508	0.078	0.077	1.104	1.367
Mean	**0.818**	**3.365**	**1.218**	**0.035**	**0.504**	**0.078**	**0.076**	**1.105**	**1.370**
%RSD	0.199	0.200	0.621	1.805	0.897	0.726	0.650	0.160	0.258

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.125	3.705	2.292	6.344	2.973	0.010	0.343	0.741	0.838
#2	0.211	3.698	2.273	6.325	2.967	0.011	0.343	0.752	0.841
Mean	**0.168**	**3.702**	**2.282**	**6.334**	**2.970**	**0.011**	**0.343**	**0.747**	**0.839**
%RSD	36.187	0.132	0.561	0.209	0.136	10.054	0.103	1.042	0.303

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	4.252	0.317	9.860	0.641	10.724	0.759	0.104	1.346	0.353

#2	4.245	0.316	9.797	0.643	10.672	0.758	0.106	1.342	0.354
Mean	**4.249**	**0.316**	**9.828**	**0.642**	**10.698**	**0.758**	**0.105**	**1.344**	**0.353**
%RSD	0.112	0.224	0.452	0.242	0.343	0.093	0.875	0.195	0.080

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.249		
#2	0.244		
Mean	**0.246**	**0.000**	**0.000**
%RSD	1.321	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:21
SampleId1 : B1 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:33:40
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE6

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	4.198	0.259	5.124	14.654	25.409	58.696	0.164	0.046	29.303
#2	4.163	0.258	5.100	14.541	25.133	58.381	0.162	0.046	29.188
Mean	**4.180**	**0.259**	**5.112**	**14.598**	**25.271**	**58.539**	**0.163**	**0.046**	**29.245**
%RSD	0.585	0.219	0.340	0.545	0.773	0.381	0.909	0.305	0.279

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	7.355	31.756	11.701	0.058	0.518	0.087	0.088	10.373	12.806
#2	7.303	31.595	11.558	0.059	0.523	0.087	0.089	10.314	12.740
Mean	**7.329**	**31.676**	**11.629**	**0.058**	**0.521**	**0.087**	**0.088**	**10.343**	**12.773**
%RSD	0.499	0.359	0.874	0.726	0.801	0.406	0.562	0.407	0.361

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.216	34.865	19.950	47.648	24.828	0.012	2.075	4.322	6.220
#2	0.265	34.582	19.798	47.292	24.757	0.013	2.063	4.307	6.205
Mean	**0.241**	**34.723**	**19.874**	**47.470**	**24.792**	**0.013**	**2.069**	**4.315**	**6.212**
%RSD	14.316	0.577	0.541	0.530	0.204	6.149	0.414	0.244	0.175

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	39.130	2.525	90.129	2.638	104.281	5.675	0.123	12.417	3.245
#2	38.889	2.511	89.254	2.624	103.493	5.623	0.123	12.333	3.240
Mean	**39.009**	**2.518**	**89.692**	**2.631**	**103.887**	**5.649**	**0.123**	**12.375**	**3.242**
%RSD	0.438	0.396	0.689	0.376	0.536	0.643	0.058	0.479	0.113

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.737		
#2	0.732		

Mean	**0.735**	**0.000**	**0.000UNDGREEN**
%RSD	0.549	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:21
SampleId1 : A5 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:35:33
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE7

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.076	1.317	0.177	0.069	0.018	0.481	0.107	1.820	0.083
#2	0.076	1.311	0.177	0.068	0.018	0.479	0.109	1.805	0.083
Mean	**0.076**	**1.314**	**0.177**	**0.068**	**0.018**	**0.480**	**0.108**	**1.813**	**0.083**
%RSD	0.279	0.350	0.120	1.447	0.000	0.383	1.046	0.573	0.256

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.078	0.138	0.050	1.720	1.783	3.017	1.267	0.010	0.069
#2	0.078	0.139	0.049	1.709	1.774	3.005	1.260	0.010	0.066
Mean	**0.078**	**0.139**	**0.049**	**1.715**	**1.779**	**3.011**	**1.263**	**0.010**	**0.067**
%RSD	0.000	0.102	0.715	0.466	0.358	0.296	0.375	0.733	2.522

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	3.227	0.160	0.082	1.677	0.497	0.010	0.149	0.349	0.229
#2	3.214	0.158	0.079	1.675	0.497	0.009	0.149	0.347	0.230
Mean	**3.221**	**0.159**	**0.081**	**1.676**	**0.497**	**0.009**	**0.149**	**0.348**	**0.230**
%RSD	0.290	1.024	2.625	0.089	0.014	2.245	0.238	0.285	0.339

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.244	0.067	0.059	0.474	0.173	0.218	0.110	0.097	0.018
#2	0.239	0.067	0.059	0.472	0.172	0.211	0.111	0.096	0.018
Mean	**0.242**	**0.067**	**0.059**	**0.473**	**0.172**	**0.215**	**0.111**	**0.096**	**0.018**
%RSD	1.433	0.000	0.120	0.404	0.738	2.308	0.447	0.367	0.390

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.177		
#2	0.177		
Mean	**0.177**	**0.000**	**0.000**
%RSD	0.040	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:21
SampleId1 : A4 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:37:25
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE8

Raw intensities**1 12:54:23** **User: MIKE LUNDGREEN**

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.081	11.023	0.196	0.067	0.015	0.481	0.111	17.330	0.087
#2	0.081	11.028	0.198	0.068	0.016	0.478	0.111	17.340	0.086
Mean	**0.081**	**11.025**	**0.197**	**0.067**	**0.015**	**0.480**	**0.111**	**17.335**	**0.086**
%RSD	0.262	0.033	0.898	0.734	0.458	0.501	0.128	0.040	0.409

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.081	0.159	0.051	15.985	9.698	27.543	11.596	0.011	0.074
#2	0.081	0.160	0.051	16.022	9.694	27.532	11.618	0.011	0.075
Mean	**0.081**	**0.159**	**0.051**	**16.004**	**9.696**	**27.538**	**11.607**	**0.011**	**0.075**
%RSD	0.175	0.489	0.000	0.161	0.034	0.029	0.132	0.000	1.519

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	25.442	0.162	0.087	1.923	0.566	0.010	0.187	0.402	0.269
#2	25.415	0.163	0.084	1.927	0.573	0.010	0.189	0.401	0.271
Mean	**25.428**	**0.163**	**0.086**	**1.925**	**0.570**	**0.010**	**0.188**	**0.401**	**0.270**
%RSD	0.076	0.522	2.562	0.143	0.832	2.154	0.941	0.053	0.603

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.256	0.074	0.039	0.760	0.183	0.239	0.145	0.113	0.022
#2	0.256	0.075	0.039	0.759	0.183	0.239	0.144	0.113	0.022
Mean	**0.256**	**0.074**	**0.039**	**0.759**	**0.183**	**0.239**	**0.144**	**0.113**	**0.022**
%RSD	0.000	0.953	0.180	0.121	0.116	0.089	0.441	0.125	0.000

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.196		
#2	0.195		
Mean	**0.196**	**0.000**	**0.000**
%RSD	0.578	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:21
SampleId1 : A3 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:39:18
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE9

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.082	21.719	0.222	0.072	0.018	0.496	0.112	33.289	0.092
#2	0.083	21.659	0.222	0.071	0.019	0.492	0.113	33.349	0.094
Mean	**0.082**	**21.689**	**0.222**	**0.072**	**0.019**	**0.494**	**0.112**	**33.319**	**0.093**
%RSD	0.171	0.195	0.032	0.788	0.764	0.587	0.819	0.128	1.524

ted: 11/21/2011 12:54:23 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.084	0.172	0.052	30.348	19.734	59.820	22.686	0.014	0.089
#2	0.084	0.173	0.053	30.350	19.665	59.548	22.674	0.014	0.089
Mean	**0.084**	**0.172**	**0.053**	**30.349**	**19.699**	**59.684**	**22.680**	**0.014**	**0.089**
%RSD	0.338	0.451	0.538	0.006	0.248	0.322	0.040	1.032	0.319

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	50.713	0.169	0.094	2.155	0.646	0.011	0.226	0.461	0.307
#2	50.565	0.173	0.095	2.180	0.643	0.011	0.224	0.458	0.314
Mean	**50.639**	**0.171**	**0.094**	**2.167**	**0.644**	**0.011**	**0.225**	**0.459**	**0.311**
%RSD	0.206	1.532	0.824	0.845	0.318	0.652	0.471	0.539	1.502

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.272	0.083	0.061	0.907	0.201	0.275	0.163	0.124	0.026
#2	0.273	0.083	0.062	0.909	0.204	0.274	0.164	0.125	0.027
Mean	**0.273**	**0.083**	**0.062**	**0.908**	**0.202**	**0.275**	**0.164**	**0.125**	**0.026**
%RSD	0.208	0.597	0.690	0.156	1.049	0.283	0.431	0.909	1.075

	Zr	Pb	Se
	Reading	Reading	Reading
#1	0.200		
#2	0.203		
Mean	**0.201**	**0.000**	**0.000**
%RSD	1.194	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:21
SampleId1 : A2 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:41:11
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE10

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.084	41.997	0.262	0.080	0.018	0.508	0.116	62.773	0.098
#2	0.084	42.049	0.258	0.081	0.018	0.506	0.116	62.863	0.098
Mean	**0.084**	**42.023**	**0.260**	**0.081**	**0.018**	**0.507**	**0.116**	**62.818**	**0.098**
%RSD	0.168	0.087	1.089	0.701	1.169	0.362	0.427	0.101	0.217

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.088	0.186	0.053	55.691	38.675	126.418	43.807	0.017	0.112
#2	0.089	0.184	0.054	55.712	38.689	126.439	43.907	0.016	0.113
Mean	**0.089**	**0.185**	**0.053**	**55.701**	**38.682**	**126.429**	**43.857**	**0.016**	**0.113**
%RSD	0.638	0.917	0.265	0.026	0.027	0.012	0.162	0.430	0.314

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	94.327	0.178	0.102	2.630	0.794	0.012	0.300	0.574	0.393
#2	94.348	0.177	0.099	2.642	0.787	0.012	0.305	0.570	0.392
Mean	**94.338**	**0.177**	**0.101**	**2.636**	**0.791**	**0.012**	**0.303**	**0.572**	**0.393**
%RSD	0.015	0.399	2.245	0.309	0.635	0.000	1.168	0.532	0.054

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.292	0.098	0.082	1.084	0.215	0.335	0.198	0.141	0.034
#2	0.292	0.099	0.081	1.086	0.214	0.331	0.199	0.140	0.034
Mean	**0.292**	**0.098**	**0.081**	**1.085**	**0.214**	**0.333**	**0.199**	**0.140**	**0.034**
%RSD	0.073	0.575	0.698	0.117	0.231	0.765	0.285	0.555	0.619

	Zr	Pb	Se
	Reading	Reading	Reading
#1	0.212		
#2	0.212		
Mean	**0.212**	**0.000**	**0.000**
%RSD	0.133	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:22
SampleId1 : A1 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:43:05
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE11

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.087	96.508	0.390	0.108	0.019	0.547	0.126	136.188	0.118
#2	0.087	96.198	0.390	0.108	0.019	0.545	0.128	136.338	0.118
Mean	**0.087**	**96.353**	**0.390**	**0.108**	**0.019**	**0.546**	**0.127**	**136.263**	**0.118**
%RSD	0.000	0.228	0.000	0.458	0.000	0.259	0.669	0.078	0.239

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.102	0.216	0.056	111.611	88.121	327.213	100.834	0.025	0.187
#2	0.103	0.217	0.056	111.750	87.771	325.080	100.795	0.025	0.187
Mean	**0.102**	**0.217**	**0.056**	**111.680**	**87.946**	**326.147**	**100.814**	**0.025**	**0.187**
%RSD	0.207	0.163	0.127	0.088	0.282	0.462	0.027	0.000	0.076

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	187.670	0.196	0.128	3.987	1.202	0.014	0.533	0.902	0.620
#2	187.072	0.199	0.129	3.982	1.205	0.015	0.530	0.905	0.632
Mean	**187.371**	**0.197**	**0.128**	**3.984**	**1.203**	**0.015**	**0.532**	**0.904**	**0.626**
%RSD	0.226	0.968	0.551	0.096	0.200	2.430	0.426	0.235	1.423

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.332	0.144	0.139	1.416	0.250	0.512	0.290	0.186	0.059
#2	0.333	0.144	0.139	1.416	0.251	0.509	0.293	0.187	0.059
Mean	**0.332**	**0.144**	**0.139**	**1.416**	**0.250**	**0.511**	**0.291**	**0.187**	**0.059**
%RSD	0.149	0.098	0.356	0.020	0.254	0.346	0.631	0.227	0.960

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	0.238		
#2	0.239		
Mean	**0.239**	**0.000**	**0.000**
%RSD	0.207	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:22
SampleId1 : C3 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:44:59
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE12

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.075	0.181	0.170	0.054	0.014	0.479	0.141	0.040	0.081
#2	0.077	0.180	0.171	0.053	0.014	0.474	0.140	0.041	0.080
Mean	**0.076**	**0.181**	**0.171**	**0.054**	**0.014**	**0.477**	**0.140**	**0.040**	**0.080**
%RSD	1.769	0.627	0.249	1.586	1.032	0.816	0.706	0.702	0.352

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.076	0.136	0.049	0.044	0.505	0.088	0.084	0.009	0.060
#2	0.077	0.138	0.049	0.044	0.511	0.089	0.085	0.009	0.059
Mean	**0.076**	**0.137**	**0.049**	**0.044**	**0.508**	**0.088**	**0.084**	**0.009**	**0.059**
%RSD	0.741	1.083	0.580	0.161	0.918	0.800	0.503	0.000	1.196

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.112	0.153	0.079	1.636	0.481	0.025	0.144	0.342	0.223
#2	0.112	0.155	0.080	1.644	0.482	0.025	0.144	0.343	0.225
Mean	**0.112**	**0.154**	**0.079**	**1.640**	**0.481**	**0.025**	**0.144**	**0.342**	**0.224**
%RSD	0.253	0.597	1.248	0.345	0.147	0.280	0.295	0.227	0.695

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.221	0.065	0.022	0.465	0.146	0.209	0.180	0.093	0.017
#2	0.223	0.066	0.023	0.468	0.148	0.207	0.182	0.093	0.017
Mean	**0.222**	**0.065**	**0.022**	**0.467**	**0.147**	**0.208**	**0.181**	**0.093**	**0.017**
%RSD	0.542	0.977	0.631	0.546	0.722	0.613	0.586	0.000	0.827

	Zr	**Pb**	**Se**
	Reading	Reading	Reading

#1	0.510		
#2	0.518		
Mean	**0.514**	**0.000**	**0.000**
%RSD	1.059	0.000	0.000

UNDGREEN

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:22
SampleId1 : C2 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:46:52
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE13

Raw intensities

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.097	0.192	0.173	0.057	0.014	0.512	0.441	0.041	0.081
#2	0.097	0.193	0.172	0.057	0.014	0.507	0.440	0.046	0.080
Mean	**0.097**	**0.192**	**0.173**	**0.057**	**0.014**	**0.509**	**0.440**	**0.043**	**0.081**
%RSD	0.219	0.662	0.328	0.992	1.521	0.694	0.144	8.818	0.351

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.078	0.181	0.055	0.039	0.497	0.079	0.114	0.010	0.059
#2	0.079	0.182	0.056	0.044	0.506	0.085	0.118	0.010	0.059
Mean	**0.079**	**0.182**	**0.055**	**0.041**	**0.501**	**0.082**	**0.116**	**0.010**	**0.059**
%RSD	0.540	0.311	0.638	8.057	1.241	4.983	2.256	0.704	0.361

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.110	0.160	0.080	1.670	0.505	0.170	0.144	0.347	0.224
#2	0.123	0.163	0.077	1.702	0.504	0.169	0.144	0.347	0.224
Mean	**0.117**	**0.162**	**0.078**	**1.686**	**0.505**	**0.170**	**0.144**	**0.347**	**0.224**
%RSD	8.005	1.311	2.076	1.342	0.182	0.375	0.393	0.102	0.158

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.250	0.066	0.024	0.924	0.171	0.212	0.868	0.105	0.018
#2	0.251	0.066	0.025	0.927	0.175	0.213	0.864	0.106	0.017
Mean	**0.251**	**0.066**	**0.025**	**0.925**	**0.173**	**0.212**	**0.866**	**0.106**	**0.017**
%RSD	0.113	0.215	2.016	0.214	1.308	0.433	0.384	0.938	0.813

	Zr	**Pb**	**Se**
	Reading	Reading	Reading
#1	4.082		
#2	4.087		
Mean	**4.085**	**0.000**	**0.000**
%RSD	0.069	0.000	0.000

Method : Paragon File : 111118A Printed : 11/21/2011 12:54:22
SampleId1 : C1 **SampleId2 :** **[STD]**
Analysis commenced : 11/18/2011 13:48:46

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE14

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.311	0.350	0.189	0.110	0.016	0.796	3.467	0.106	0.101
#2	0.309	0.348	0.190	0.109	0.016	0.791	3.431	0.106	0.100
Mean	**0.310**	**0.349**	**0.190**	**0.109**	**0.016**	**0.794**	**3.449**	**0.106**	**0.101**
%RSD	0.456	0.487	0.298	0.713	0.889	0.383	0.734	0.000	0.563

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.105	0.628	0.126	0.097	0.514	0.088	0.476	0.024	0.064
#2	0.106	0.623	0.126	0.097	0.522	0.090	0.475	0.024	0.064
Mean	**0.105**	**0.626**	**0.126**	**0.097**	**0.518**	**0.089**	**0.475**	**0.024**	**0.064**
%RSD	0.538	0.554	0.112	0.219	1.105	0.953	0.238	0.299	0.330

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.172	0.211	0.091	2.303	0.728	1.581	0.165	0.383	0.245
#2	0.171	0.213	0.093	2.318	0.730	1.574	0.163	0.384	0.250
Mean	**0.171**	**0.212**	**0.092**	**2.310**	**0.729**	**1.577**	**0.164**	**0.383**	**0.248**
%RSD	0.124	0.533	1.379	0.465	0.194	0.318	0.648	0.185	1.600

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	0.566	0.076	0.043	5.530	0.441	0.237	7.669	0.243	0.020
#2	0.565	0.076	0.044	5.489	0.439	0.235	7.582	0.244	0.020
Mean	**0.565**	**0.076**	**0.044**	**5.509**	**0.440**	**0.236**	**7.625**	**0.244**	**0.020**
%RSD	0.113	0.000	0.650	0.522	0.386	0.479	0.809	0.523	0.349

	Zr	Pb	Se
	Reading	Reading	Reading
#1	39.908		
#2	39.673		
Mean	**39.790**	**0.000**	**0.000**
%RSD	0.416	0.000	0.000

Line calibration information

Analyte	Reporting name	C0	C1	C2	C3	Correlation coefficient	Low limit	High limit	Date of last regression
Ag 328.068	Ag	-0.000374	0.5016578	0.0024078	0	1.0000	0.001	3.514	11/18/2011 14:08:08
Al 308.215	Al	-0.3368062	4.5968914	0.0064363	0	0.99998	0.064	93.159	11/18/2011 14:08:09
As 189.042/2	As	0.0095843	1.0532547	0.0061691	0	1.0000	-0.010	4.576	11/18/2011 14:08:09
B 249.678/2	B	-0.014971	0.7628026	0.0011123	0	0.99999	0.004	12.867	11/18/2011 14:08:09
Ba 493.409	Ba	-0.0015007	0.4164482	0.0010612	0	1.0000	0.000	22.703	11/18/2011 14:08:09
Be 313.042	Be	-0.0084576	0.0168066	0.0000072	0	1.0000	0.472	56.539	11/18/2011 14:08:09
Bi 223.061	Bi	0.000002	1.7339026	-0.0034691	0	1.0000	-0.001	2.901	11/18/2011 14:08:09
Ca 317.933	Ca	-0.0987362	2.8787372	0.0071163	0	0.99983	0.005	131.301	11/18/2011 14:08:09
Cd 226.502/2	Cd	-0.001263	0.1910578	0.000475	0	1.0000	0.004	24.664	11/18/2011 14:08:09
Co 228.616	Co	0.000281	0.6880513	0.0023935	0	1.0000	-0.001	7.092	11/18/2011 14:08:09
Cr 267.716	Cr	-0.0017229	0.3137067	0.000267	0	1.0000	0.003	31.061	11/18/2011 14:08:09
Cu 324.753	Cu	-0.0111409	0.9248795	0.0008597	0	1.0000	0.011	10.718	11/18/2011 14:08:09
Fe 259.94	Fe	-0.0196946	1.1890322	0.0054998	0	1.0000	0.003	109.814	11/18/2011 14:08:10
K 766.491	K	-1.4212382	2.4907513	0.0041638	0	0.99994	0.500	87.546	11/18/2011 14:08:10
Li 670.784	Li	-0.007529	0.0353176	-0.000018	0	1.0000	0.077	326.147	11/18/2011 14:08:10
Mg 279.078	Mg	-0.0689904	4.4754958	0.0062292	0	0.9998	0.001	98.077	11/18/2011 14:08:10
Mn 257.61	Mn	-0.0012239	0.9192311	0.0061556	0	1.0000	0.000	10.185	11/18/2011 14:08:10
Mo 202.031/2	Mo	-0.0041435	0.8184837	0.0022072	0	1.0000	0.002	11.844	11/18/2011 14:08:10
Na 588.995	Na	-0.2252155	0.5320342	0.001439	0	0.99997	0.101	187.371	11/18/2011 14:08:10
Ni 231.604	Ni	-0.0038592	0.3330337	0.0002993	0	1.0000	0.005	29.268	11/18/2011 14:08:10
P 178.287/2	P	-0.0204643	2.274633	0.0148879	0	1.0000	0.003	19.501	11/18/2011 14:08:10
Pb 220.351	Pb I	0.0010838	0.2197253	0.0001278	0	1.0000	-0.007	44.364	11/18/2011 14:08:11
Pb 220.352/2	Pb II	-0.0038569	0.4294254	0.0004334	0	1.0000	0.002	22.773	11/18/2011 14:08:11
S 182.04/2	S	-0.0700192	31.7237916	0.4447858	0	1.0000	0.002	1.545	11/18/2011 14:08:11
Sb 206.838/2	Sb	-0.0045253	1.2245343	0.0177354	0	1.0000	0.002	1.600	11/18/2011 14:08:11
Se 196.021	Se I	0.001077	1.2617128	0.0064247	0	1.0000	0.000	3.885	11/18/2011 14:08:11
Se 196.021/2	Se II	-0.003478	0.8518472	0.0037441	0	1.0000	0.001	5.729	11/18/2011 14:08:11
Si 288.158	Si	-0.1374597	1.2621152	0.0012822	0	1.0000	0.093	38.239	11/18/2011 14:08:11
Sn 189.989	Sn	0.0008349	4.0961755	0.0403961	0	1.0000	0.000	2.385	11/18/2011 14:08:11
Sr 421.552	Sr	-0.0050511	0.1155774	0.0001407	0	1.0000	0.001	78.573	11/18/2011 14:08:11

Th 283.732	Th	-0.0619462	1.0126854	0.0079667	0	0.99986	0.049	2.005	11/18/2011 14:08:11
Ti 334.941	Ti	-0.002154	0.0993989	0.0000149	0	1.0000	-0.011	99.155	11/18/2011 14:08:12
Tl 190.864/2	Tl	0.0103569	1.0213857	0.0017855	0	1.0000	-0.011	4.844	11/18/2011 14:08:12
U 385.958	U	-0.0356963	6.8653723	0.0092008	0	1.0000	0.001	7.218	11/18/2011 14:08:12
V 292.402	V	-0.0011584	0.4089905	0.0007094	0	1.0000	0.002	11.579	11/18/2011 14:08:12
Zn 206.2	Zn	-0.0032433	3.3009169	0.0521845	0	1.0000	0.000	2.898	11/18/2011 14:08:12
Zr 339.198	Zr	-0.0008393	0.131935	-0.0000497	0	1.0000	0.008	38.481	11/18/2011 14:08:13

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:25
SampleId1 : MIXBHIGH **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 14:08:47
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.00202	0.02374	4.98590	9.97997	10.01401	0.98384	0.00110	-0.08822	4.92314
#2	1.99739	0.01999	5.01060	9.98203	10.00792	0.98372	0.00210	-0.08937	4.92202
Mean	**1.99971**	**0.02186**	**4.99825**	**9.98100**	**10.01097**	**0.98378**	**0.00160**	**-0.08880**	**4.92258**
%RSD	0.16355	12.11884	0.34947	0.01458	0.04300	0.00818	44.31583	0.91695	0.01598

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.93766	9.84617	10.11016	-0.02183	-0.16210	-0.00450	-0.11553	9.82916	9.89532
#2	4.93730	9.84657	10.10064	-0.02231	-0.15736	-0.00450	-0.11195	9.82770	9.90872
Mean	**4.93748**	**9.84637**	**10.10540**	**-0.02207**	**-0.15973**	**-0.00450**	**-0.11374**	**9.82843**	**9.90202**
%RSD	0.00511	0.00286	0.06666	1.52362	2.09857	0.00000	2.22573	0.01050	0.09571

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.10341	9.92780	49.62365	9.91162	9.87444	0.00295	1.99593	4.99081	4.93837
#2	-0.10362	9.93088	49.50677	9.89546	9.89452	-0.00340	2.00104	4.97179	4.97056
Mean	**-0.10352**	**9.92934**	**49.56521**	**9.90354**	**9.88448**	**-0.00022**	**1.99849**	**4.98130**	**4.95447**
%RSD	0.14555	0.02196	0.16675	0.11539	0.14363	1996.98746	0.18075	0.26998	0.45952

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.63059	9.93617	9.95126	1.97344	9.88892	5.01154	-0.08717	4.96011	9.67217
#2	49.63488	9.94562	9.95488	1.98097	9.88313	5.00344	-0.09129	4.95266	9.67073
Mean	**49.63274**	**9.94090**	**9.95307**	**1.97721**	**9.88603**	**5.00749**	**-0.08923**	**4.95638**	**9.67145**
%RSD	0.00610	0.06715	0.02573	0.26959	0.04142	0.11440	3.26388	0.10632	0.01051

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.07542	9.88682	4.95583
#2	-0.07651	9.89483	4.97097
Mean	**-0.07597**	**9.89083**	**4.96340**
%RSD	1.01361	0.05726	0.21572

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:25
SampleId1 : MIXAHIGH **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 14:10:40
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE11

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00013	496.34422	-0.00042	-0.00704	-0.00063	0.00099	0.00503	493.86884	-0.00054
#2	0.00013	497.41144	0.00158	-0.00719	-0.00063	0.00099	0.00417	497.96666	-0.00059
Mean	**0.00013**	**496.87783**	**0.00058**	**-0.00711**	**-0.00063**	**0.00099**	**0.00460**	**495.91775**	**-0.00056**
%RSD	0.86855	0.15188	244.10510	1.51643	0.00000	0.54568	13.35398	0.58429	6.54449

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00035	0.00129	-0.00855	193.36483	249.40916	9.78448	492.12105	-0.01363	0.00191
#2	0.00056	0.00092	-0.00882	194.88481	249.25097	9.77636	494.37240	-0.01409	0.00109
Mean	**0.00046**	**0.00110**	**-0.00868**	**194.12482**	**249.33006**	**9.78042**	**493.24672**	**-0.01386**	**0.00150**
%RSD	32.16746	24.04709	2.24858	0.55366	0.04486	0.05869	0.32275	2.34407	38.47903

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	149.60083	-0.00086	0.01002	-0.01710	0.00233	-0.00022	0.01140	-0.02637	0.00230
#2	149.36191	0.00027	0.01502	-0.01631	0.00311	0.00295	0.00307	-0.02125	0.00328
Mean	**149.48137**	**-0.00030**	**0.01252**	**-0.01670**	**0.00272**	**0.00136**	**0.00723**	**-0.02381**	**0.00279**
%RSD	0.11302	270.76971	28.26588	3.33303	20.33057	164.75711	81.45252	15.20385	25.06649

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01253	-0.00162	0.00571	-0.03552	-0.00127	0.00652	0.11139	-0.00813	-0.00951
#2	-0.01998	0.00780	0.00568	-0.02991	-0.00158	0.00246	0.10967	-0.00726	-0.00786
Mean	**-0.01625**	**0.00309**	**0.00569**	**-0.03272**	**-0.00142**	**0.00449**	**0.11053**	**-0.00770**	**-0.00869**
%RSD	32.40133	215.63814	0.43076	12.13102	15.30701	64.04389	1.10138	7.96545	13.42967

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00602	-0.00414	-0.00725
#2	0.00593	-0.00336	-0.00488
Mean	**0.00598**	**-0.00375**	**-0.00607**
%RSD	1.10464	14.75847	27.55727

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:25
SampleId1 : MIXCHIGH **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 14:12:34
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE14

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01182	0.35702	-0.00853	0.00387	-0.00142	0.00510	5.04089	-0.04763	-0.00174
#2	-0.01102	0.34382	-0.00347	0.00387	-0.00138	0.00501	5.01631	-0.05022	-0.00166
Mean	**-0.01142**	**0.35042**	**-0.00600**	**0.00387**	**-0.00140**	**0.00505**	**5.02860**	**-0.04893**	**-0.00170**
%RSD	4.98774	2.66320	59.54758	0.00000	2.10853	1.20392	0.34573	3.74477	3.32695

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00557	-0.00464	-0.01497	-0.00459	-0.13365	-0.00412	-0.26635	0.00365	-0.00144
#2	0.00605	-0.00469	-0.01464	-0.00424	-0.11943	-0.00412	-0.26993	0.00374	-0.00259
Mean	**0.00581**	**-0.00467**	**-0.01480**	**-0.00441**	**-0.12654**	**-0.00412**	**-0.26814**	**0.00369**	**-0.00202**
%RSD	5.86786	0.84541	1.58153	5.71421	7.94702	0.06062	0.94407	1.75963	40.20321

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.12679	-0.00003	0.00001	-0.02022	0.01599	49.63762	0.00176	-0.00008	-0.00253
#2	-0.12796	-0.00183	0.00888	-0.01419	0.01244	49.66078	0.00064	-0.00588	0.00165
Mean	**-0.12738**	**-0.00093**	**0.00444**	**-0.01721**	**0.01421**	**49.64920**	**0.00120**	**-0.00298**	**-0.00044**
%RSD	0.65040	136.96238	141.14852	24.77088	17.63548	0.03299	65.47078	137.65322	672.25037

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.05732	0.02008	-0.00292	0.10132	0.00529	0.00184	49.94124	-0.01056	0.00072
#2	-0.05396	0.02008	-0.00299	0.10666	0.00521	0.00575	49.63404	-0.01032	-0.00093
Mean	**-0.05564**	**0.02008**	**-0.00296**	**0.10399**	**0.00525**	**0.00379**	**49.78764**	**-0.01044**	**-0.00011**
%RSD	4.27345	0.00033	1.65718	3.62949	1.07078	72.81829	0.43629	1.66226	1087.22428

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	4.97524	0.00393	-0.00171
#2	4.96533	0.00357	-0.00086
Mean	**4.97028**	**0.00375**	**-0.00128**
%RSD	0.14103	6.73577	47.14359

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:26
SampleId1 : ICV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 14:47:56
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD1

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09268	25.94587	0.24783	0.49589	0.50190	0.24033	0.25293	24.41890	0.24697
#2	0.09278	25.79588	0.25121	0.49635	0.49972	0.23984	0.25016	24.38562	0.24394
Mean	**0.09273**	**25.87087**	**0.24952**	**0.49612**	**0.50081**	**0.24009**	**0.25155**	**24.40226**	**0.24545**
%RSD	0.07730	0.40995	0.95851	0.06536	0.30763	0.14485	0.78113	0.09641	0.87083

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.24564	0.49572	0.49868	10.15238	22.96549	0.24127	25.25913	0.50566	0.49245
#2	0.24508	0.49537	0.49571	10.13076	22.85571	0.24023	25.16959	0.50547	0.49212
Mean	**0.24536**	**0.49554**	**0.49719**	**10.14157**	**22.91060**	**0.24075**	**25.21436**	**0.50557**	**0.49229**
%RSD	0.15986	0.04995	0.42218	0.15078	0.33880	0.30592	0.25111	0.02590	0.04718

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	23.37303	0.47359	2.51488	0.49732	0.51456	2.57566	0.24088	0.51961	0.51785
#2	23.27960	0.47379	2.50126	0.49959	0.51505	2.53432	0.23780	0.50264	0.52230
Mean	**23.32632**	**0.47369**	**2.50807**	**0.49846**	**0.51481**	**2.55499**	**0.23934**	**0.51113**	**0.52007**
%RSD	0.28322	0.02991	0.38383	0.32323	0.06836	1.14401	0.90942	2.34735	0.60488

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.55233	0.52182	0.24946	0.14371	0.25084	0.24950	2.45004	0.24482	0.49673
#2	2.54370	0.50827	0.24878	0.14081	0.25077	0.25501	2.45762	0.24482	0.50137
Mean	**2.54802**	**0.51504**	**0.24912**	**0.14226**	**0.25080**	**0.25225**	**2.45383**	**0.24482**	**0.49905**
%RSD	0.23955	1.86039	0.19458	1.44193	0.01963	1.54603	0.21826	0.00121	0.65792

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.49579	0.50882	0.51844
#2	0.49524	0.50991	0.51575
Mean	**0.49552**	**0.50936**	**0.51709**
%RSD	0.07845	0.15141	0.36687

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:26
SampleId1 : ICB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 14:49:51
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00041	-0.06173	0.00042	-0.00507	-0.00113	-0.00071	-0.00123	-0.07354	-0.00039
#2	-0.00035	-0.04522	-0.00347	-0.00591	-0.00092	-0.00067	-0.00088	-0.06260	-0.00082
Mean	**-0.00038**	**-0.05348**	**-0.00153**	**-0.00549**	**-0.00102**	**-0.00069**	**-0.00105**	**-0.06807**	**-0.00060**
%RSD	9.72422	21.83794	180.48200	10.80371	14.40996	4.09278	23.27941	11.36399	50.56865

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00047	-0.00111	-0.00029	-0.01030	-0.16409	-0.00160	-0.04796	-0.00067	-0.00059
#2	-0.00006	0.00011	-0.00039	-0.00566	-0.16285	-0.00155	-0.03587	-0.00067	-0.00051
Mean	**-0.00026**	**-0.00050**	**-0.00034**	**-0.00798**	**-0.16347**	**-0.00157**	**-0.04191**	**-0.00067**	**-0.00055**
%RSD	110.23262	173.97432	18.99301	41.08340	0.53961	2.33188	20.38656	0.00000	10.57198

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.17436	-0.00146	-0.01501	-0.00189	0.00024	-0.03829	-0.00085	-0.00551	0.00035
#2	-0.16724	-0.00073	-0.01159	-0.00220	-0.00237	-0.02560	-0.00024	-0.00475	0.00325
Mean	**-0.17080**	**-0.00109**	**-0.01330**	**-0.00205**	**-0.00107**	**-0.03195**	**-0.00054**	**-0.00513**	**0.00180**
%RSD	2.94971	47.35195	18.14195	10.73821	173.53236	28.08499	77.90472	10.40941	113.66270

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01573	-0.00531	-0.00182	-0.00989	-0.00318	0.00145	-0.03226	-0.00095	-0.00058

#2	-0.01434	0.00002	-0.00169	-0.01161	-0.00282	-0.00723	-0.03363	-0.00050	-0.00091
Mean	**-0.01504**	**-0.00264**	**-0.00176**	**-0.01075**	**-0.00300**	**-0.00289**	**-0.03295**	**-0.00073**	**-0.00075**
%RSD	6.54031	142.43363	5.11842	11.34987	8.43732	212.34413	2.95370	43.75770	31.19798

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00079	-0.00047	-0.00160
#2	0.00099	-0.00232	0.00059
Mean	**0.00089**	**-0.00139**	**-0.00051**
%RSD	16.14569	93.82483	305.01188

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:26
SampleId1 : CRI **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/18/2011 14:51:45
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD3

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01849	0.41078	0.01453	0.41168	0.42149	0.01124	0.05189	5.08675	0.01119
#2	0.01854	0.41310	0.01369	0.40763	0.42212	0.01119	0.04687	5.08443	0.01062
Mean	**0.01852**	**0.41194**	**0.01411**	**0.40965**	**0.42181**	**0.01121**	**0.04938**	**5.08559**	**0.01091**
%RSD	0.20101	0.39932	4.22185	0.69895	0.10526	0.30333	7.19540	0.03230	3.67959

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10196	0.02114	0.05180	0.20404	3.76425	0.01630	5.24636	0.03252	0.02004
#2	0.10147	0.02136	0.05272	0.20416	3.76575	0.01634	5.25040	0.03261	0.02061
Mean	**0.10172**	**0.02125**	**0.05226**	**0.20410**	**3.76500**	**0.01632**	**5.24838**	**0.03257**	**0.02033**
%RSD	0.33467	0.72943	1.25083	0.04127	0.02826	0.17630	0.05445	0.19969	1.99350

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.13426	0.08075	0.18232	0.00578	0.00771	0.20918	0.11843	0.02139	0.01138
#2	4.13615	0.07782	0.20145	0.00536	0.00981	0.19015	0.11818	0.00940	0.01087
Mean	**4.13520**	**0.07929**	**0.19189**	**0.00557**	**0.00876**	**0.19967**	**0.11830**	**0.01540**	**0.01113**
%RSD	0.03241	2.61491	7.04946	5.29132	16.98227	6.74252	0.14526	55.05663	3.24806

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10786	0.09791	0.02047	0.00367	0.01977	0.02827	0.18180	0.10359	0.05125
#2	0.10597	0.10078	0.02049	0.00474	0.01985	0.01969	0.18249	0.10294	0.05092
Mean	**0.10691**	**0.09935**	**0.02048**	**0.00420**	**0.01981**	**0.02398**	**0.18215**	**0.10326**	**0.05109**
%RSD	1.25180	2.04171	0.07985	17.97236	0.28380	25.30002	0.26651	0.44848	0.45710

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.05370	0.00707	0.01472
#2	0.05346	0.00833	0.01038

Mean	**0.05358**	**0.00770**	**0.01255UNDGREEN**
%RSD	0.31591	11.61529	24.41309

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:26
SampleId1 : ICSA **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/18/2011 14:53:40
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD4

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00041	276.31459	-0.00147	-0.00698	-0.00096	0.00002	0.00520	264.43788	-0.00041
#2	-0.00041	277.30235	-0.00337	-0.00660	-0.00100	0.00000	0.01006	263.81683	-0.00015
Mean	**0.00000**	**276.80847**	**-0.00242**	**-0.00679**	**-0.00098**	**0.00001**	**0.00763**	**264.12735**	**-0.00028**
%RSD	43556.06966	0.25232	55.34696	3.97270	3.00445	120.96451	44.95953	0.16626	65.42542

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00104	-0.00199	-0.00303	111.19653	-0.21549	-0.00140	273.73741	0.00218	-0.00010
#2	0.00063	-0.00133	-0.00330	111.19653	-0.23071	-0.00143	274.64496	0.00209	-0.00116
Mean	**0.00083**	**-0.00166**	**-0.00317**	**111.19653**	**-0.22310**	**-0.00141**	**274.19118**	**0.00213**	**-0.00063**
%RSD	35.07748	28.26580	6.01877	0.00000	4.82336	1.48267	0.23405	3.04974	119.56039

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.13470	0.00084	-0.01296	-0.01155	0.00162	0.03467	-0.00206	-0.01941	0.00967
#2	-0.13437	0.00077	0.00069	-0.01281	0.00321	0.02833	-0.00219	-0.01715	0.00431
Mean	**-0.13453**	**0.00080**	**-0.00613**	**-0.01218**	**0.00241**	**0.03150**	**-0.00213**	**-0.01828**	**0.00699**
%RSD	0.17424	5.85658	157.35518	7.32315	46.63772	14.24320	4.60306	8.75149	54.28673

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02025	0.00370	-0.00032	-0.04013	-0.00070	0.00305	0.03757	-0.00660	-0.00157
#2	-0.01961	0.00125	-0.00034	-0.03391	-0.00084	0.00386	0.02727	-0.00639	-0.00256
Mean	**-0.01993**	**0.00247**	**-0.00033**	**-0.03702**	**-0.00077**	**0.00345**	**0.03242**	**-0.00649**	**-0.00207**
%RSD	2.27925	70.23371	4.96883	11.87778	12.73998	16.61434	22.46105	2.22628	33.85140

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00508	-0.00277	-0.00001
#2	0.00483	-0.00212	-0.00284
Mean	**0.00495**	**-0.00244**	**-0.00143**
%RSD	3.60147	18.56277	140.10334

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:26
SampleId1 : ICSAB **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/18/2011 14:55:35
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD5

Final concentrations**56:06** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.18854	222.16445	0.10877	1.02001	0.52080	0.47737	0.53504	263.60380	0.98219
#2	0.18863	221.81434	0.10233	1.01656	0.52101	0.47647	0.52655	263.56962	0.97773
Mean	**0.18859**	**221.98940**	**0.10555**	**1.01829**	**0.52091**	**0.47692**	**0.53080**	**263.58671**	**0.97996**
%RSD	0.03617	0.11152	4.31022	0.23930	0.02845	0.13442	1.13068	0.00917	0.32190

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47254	0.47054	0.53816	111.61980	-0.23320	1.14145	276.00258	0.49622	0.97597
#2	0.47130	0.47109	0.53676	111.61725	-0.23320	1.14116	275.42375	0.49612	0.97811
Mean	**0.47192**	**0.47082**	**0.53746**	**111.61853**	**-0.23320**	**1.14131**	**275.71317**	**0.49617**	**0.97704**
%RSD	0.18602	0.08370	0.18442	0.00162	0.00000	0.01830	0.14845	0.01319	0.15500

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.14409	0.92201	1.01780	0.03197	0.05922	1.11072	0.58517	0.03095	0.05731
#2	-0.14216	0.92566	1.00019	0.03800	0.05407	1.09167	0.57574	0.04623	0.05527
Mean	**-0.14312**	**0.92383**	**1.00900**	**0.03499**	**0.05664**	**1.10119**	**0.58045**	**0.03859**	**0.05629**
%RSD	0.95531	0.27923	1.23468	12.19615	6.43389	1.22351	1.14769	28.00959	2.57009

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.98618	1.05342	1.02303	0.00219	0.98991	0.10194	10.26565	0.47607	0.92011
#2	0.98920	1.05054	1.02200	0.00913	0.98867	0.10348	10.28220	0.47705	0.92044
Mean	**0.98769**	**1.05198**	**1.02251**	**0.00566**	**0.98929**	**0.10271**	**10.27392**	**0.47656**	**0.92028**
%RSD	0.21617	0.19361	0.07184	86.69953	0.08836	1.06013	0.11387	0.14613	0.02559

	Zr	Pb	Se
	ppm	calc	calc
#1	0.49350	0.05015	0.04853
#2	0.49265	0.04872	0.05226
Mean	**0.49308**	**0.04943**	**0.05040**
%RSD	0.12216	2.04307	5.22714

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:27
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 15:00:31
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19795	53.55490	0.50716	1.02445	1.05098	0.48562	0.53037	48.47555	0.49576
#2	0.19828	53.42783	0.51618	1.02353	1.04684	0.48572	0.53328	48.67926	0.49681
Mean	**0.19811**	**53.49137**	**0.51167**	**1.02399**	**1.04891**	**0.48567**	**0.53182**	**48.57740**	**0.49629**
%RSD	0.12032	0.16797	1.24634	0.06346	0.27864	0.01463	0.38752	0.29653	0.14837

ted: 11/21/2011 12:56:06 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48778	0.98697	1.05519	20.56983	49.95408	0.54400	51.08072	1.00040	0.99425
#2	0.48646	0.98887	1.04695	20.60358	49.62415	0.54000	50.99487	1.00264	0.99137
Mean	**0.48712**	**0.98792**	**1.05107**	**20.58671**	**49.78911**	**0.54200**	**51.03779**	**1.00152**	**0.99281**
%RSD	0.19124	0.13623	0.55388	0.11593	0.46857	0.52099	0.11894	0.15802	0.20536

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.68968	0.96120	5.12319	1.01100	1.03503	5.31038	0.50766	1.06806	1.06438
#2	49.48065	0.96070	5.11009	1.01248	1.03154	5.28169	0.49845	1.05964	1.07188
Mean	**49.58516**	**0.96095**	**5.11664**	**1.01174**	**1.03328**	**5.29604**	**0.50305**	**1.06385**	**1.06813**
%RSD	0.29809	0.03695	0.18116	0.10324	0.23886	0.38301	1.29518	0.55958	0.49646

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.15796	1.05522	0.51900	0.30304	0.50657	0.53029	5.12789	0.49086	0.95941
#2	5.16612	1.04863	0.51698	0.31416	0.50559	0.54022	5.10723	0.49034	0.96774
Mean	**5.16204**	**1.05193**	**0.51799**	**0.30860**	**0.50608**	**0.53525**	**5.11756**	**0.49060**	**0.96358**
%RSD	0.11187	0.44270	0.27592	2.54679	0.13770	1.31147	0.28547	0.07601	0.61115

	Zr	Pb	Se
	ppm	calc	calc
#1	1.00130	1.02703	1.06561
#2	0.99911	1.02519	1.06781
Mean	**1.00021**	**1.02611**	**1.06671**
%RSD	0.15509	0.12654	0.14574

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:27
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 15:02:35
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00077	-0.01252	-0.00021	-0.00515	-0.00092	-0.00020	0.00172	-0.05512	-0.00044
#2	-0.00051	0.02101	-0.00084	-0.00446	-0.00033	0.00001	0.00120	-0.02287	-0.00074
Mean	**-0.00064**	**0.00424**	**-0.00053**	**-0.00481**	**-0.00063**	**-0.00010**	**0.00146**	**-0.03899**	**-0.00059**
%RSD	28.80812	558.64618	84.91616	10.10229	65.84197	151.82177	25.12087	58.47345	36.02021

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00006	-0.00098	-0.00039	-0.00352	-0.23495	-0.00181	-0.02826	-0.00049	0.00048
#2	-0.00040	-0.00045	-0.00002	0.00908	-0.22696	-0.00165	0.00128	-0.00012	-0.00042
Mean	**-0.00023**	**-0.00072**	**-0.00020**	**0.00278**	**-0.23096**	**-0.00173**	**-0.01349**	**-0.00030**	**0.00003**
%RSD	105.72733	52.70505	130.48664	320.61321	2.44417	6.46161	154.79914	85.35111	2496.82011

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.16420	-0.00073	-0.01705	-0.00236	-0.00010	-0.03512	0.00051	-0.00059	-0.00322
#2	-0.14763	-0.00126	-0.00795	-0.00130	-0.00168	-0.02878	-0.00220	-0.00576	0.00368
Mean	**-0.15591**	**-0.00099**	**-0.01250**	**-0.00183**	**-0.00089**	**-0.03195**	**-0.00084**	**-0.00318**	**0.00023**
%RSD	7.51582	37.89858	51.45961	41.26181	126.05281	14.04249	226.84828	115.20646	2133.82736

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01219	0.00125	-0.00168	-0.00289	-0.00296	-0.00314	-0.03226	-0.00075	-0.00124
#2	-0.01043	-0.00449	-0.00142	-0.00457	-0.00265	0.00207	-0.03433	-0.00087	-0.00025
Mean	**-0.01131**	**-0.00162**	**-0.00155**	**-0.00373**	**-0.00281**	**-0.00054**	**-0.03330**	**-0.00081**	**-0.00075**
%RSD	11.04549	250.39374	12.14019	31.85453	7.76751	686.35765	4.39206	10.52162	93.59407

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00042	-0.00085	-0.00235
#2	0.00080	-0.00155	0.00053
Mean	**0.00061**	**-0.00120**	**-0.00091**
%RSD	44.64244	41.27452	224.98583

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:27
SampleId1 : F111115-1LCS SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 15:04:40
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE1

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08950	2.12602	1.96494	0.48740	2.03995	0.04563	-0.00240	36.97164	0.04652
#2	0.09038	2.11953	1.95952	0.48702	2.03090	0.04568	-0.00361	36.85856	0.04761
Mean	**0.08994**	**2.12278**	**1.96223**	**0.48721**	**2.03543**	**0.04566**	**-0.00301**	**36.91510**	**0.04706**
%RSD	0.69007	0.21600	0.19516	0.05546	0.31426	0.07221	28.45367	0.21661	1.63706

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47703	0.19068	0.25266	0.97423	38.43887	0.48827	37.98944	0.49186	0.97687
#2	0.47460	0.19102	0.25330	0.97602	38.17868	0.48442	37.87677	0.49085	0.97350
Mean	**0.47581**	**0.19085**	**0.25298**	**0.97512**	**38.30878**	**0.48635**	**37.93310**	**0.49135**	**0.97518**
%RSD	0.36115	0.12500	0.17778	0.13033	0.48026	0.56022	0.21003	0.14656	0.24489

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	37.46859	0.47075	-0.00909	0.48826	0.50836	-0.02243	0.48206	2.01943	2.04872
#2	37.14522	0.46915	-0.00568	0.49570	0.50012	-0.02560	0.48413	2.02791	2.04541
Mean	**37.30691**	**0.46995**	**-0.00738**	**0.49198**	**0.50424**	**-0.02402**	**0.48310**	**2.02367**	**2.04706**
%RSD	0.61291	0.24114	32.67294	1.06961	1.15538	9.33980	0.30344	0.29610	0.11415

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.05092	0.51292	0.50674	-0.02888	0.49252	2.08122	-0.06039	0.48719	0.47650
#2	2.03746	0.51045	0.50465	-0.02982	0.49149	2.08153	-0.04529	0.48772	0.47849
Mean	**2.04419**	**0.51168**	**0.50569**	**-0.02935**	**0.49200**	**2.08138**	**-0.05284**	**0.48745**	**0.47749**
%RSD	0.46562	0.34031	0.29236	2.27760	0.14736	0.01078	20.21058	0.07750	0.29464

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00354	0.50167	2.03897
#2	0.00353	0.49865	2.03958
Mean	**0.00353**	**0.50016**	**2.03927**
%RSD	0.32480	0.42657	0.02142

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:27
SampleId1 : 1111179-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:06:28
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00013	-0.00405	-0.00032	0.03124	0.09922	-0.00030	0.00051	5.72371	-0.00050
#2	0.00006	-0.00317	-0.00137	0.03132	0.09859	-0.00037	-0.00053	5.73534	-0.00043
Mean	**0.00010**	**-0.00361**	**-0.00084**	**0.03128**	**0.09890**	**-0.00033**	**-0.00001**	**5.72952**	**-0.00047**
%RSD	47.63405	17.14076	88.42938	0.17247	0.44715	14.92083	6588.18460	0.14353	9.80781

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00054	-0.00070	0.00018	-0.00221	2.10876	0.00359	1.32707	0.00392	-0.00092
#2	-0.00026	-0.00045	0.00035	-0.00305	2.09174	0.00351	1.32618	0.00392	0.00129
Mean	**-0.00040**	**-0.00058**	**0.00026**	**-0.00263**	**2.10025**	**0.00355**	**1.32663**	**0.00392**	**0.00019**
%RSD	48.48242	29.85854	46.77637	22.37361	0.57292	1.57847	0.04775	0.00000	825.92967

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	162.57148	-0.00009	-0.00773	-0.00226	-0.00030	42.39288	-0.00379	0.00546	0.00206
#2	162.18073	-0.00026	0.00115	0.00392	0.00080	42.36327	-0.00329	0.00005	0.00240
Mean	**162.37611**	**-0.00018**	**-0.00329**	**0.00083**	**0.00025**	**42.37807**	**-0.00354**	**0.00275**	**0.00223**
%RSD	0.17016	66.05362	190.68452	525.63219	313.05264	0.04940	10.11397	139.04087	10.79471

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.59843	-0.00080	0.28596	-0.00356	-0.00247	-0.00111	-0.04188	-0.00030	0.01031
#2	4.59804	0.00166	0.28505	-0.00471	-0.00267	0.00197	-0.02677	-0.00030	0.00899
Mean	**4.59823**	**0.00043**	**0.28550**	**-0.00414**	**-0.00257**	**0.00043**	**-0.03432**	**-0.00030**	**0.00965**
%RSD	0.00608	405.84100	0.22462	19.65341	5.46651	504.27895	31.11704	0.03828	9.67574

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	-0.00092	-0.00095	0.00319**UNDGREEN**
#2	-0.00043	0.00184	0.00162
Mean	**-0.00068**	**0.00044**	**0.00240**
%RSD	51.83070	445.81757	46.34637

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:27
SampleId1 : 1111184-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:08:18
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE3

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00128	-0.03604	0.00011	0.01789	0.07124	-0.00040	-0.00175	55.03528	-0.00105
#2	-0.00004	-0.04422	0.00042	0.01858	0.07095	-0.00048	-0.00556	55.29057	-0.00073
Mean	**-0.00066**	**-0.04013**	**0.00026**	**0.01823**	**0.07110**	**-0.00044**	**-0.00366**	**55.16293**	**-0.00089**
%RSD	133.38481	14.42950	84.72610	2.66278	0.29018	13.54299	73.67109	0.32724	25.54268

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00119	-0.00157	0.00018	-0.01280	1.78925	0.00063	14.55526	0.21864	-0.00083
#2	-0.00085	-0.00086	0.00017	-0.01327	1.77600	0.00061	14.48301	0.21864	0.00023
Mean	**-0.00102**	**-0.00121**	**0.00017**	**-0.01304**	**1.78263**	**0.00062**	**14.51914**	**0.21864**	**-0.00030**
%RSD	23.66047	41.37739	6.26759	2.58001	0.52589	1.63976	0.35189	0.00000	249.21906

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	23.04443	-0.00013	-0.01273	-0.00291	0.00202	3.44726	-0.00182	-0.00325	-0.00161
#2	22.82535	-0.00016	-0.01228	-0.00361	0.00127	3.41862	-0.00072	-0.00223	-0.00399
Mean	**22.93489**	**-0.00014**	**-0.01250**	**-0.00326**	**0.00165**	**3.43294**	**-0.00127**	**-0.00274**	**-0.00280**
%RSD	0.67543	16.24591	2.57297	15.15438	32.08780	0.58991	61.45046	26.46858	60.27690

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.24552	0.00002	1.14274	-0.02052	-0.00341	-0.00159	-0.05079	-0.00071	0.00272
#2	4.23444	0.00084	1.13822	-0.01087	-0.00284	0.00067	-0.03088	-0.00046	0.00338
Mean	**4.23998**	**0.00043**	**1.14048**	**-0.01569**	**-0.00312**	**-0.00046**	**-0.04084**	**-0.00059**	**0.00305**
%RSD	0.18485	134.95759	0.28025	43.48418	12.82762	348.06236	34.47345	29.58525	15.31635

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00005	0.00038	-0.00215
#2	-0.00055	-0.00035	-0.00340
Mean	**-0.00030**	**0.00001**	**-0.00278**
%RSD	116.74532	3841.95734	31.79945

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:28
SampleId1 : IP111116-5MB **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:10:06

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE4

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00139	-0.04443	-0.00242	-0.00736	-0.00150	-0.00053	-0.00626	-0.08160	-0.00100
#2	-0.00035	-0.04885	-0.00190	-0.00622	-0.00138	-0.00058	-0.00071	-0.07872	-0.00052
Mean	**-0.00087**	**-0.04664**	**-0.00216**	**-0.00679**	**-0.00144**	**-0.00055**	**-0.00348**	**-0.08016**	**-0.00076**
%RSD	84.41878	6.70783	17.24939	11.91809	6.14244	7.32471	112.69632	2.53940	43.99301

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	-0.00145	-0.00066	-0.01803	-0.25765	-0.00204	-0.06899	-0.00104	-0.00059
#2	-0.00027	-0.00127	-0.00076	-0.01732	-0.24468	-0.00202	-0.06183	-0.00086	-0.00231
Mean	**-0.00064**	**-0.00136**	**-0.00071**	**-0.01767**	**-0.25116**	**-0.00203**	**-0.06541**	**-0.00095**	**-0.00145**
%RSD	83.10222	9.62223	9.71032	2.85444	3.65213	1.00388	7.74110	13.71167	83.94838

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.18226	-0.00179	-0.00613	-0.00144	-0.00001	-0.02560	-0.00145	-0.00640	-0.00093
#2	-0.18093	-0.00156	-0.02206	0.00023	-0.00238	-0.03195	-0.00478	-0.00324	-0.00237
Mean	**-0.18160**	**-0.00168**	**-0.01410**	**-0.00060**	**-0.00119**	**-0.02878**	**-0.00312**	**-0.00482**	**-0.00165**
%RSD	0.51610	9.83014	79.88100	196.03823	140.42908	15.59061	75.42200	46.37941	62.07617

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01774	0.00043	-0.00194	-0.01093	-0.00326	0.00083	-0.03843	-0.00096	-0.00157
#2	-0.01372	0.00166	-0.00188	-0.00541	-0.00285	0.00339	-0.03225	-0.00071	0.00041
Mean	**-0.01573**	**0.00104**	**-0.00191**	**-0.00817**	**-0.00305**	**0.00211**	**-0.03534**	**-0.00083**	**-0.00058**
%RSD	18.08431	83.25979	2.14320	47.77117	9.43713	85.75832	12.36103	20.85292	240.17247

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00009	-0.00048	-0.00275
#2	-0.00012	-0.00151	-0.00266
Mean	**-0.00002**	**-0.00100**	**-0.00270**
%RSD	836.35545	72.75216	2.25061

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:28
SampleId1 : IP111116-5LCS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:11:54
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE5

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09012	2.15141	2.02378	0.50475	2.02647	0.04856	0.00160	37.39235	0.04774
#2	0.08939	2.12867	1.98141	0.49390	2.00292	0.04758	0.00505	36.69081	0.04688

Mean	**0.08976**	**2.14004**	**2.00259**	**0.49933**	**2.01469**	**0.04807**	**0.00332**	**37.04158**	**0.04731**
%RSD	0.58059	0.75137	1.49620	1.53689	0.82649	1.44061	73.31669	1.33922	1.28215

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48032	0.19312	0.25413	0.97447	36.29066	0.50023	38.26931	0.49649	0.97382
#2	0.47138	0.19020	0.25125	0.95973	35.94623	0.49504	37.69862	0.48835	0.95974
Mean	**0.47585**	**0.19166**	**0.25269**	**0.96710**	**36.11845**	**0.49764**	**37.98396**	**0.49242**	**0.96678**
%RSD	1.32776	1.07872	0.80409	1.07751	0.67430	0.73638	1.06240	1.16993	1.03019

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	37.22296	0.47059	-0.00886	0.49876	0.51149	-0.01609	0.48560	2.15542	2.18274
#2	36.88685	0.46364	-0.00795	0.49515	0.49989	-0.02243	0.47820	2.12283	2.15870
Mean	**37.05491**	**0.46711**	**-0.00841**	**0.49695**	**0.50569**	**-0.01926**	**0.48190**	**2.13913**	**2.17072**
%RSD	0.64139	1.05127	7.65201	0.51359	1.62223	23.29508	1.08518	1.07726	0.78296

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.08913	0.51620	0.50400	-0.02880	0.49590	2.11682	-0.04185	0.48863	0.48280
#2	2.05917	0.50717	0.49684	-0.03194	0.48831	2.06703	-0.03567	0.48226	0.47517
Mean	**2.07415**	**0.51168**	**0.50042**	**-0.03037**	**0.49211**	**2.09193**	**-0.03876**	**0.48544**	**0.47898**
%RSD	1.02108	1.24717	1.01165	7.31237	1.08993	1.68291	11.29058	0.92763	1.12594

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00172	0.50725	2.17364
#2	0.00202	0.49831	2.14676
Mean	**0.00187**	**0.50278**	**2.16020**
%RSD	11.28999	1.25733	0.88001

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:28
SampleId1 : 1111037-3 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:13:42
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00024	-0.02360	0.00621	0.01003	0.15444	-0.00056	-0.00140	120.57967	-0.00104
#2	-0.00039	-0.02663	-0.00284	0.00919	0.15473	-0.00061	-0.00279	120.64267	-0.00027
Mean	**-0.00032**	**-0.02511**	**0.00169**	**0.00961**	**0.15459**	**-0.00058**	**-0.00209**	**120.61117**	**-0.00065**
%RSD	33.27547	8.53662	379.95169	6.17301	0.13360	5.75795	46.94105	0.03694	83.07436

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00032	-0.00095	-0.00011	0.00504	0.70316	0.00808	10.47517	-0.00012	-0.00059
#2	-0.00025	-0.00073	-0.00001	0.00349	0.71140	0.00812	10.46661	-0.00012	-0.00133
Mean	**-0.00029**	**-0.00084**	**-0.00006**	**0.00427**	**0.70728**	**0.00810**	**10.47089**	**-0.00012**	**-0.00096**

%RSD	17.02209	18.92332	120.57750	25.62232	0.82410	0.34582	0.05780	0.00000	54.44627

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.04598	-0.00006	0.02412	0.00331	-0.00418	6.74882	-0.00574	0.00017	-0.00015
#2	7.02019	-0.00083	0.01298	0.00054	-0.00082	6.74243	-0.00245	0.00167	0.00334
Mean	**7.03308**	**-0.00044**	**0.01855**	**0.00192**	**-0.00250**	**6.74562**	**-0.00410**	**0.00092**	**0.00159**
%RSD	0.25923	121.80062	42.49558	101.96278	95.04496	0.06691	56.92726	115.88192	155.11840

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.82087	-0.00285	0.16715	-0.01692	-0.00228	0.00595	-0.03364	-0.00058	0.00107
#2	9.80960	0.00043	0.16708	-0.01821	-0.00243	0.00758	-0.04325	-0.00017	0.00140
Mean	**9.81523**	**-0.00121**	**0.16712**	**-0.01757**	**-0.00236**	**0.00676**	**-0.03845**	**-0.00038**	**0.00123**
%RSD	0.08120	191.43603	0.02945	5.22088	4.47149	17.01772	17.67516	76.36330	18.93966

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00108	-0.00169	-0.00005
#2	-0.00130	-0.00037	0.00278
Mean	**-0.00119**	**-0.00103**	**0.00137**
%RSD	12.99500	90.73428	146.33895

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:28
SampleId1 : 1111037-3D SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 15:15:31
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE7

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00024	-0.02139	0.00021	0.00980	0.15507	-0.00056	-0.00105	120.57591	-0.00052
#2	-0.00066	-0.02227	-0.00674	0.00965	0.15407	-0.00059	0.00016	120.01255	-0.00066
Mean	**-0.00045**	**-0.02183**	**-0.00326**	**0.00973**	**0.15457**	**-0.00057**	**-0.00045**	**120.29423**	**-0.00059**
%RSD	66.19704	2.83445	150.56397	1.10916	0.45811	4.34352	192.37608	0.33115	17.13497

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00053	-0.00076	-0.00048	0.00611	0.69167	0.00805	10.48688	-0.00021	-0.00149
#2	-0.00032	-0.00070	-0.00020	0.00623	0.68717	0.00801	10.42607	-0.00012	-0.00329
Mean	**-0.00043**	**-0.00073**	**-0.00034**	**0.00617**	**0.68942**	**0.00803**	**10.45647**	**-0.00017**	**-0.00239**
%RSD	33.94556	5.99815	57.87837	1.36308	0.46114	0.41218	0.41124	38.98332	53.29583

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.08549	-0.00153	0.02094	-0.00083	-0.00100	6.78073	-0.00306	0.00395	0.00172
#2	7.00907	-0.00039	0.02390	-0.00092	0.00059	6.72328	-0.00124	0.00824	-0.00348
Mean	**7.04728**	**-0.00096**	**0.02242**	**-0.00087**	**-0.00020**	**6.75201**	**-0.00215**	**0.00609**	**-0.00088**
%RSD	0.76675	83.32579	9.32940	7.36873	551.84003	0.60161	59.88588	49.79241	418.50474

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	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.84395	0.00166	0.16784	-0.01483	-0.00264	-0.00335	-0.03708	-0.00042	0.00404
#2	9.78714	-0.00162	0.16681	-0.01463	-0.00242	0.00268	-0.03570	-0.00046	0.00404
Mean	**9.81555**	**0.00002**	**0.16732**	**-0.01473**	**-0.00253**	**-0.00033**	**-0.03639**	**-0.00044**	**0.00404**
%RSD	0.40926	12464.22957	0.43625	0.91683	6.10759	1278.52013	2.66798	6.57771	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00144	-0.00094	0.00246
#2	-0.00119	0.00009	0.00043
Mean	**-0.00132**	**-0.00043**	**0.00144**
%RSD	13.36654	170.48259	99.77818

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:28
SampleId1 : 1111037-3L 5X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 15:17:19
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE8

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00071	0.27380	-0.00653	-0.00408	0.03091	-0.00059	0.00414	23.54603	-0.00084
#2	-0.00046	0.27282	-0.00084	-0.00256	0.03061	-0.00061	-0.00209	23.68972	-0.00080
Mean	**-0.00058**	**0.27331**	**-0.00369**	**-0.00332**	**0.03076**	**-0.00060**	**0.00102**	**23.61788**	**-0.00082**
%RSD	30.46195	0.25421	109.10694	32.51447	0.67040	2.42283	430.24326	0.43022	3.23744

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00091	-0.00142	-0.00121	-0.01208	-0.09972	-0.00037	2.08920	-0.00076	-0.00067
#2	-0.00063	-0.00105	-0.00076	-0.01244	-0.08300	-0.00034	2.09323	-0.00086	-0.00042
Mean	**-0.00077**	**-0.00123**	**-0.00099**	**-0.01226**	**-0.09136**	**-0.00035**	**2.09121**	**-0.00081**	**-0.00055**
%RSD	25.13213	21.14550	32.38132	2.05698	12.93894	7.17797	0.13638	8.02261	31.71595

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.09689	-0.00076	-0.00818	-0.00493	-0.00337	1.32987	-0.00231	0.00395	-0.00527
#2	1.09041	-0.00063	-0.00613	0.00098	-0.00016	1.32034	-0.00170	-0.00071	-0.00331
Mean	**1.09365**	**-0.00069**	**-0.00716**	**-0.00197**	**-0.00177**	**1.32510**	**-0.00201**	**0.00162**	**-0.00429**
%RSD	0.41916	13.56393	20.22685	211.81852	128.39553	0.50848	21.51326	203.62144	32.29483

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.98936	0.00207	0.03309	-0.00888	-0.00302	0.00492	-0.04324	-0.00108	-0.00058
#2	1.98884	0.00125	0.03300	-0.00440	-0.00262	0.00247	-0.02882	-0.00067	-0.00025
Mean	**1.98910**	**0.00166**	**0.03305**	**-0.00664**	**-0.00282**	**0.00369**	**-0.03603**	**-0.00087**	**-0.00042**
%RSD	0.01876	34.97159	0.17325	47.77945	9.96960	46.77272	28.29263	33.14306	55.83117

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	-0.00048	-0.00389	-0.00220
#2	-0.00045	0.00022	-0.00244
Mean	**-0.00047**	**-0.00184**	**-0.00232**
%RSD	4.55196	158.26322	7.43089

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:28
SampleId1 : 1111037-3MS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:19:07
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE9

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08951	2.10828	1.99462	0.51966	2.16798	0.04746	0.00140	156.91243	0.04599
#2	0.08883	2.08419	1.98206	0.51652	2.16302	0.04729	0.00019	156.56034	0.04661
Mean	**0.08917**	**2.09624**	**1.98834**	**0.51809**	**2.16550**	**0.04737**	**0.00080**	**156.73639**	**0.04630**
%RSD	0.53655	0.81237	0.44698	0.42771	0.16187	0.24377	107.92840	0.15884	0.94978

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.46444	0.18536	0.25496	0.96632	40.22151	0.55107	48.43152	0.48085	0.95027
#2	0.46367	0.18606	0.25478	0.96440	39.86914	0.54680	48.26148	0.48057	0.95323
Mean	**0.46406**	**0.18571**	**0.25487**	**0.96536**	**40.04533**	**0.54894**	**48.34650**	**0.48071**	**0.95175**
%RSD	0.11693	0.26402	0.05031	0.14041	0.62221	0.54909	0.24871	0.04085	0.22029

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	46.74058	0.45399	0.01730	0.49066	0.49717	6.63712	0.48176	2.14066	2.13851
#2	46.35419	0.45593	0.02139	0.48768	0.49687	6.70414	0.47584	2.11820	2.14007
Mean	**46.54739**	**0.45496**	**0.01935**	**0.48917**	**0.49702**	**6.67063**	**0.47880**	**2.12943**	**2.13929**
%RSD	0.58695	0.30095	14.96821	0.43160	0.04218	0.71039	0.87513	0.74581	0.05178

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	11.65853	0.51046	0.66716	-0.03320	0.48213	2.08153	-0.04322	0.47762	0.45793
#2	11.61303	0.50225	0.66540	-0.03498	0.48217	2.09274	-0.04803	0.47585	0.45428
Mean	**11.63578**	**0.50636**	**0.66628**	**-0.03409**	**0.48215**	**2.08714**	**-0.04562**	**0.47673**	**0.45611**
%RSD	0.27649	1.14682	0.18656	3.69133	0.00584	0.37977	7.44622	0.26196	0.56538

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00051	0.49500	2.13923
#2	-0.00032	0.49381	2.13279
Mean	**-0.00042**	**0.49441**	**2.13601**
%RSD	31.88387	0.17048	0.21300

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:29

SampleId1 : 1111037-3MSD **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:20:56
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE10

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08899	2.12574	1.97805	0.51721	2.16806	0.04742	-0.00084	156.62139	0.04612
#2	0.08873	2.11774	1.98997	0.51507	2.16405	0.04741	-0.00189	156.37649	0.04688
Mean	**0.08886**	**2.12174**	**1.98401**	**0.51614**	**2.16606**	**0.04741**	**-0.00137**	**156.49894**	**0.04650**
%RSD	0.20492	0.26643	0.42476	0.29319	0.13114	0.01747	54.24239	0.11065	1.15614

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.46527	0.18593	0.25727	0.96871	40.08522	0.54862	48.26839	0.47937	0.94648
#2	0.46375	0.18619	0.25598	0.96560	39.87019	0.54617	48.12508	0.47872	0.94895
Mean	**0.46451**	**0.18606**	**0.25663**	**0.96716**	**39.97771**	**0.54740**	**48.19674**	**0.47904**	**0.94771**
%RSD	0.23146	0.09659	0.35579	0.22775	0.38033	0.31709	0.21025	0.09564	0.18435

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	46.71661	0.45750	0.01798	0.49129	0.49588	6.62436	0.48222	2.13091	2.16132
#2	46.51457	0.45860	0.01753	0.49315	0.49709	6.59245	0.48224	2.13642	2.16236
Mean	**46.61559**	**0.45805**	**0.01775**	**0.49222**	**0.49649**	**6.60840**	**0.48223**	**2.13367**	**2.16184**
%RSD	0.30648	0.17008	1.81231	0.26678	0.17234	0.34145	0.00269	0.18273	0.03416

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	11.66058	0.50964	0.67216	-0.03737	0.48233	2.08832	-0.04597	0.47635	0.45959
#2	11.63527	0.50677	0.67076	-0.03504	0.47953	2.08071	-0.05146	0.47626	0.45627
Mean	**11.64792**	**0.50821**	**0.67146**	**-0.03620**	**0.48093**	**2.08451**	**-0.04871**	**0.47630**	**0.45793**
%RSD	0.15365	0.39947	0.14811	4.55044	0.41272	0.25838	7.96914	0.01228	0.51194

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00040	0.49435	2.15119
#2	-0.00038	0.49578	2.15372
Mean	**-0.00039**	**0.49507**	**2.15246**
%RSD	4.97078	0.20361	0.08320

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:29
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 15:23:38
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	0.19890	53.53644	0.50981	1.03004	1.05098	0.48495	0.53574	48.46249	0.49832
#2	0.19843	53.66512	0.51321	1.02399	1.05515	0.48397	0.52467	48.37760	0.49814
Mean	**0.19866**	**53.60078**	**0.51151**	**1.02702**	**1.05306**	**0.48446**	**0.53020**	**48.42004**	**0.49823**
%RSD	0.16883	0.16976	0.46935	0.41654	0.28039	0.14211	1.47642	0.12396	0.02528

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48931	0.98439	1.05844	20.51737	49.98756	0.54356	51.10610	0.99695	0.99252
#2	0.48620	0.98211	1.06260	20.49293	50.16799	0.54538	51.05671	0.99630	0.98981
Mean	**0.48775**	**0.98325**	**1.06052**	**20.50515**	**50.07778**	**0.54447**	**51.08141**	**0.99663**	**0.99117**
%RSD	0.45016	0.16362	0.27767	0.08430	0.25478	0.23715	0.06837	0.04631	0.19395

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.57360	0.96181	5.15363	1.00961	1.02718	5.33588	0.50284	1.06603	1.05998
#2	49.72131	0.96492	5.16182	1.00130	1.02584	5.38688	0.50755	1.06629	1.06299
Mean	**49.64745**	**0.96336**	**5.15773**	**1.00546**	**1.02651**	**5.36138**	**0.50520**	**1.06616**	**1.06148**
%RSD	0.21037	0.22852	0.11235	0.58470	0.09205	0.67265	0.65920	0.01751	0.20043

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.15822	1.05193	0.51948	0.31171	0.50466	0.54387	5.11829	0.49015	0.95208
#2	5.16736	1.04822	0.52078	0.31101	0.50446	0.54642	5.12657	0.48904	0.95075
Mean	**5.16279**	**1.05008**	**0.52013**	**0.31136**	**0.50456**	**0.54515**	**5.12243**	**0.48960**	**0.95142**
%RSD	0.12520	0.24948	0.17632	0.16027	0.02790	0.33117	0.11418	0.16083	0.09902

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	1.00001	1.02133	1.06199
#2	0.99934	1.01767	1.06409
Mean	**0.99967**	**1.01950**	**1.06304**
%RSD	0.04796	0.25385	0.13934

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:29
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 15:25:32
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00020	0.00273	-0.00284	-0.00561	-0.00088	-0.00006	-0.00365	-0.05742	-0.00050
#2	-0.00015	0.00044	-0.00095	-0.00530	-0.00083	-0.00013	-0.00209	-0.05742	-0.00074
Mean	**-0.00017**	**0.00159**	**-0.00190**	**-0.00545**	**-0.00086**	**-0.00009**	**-0.00287**	**-0.05742**	**-0.00062**
%RSD	21.47758	102.50467	70.72464	3.95610	3.44337	53.16623	38.40121	0.00000	27.60963

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00095	-0.00077	-0.00067	-0.00471	-0.25540	-0.00184	-0.03408	-0.00058	-0.00010

#2	-0.00026	-0.00052	-0.00076	-0.00495	-0.24168	-0.00183	-0.03498	-0.00058	-0.00157
Mean	**-0.00061**	**-0.00064**	**-0.00071**	**-0.00483**	**-0.24854**	**-0.00184**	**-0.03453**	**-0.00058**	**-0.00083**
%RSD	79.88051	27.70365	9.17277	3.48125	3.90355	0.41595	1.83309	0.00000	124.92451

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.16735	-0.00196	-0.00272	-0.00079	-0.00164	-0.03512	-0.00501	0.00358	-0.00212
#2	-0.16762	-0.00139	-0.00500	-0.00120	-0.00199	-0.03512	-0.00184	-0.00917	-0.00195
Mean	**-0.16748**	**-0.00168**	**-0.00386**	**-0.00100**	**-0.00182**	**-0.03512**	**-0.00342**	**-0.00279**	**-0.00203**
%RSD	0.11660	23.87321	41.68653	29.82584	13.41876	0.00000	65.44623	322.46224	5.93178

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01245	0.00002	-0.00168	-0.00472	-0.00299	-0.00130	-0.02952	-0.00038	-0.00124
#2	-0.01195	-0.00367	-0.00170	-0.00280	-0.00272	-0.00151	-0.02952	-0.00013	-0.00091
Mean	**-0.01220**	**-0.00182**	**-0.00169**	**-0.00376**	**-0.00285**	**-0.00141**	**-0.02952**	**-0.00026**	**-0.00108**
%RSD	2.89019	142.90334	0.96557	36.27076	6.64747	10.27805	0.00039	67.37263	21.64708

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00074	-0.00136	-0.00022
#2	0.00061	-0.00173	-0.00435
Mean	**0.00068**	**-0.00154**	**-0.00228**
%RSD	14.27053	16.94208	127.81165

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:29
SampleId1 : 1111040-1 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:27:27
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE11

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00072	-0.04007	-0.00116	3.08342	3.21598	-0.00031	0.00518	656.73541	-0.00105
#2	0.00005	-0.03691	0.00053	3.06914	3.18099	-0.00028	0.00606	667.27273	-0.00025
Mean	**-0.00034**	**-0.03849**	**-0.00032**	**3.07628**	**3.19849**	**-0.00030**	**0.00562**	**662.00407**	**-0.00065**
%RSD	162.17971	5.80455	377.60000	0.32817	0.77344	7.40400	10.98978	1.12552	85.99068

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00362	0.00247	-0.00140	34.39427	77.58273	2.36890	50.29300	0.61130	0.00318
#2	0.00454	0.00327	-0.00077	34.60448	76.14067	2.32685	50.26393	0.61520	0.00522
Mean	**0.00408**	**0.00287**	**-0.00109**	**34.49938**	**76.86170**	**2.34788**	**50.27847**	**0.61325**	**0.00420**
%RSD	15.82663	19.89842	41.35666	0.43087	1.32666	1.26643	0.04088	0.44913	34.45211

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	386.69836	0.00760	0.03846	0.00051	0.00298	3.40589	-0.00342	-0.00211	0.00204
#2	395.59459	0.00930	-0.04480	0.00926	-0.00035	3.41862	-0.00011	0.00229	-0.00379

Mean	**391.14647**	**0.00845**	**-0.00317**	**0.00488**	**0.00131**	**3.41225**	**-0.00176**	**0.00009**	**-0.00088**
%RSD	1.60824	14.21787	1856.46696	126.57313	178.92988	0.26377	132.89683	3399.03612	470.27654

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.02748	-0.00121	37.86521	-0.02784	-0.00518	0.00090	-0.03166	-0.00390	0.02715
#2	2.01784	0.00780	38.08209	-0.01294	-0.00484	0.00416	-0.01669	-0.00292	0.02616
Mean	**2.02266**	**0.00330**	**37.97365**	**-0.02039**	**-0.00501**	**0.00253**	**-0.02418**	**-0.00341**	**0.02665**
%RSD	0.33700	193.17920	0.40387	51.67057	4.77293	91.30555	43.75944	20.37218	2.62789

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00176	0.00216	0.00066
#2	0.00139	0.00285	-0.00177
Mean	**0.00158**	**0.00250**	**-0.00055**
%RSD	16.55478	19.62785	309.21426

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:29
SampleId1 : 1111040-3 10X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 15:29:19
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE12

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00055	-0.04736	0.00706	4.88821	2.40155	-0.00044	-0.00159	1031.84481	-0.00043
#2	-0.00070	-0.05242	0.00432	4.85364	2.37944	-0.00050	-0.00246	1028.81430	-0.00095
Mean	**-0.00062**	**-0.04989**	**0.00569**	**4.87093**	**2.39049**	**-0.00047**	**-0.00203**	**1030.32955**	**-0.00069**
%RSD	17.48150	7.16387	34.04487	0.50188	0.65398	8.91212	30.18398	0.20798	52.78631

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00077	-0.00087	-0.00221	8.54125	120.56792	3.86834	82.61393	0.40933	-0.00034
#2	0.00143	-0.00050	-0.00203	8.49835	119.43701	3.83235	82.09371	0.40794	-0.00173
Mean	**0.00110**	**-0.00069**	**-0.00212**	**8.51980**	**120.00246**	**3.85035**	**82.35382**	**0.40864**	**-0.00104**
%RSD	42.26012	38.78472	6.16382	0.35607	0.66638	0.66100	0.44667	0.24002	94.73781

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	349.90985	-0.00119	-0.38312	-0.00139	-0.00325	6.62436	-0.00158	-0.00893	0.00123
#2	351.78405	-0.00119	-0.44280	-0.00145	-0.00432	6.57968	-0.00356	0.00470	-0.00269
Mean	**350.84695**	**-0.00119**	**-0.41296**	**-0.00142**	**-0.00378**	**6.60202**	**-0.00257**	**-0.00212**	**-0.00073**
%RSD	0.37773	0.00000	10.22023	3.29581	20.06977	0.47848	54.38925	454.81897	380.76489

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.63705	-0.00079	46.81118	-0.04097	-0.00763	0.00405	-0.06142	-0.00171	0.09915
#2	1.62426	-0.00325	46.77217	-0.03743	-0.00714	0.00209	-0.06139	-0.00172	0.10114
Mean	**1.63065**	**-0.00202**	**46.79168**	**-0.03920**	**-0.00739**	**0.00307**	**-0.06141**	**-0.00171**	**0.10014**

%RSD	0.55461	85.88836	0.05895	6.37837	4.66196	45.10790	0.03364	0.34309	1.39980

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00194	-0.00263	-0.00215
#2	0.00140	-0.00337	-0.00023
Mean	**0.00167**	**-0.00300**	**-0.00119**
%RSD	22.92270	17.42190	113.86697

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:30
SampleId1 : 1111040-4 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:31:34
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE13

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00081	1.41122	0.00053	4.19730	19.57916	-0.00043	0.00309	1047.63959	-0.00127
#2	-0.00112	1.40478	0.00116	4.18040	19.49526	-0.00043	0.00170	1039.27904	-0.00097
Mean	**-0.00096**	**1.40800**	**0.00084**	**4.18885**	**19.53721**	**-0.00043**	**0.00239**	**1043.45932**	**-0.00112**
%RSD	22.98863	0.32344	53.00850	0.28518	0.30365	0.37688	41.06399	0.56656	19.08014

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00975	-0.00156	-0.00264	11.55738	147.93497	4.86302	83.81472	0.35128	-0.00263
#2	0.01005	-0.00106	-0.00328	11.49849	147.29425	4.84865	83.45355	0.34916	-0.00223
Mean	**0.00990**	**-0.00131**	**-0.00296**	**11.52794**	**147.61461**	**4.85583**	**83.63414**	**0.35022**	**-0.00243**
%RSD	2.11047	27.01518	15.20615	0.36122	0.30692	0.20924	0.30536	0.42905	11.90868

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	350.51327	-0.00110	-0.74886	-0.00332	-0.00350	0.52020	-0.00171	-0.00008	-0.00003
#2	352.39391	-0.00177	-0.83763	-0.00376	-0.00303	0.54559	-0.00564	-0.00966	-0.00447
Mean	**351.45359**	**-0.00144**	**-0.79325**	**-0.00354**	**-0.00327**	**0.53289**	**-0.00368**	**-0.00487**	**-0.00225**
%RSD	0.37838	33.40663	7.91289	8.70027	10.25134	3.36939	75.42782	139.11469	139.60156

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.55415	-0.00202	52.38066	-0.03966	-0.00721	0.00090	-0.06142	-0.00170	0.04414
#2	0.54960	-0.00366	52.35818	-0.04220	-0.00730	0.01058	-0.06138	-0.00228	0.04145
Mean	**0.55187**	**-0.00284**	**52.36942**	**-0.04093**	**-0.00726**	**0.00574**	**-0.06140**	**-0.00199**	**0.04279**
%RSD	0.58260	40.74551	0.03035	4.38541	0.87152	119.25442	0.04618	20.75558	4.44457

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00187	-0.00344	-0.00005
#2	0.00203	-0.00327	-0.00620
Mean	**0.00195**	**-0.00336**	**-0.00312**
%RSD	5.90983	3.59718	139.34867

ted: 11/21/2011 12:56:06 **User: MIKE LUNDGREEN**
Method : Paragon File : 111118A Printed : 11/21/2011 12:55:30
SampleId1 : 1111040-5 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:33:23
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE14

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00091	2.20977	0.00284	4.45145	11.20176	-0.00051	-0.00385	959.14132	-0.00079
#2	-0.00065	2.17894	-0.00063	4.40142	11.08594	-0.00053	-0.00454	941.58010	-0.00158
Mean	**-0.00078**	**2.19436**	**0.00111**	**4.42644**	**11.14385**	**-0.00052**	**-0.00420**	**950.36071**	**-0.00119**
%RSD	23.67798	0.99357	222.15173	0.79918	0.73487	2.23858	11.66892	1.30663	47.58132

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00538	-0.00106	-0.00300	8.90713	135.52612	4.20114	75.66217	0.34971	-0.00198
#2	0.00543	-0.00115	-0.00282	8.79563	133.95411	4.16082	74.71628	0.34565	-0.00059
Mean	**0.00541**	**-0.00111**	**-0.00291**	**8.85138**	**134.74012**	**4.18098**	**75.18923**	**0.34768**	**-0.00128**
%RSD	0.57991	6.07024	4.39479	0.89071	0.82498	0.68189	0.88955	0.82676	76.62167

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	357.98559	-0.00211	-0.77740	-0.00176	-0.00190	0.92337	-0.00355	-0.00003	-0.00116
#2	357.31251	-0.00086	-0.85913	-0.00370	-0.00246	0.92655	-0.00660	-0.01011	-0.00485
Mean	**357.64905**	**-0.00149**	**-0.81827**	**-0.00273**	**-0.00218**	**0.92496**	**-0.00508**	**-0.00507**	**-0.00300**
%RSD	0.13307	59.68737	7.06326	50.34405	18.08044	0.24273	42.46845	140.65300	86.73473

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.40180	-0.00039	49.75732	-0.04042	-0.00664	-0.00271	-0.07060	-0.00148	0.21239
#2	0.39498	-0.00284	49.48709	-0.04105	-0.00668	0.00454	-0.06915	-0.00191	0.20868
Mean	**0.39839**	**-0.00162**	**49.62221**	**-0.04073**	**-0.00666**	**0.00092**	**-0.06987**	**-0.00169**	**0.21053**
%RSD	1.21009	107.59946	0.38506	1.10001	0.42234	560.23420	1.46635	18.01291	1.24412

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00189	-0.00186	-0.00078
#2	0.00188	-0.00287	-0.00660
Mean	**0.00189**	**-0.00237**	**-0.00369**
%RSD	0.41280	30.47785	111.38055

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:30
SampleId1 : 1111040-7 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:35:20
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE15

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00056	-0.03135	0.00158	3.12957	2.95921	-0.00038	-0.00002	673.17484	-0.00095
#2	-0.00087	-0.04043	0.00032	3.09167	2.93631	-0.00042	0.00102	666.49407	-0.00106
Mean	**-0.00071**	**-0.03589**	**0.00095**	**3.11062**	**2.94776**	**-0.00040**	**0.00050**	**669.83446**	**-0.00100**
%RSD	31.18210	17.89942	94.24208	0.86149	0.54927	7.24459	148.16813	0.70525	7.47180

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00285	0.00222	-0.00101	35.07763	77.98510	2.31990	51.34337	0.62605	0.00375
#2	0.00282	0.00250	-0.00065	34.76133	77.30033	2.29979	50.84626	0.62132	0.00580
Mean	**0.00284**	**0.00236**	**-0.00083**	**34.91948**	**77.64272**	**2.30985**	**51.09481**	**0.62369**	**0.00477**
%RSD	0.80634	8.37472	30.52427	0.64048	0.62364	0.61560	0.68796	0.53633	30.31637

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	396.93842	0.00813	-0.10529	0.00029	0.00169	3.38043	-0.00317	-0.00309	0.00192
#2	395.42970	0.00908	-0.13984	-0.00347	0.00319	3.36134	-0.00181	-0.01036	0.00484
Mean	**396.18406**	**0.00860**	**-0.12256**	**-0.00159**	**0.00244**	**3.37088**	**-0.00249**	**-0.00673**	**0.00338**
%RSD	0.26927	7.80529	19.93517	167.47462	43.68567	0.40049	38.68367	76.50482	60.99604

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.05525	0.00248	37.78712	-0.03185	-0.00547	-0.00054	-0.04860	-0.00413	0.02666
#2	2.03385	0.00207	37.59020	-0.03166	-0.00533	-0.00247	-0.04426	-0.00419	0.02867
Mean	**2.04455**	**0.00227**	**37.68866**	**-0.03176**	**-0.00540**	**-0.00150**	**-0.04643**	**-0.00416**	**0.02766**
%RSD	0.74022	12.73767	0.36946	0.41929	1.82074	90.92963	6.60130	1.04117	5.15570

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00186	0.00122	0.00025
#2	0.00148	0.00097	-0.00022
Mean	**0.00167**	**0.00110**	**0.00002**
%RSD	16.00094	15.94456	2102.91789

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:30
SampleId1 : 1111051-1 10X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 15:37:08
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE16

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00007	1.11579	-0.00010	4.11757	12.29808	-0.00066	0.00257	910.25891	-0.00088
#2	-0.00095	1.09726	-0.00042	4.11129	12.25971	-0.00068	-0.00038	898.46656	-0.00126
Mean	**-0.00044**	**1.10653**	**-0.00026**	**4.11443**	**12.27889**	**-0.00067**	**0.00109**	**904.36273**	**-0.00107**
%RSD	164.55654	1.18388	84.97991	0.10785	0.22099	2.12083	191.06570	0.92202	25.08412

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00575	-0.00053	-0.00256	5.86605	128.29951	3.93346	69.33942	0.25018	-0.00149
#2	0.00542	-0.00109	-0.00263	5.82295	128.03000	3.93109	68.94670	0.24862	-0.00255
Mean	**0.00558**	**-0.00081**	**-0.00259**	**5.84450**	**128.16476**	**3.93227**	**69.14306**	**0.24940**	**-0.00202**
%RSD	4.17104	48.32558	2.04309	0.52146	0.14869	0.04262	0.40163	0.44467	37.23327

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	370.70294	0.00151	-0.77649	-0.00265	-0.00155	0.32342	-0.00172	-0.00508	-0.00161
#2	367.69286	0.00345	-0.87294	0.00023	-0.00196	0.30121	-0.00209	0.00046	-0.00289
Mean	**369.19790**	**0.00248**	**-0.82472**	**-0.00121**	**-0.00175**	**0.31232**	**-0.00190**	**-0.00231**	**-0.00225**
%RSD	0.57651	55.08686	8.26954	168.87764	16.60634	5.02943	13.78620	169.44047	40.40773

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08947	0.00002	50.79279	-0.04647	-0.00670	0.00521	-0.05411	-0.00116	0.06768
#2	0.08836	-0.00284	50.40677	-0.04177	-0.00648	0.00298	-0.07468	-0.00138	0.06768
Mean	**0.08891**	**-0.00141**	**50.59978**	**-0.04412**	**-0.00659**	**0.00410**	**-0.06439**	**-0.00127**	**0.06768**
%RSD	0.88263	143.77075	0.53945	7.52657	2.34738	38.48391	22.58439	11.84093	0.00000

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00228	-0.00191	-0.00276
#2	0.00164	-0.00123	-0.00178
Mean	**0.00196**	**-0.00157**	**-0.00227**
%RSD	23.15473	30.80119	30.72669

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:30
SampleId1 : 1111051-2 10X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 15:38:57
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE17

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00106	1.24285	0.00063	4.46410	13.22413	-0.00064	0.00430	994.45787	-0.00171
#2	-0.00138	1.22281	0.00316	4.37033	12.97823	-0.00068	0.00395	982.64970	-0.00090
Mean	**-0.00122**	**1.23283**	**0.00190**	**4.41721**	**13.10118**	**-0.00066**	**0.00413**	**988.55378**	**-0.00131**
%RSD	18.40708	1.14929	94.26204	1.50107	1.32719	4.27742	5.91327	0.84463	43.55781

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00567	-0.00134	-0.00263	6.15331	137.29138	4.18730	75.04338	0.26864	-0.00124
#2	0.00587	-0.00156	-0.00273	6.06184	134.54438	4.10912	73.80224	0.26550	-0.00223
Mean	**0.00577**	**-0.00145**	**-0.00268**	**6.10758**	**135.91788**	**4.14821**	**74.42281**	**0.26707**	**-0.00173**
%RSD	2.52539	10.89514	2.55302	1.05894	1.42912	1.33262	1.17924	0.83072	40.04645

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	363.29902	-0.00232	-0.90418	-0.00057	-0.00191	0.33929	-0.00122	-0.00349	-0.00530
#2	369.09171	-0.00123	-0.98563	-0.00272	-0.00184	0.32342	-0.00355	-0.00423	-0.00438
Mean	**366.19536**	**-0.00177**	**-0.94490**	**-0.00165**	**-0.00188**	**0.33136**	**-0.00238**	**-0.00386**	**-0.00484**
%RSD	1.11854	43.23706	6.09523	92.24953	2.96906	3.38608	69.24797	13.55937	13.42228

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10515	-0.00448	51.71203	-0.03706	-0.00642	-0.00007	-0.07147	-0.00127	0.07205
#2	0.10160	0.00166	51.64265	-0.03292	-0.00644	0.00709	-0.06385	-0.00178	0.07474
Mean	**0.10337**	**-0.00141**	**51.67734**	**-0.03499**	**-0.00643**	**0.00351**	**-0.06766**	**-0.00153**	**0.07339**
%RSD	2.42883	308.01749	0.09494	8.37624	0.21868	144.42223	7.95724	23.55041	2.59219

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00138	-0.00147	-0.00470
#2	0.00109	-0.00213	-0.00433
Mean	**0.00123**	**-0.00180**	**-0.00451**
%RSD	16.67409	26.04551	5.73710

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:31
SampleId1 : 1111059-9 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:42:26
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE18

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00076	-0.03747	-0.00190	-0.00103	-0.00038	-0.00039	-0.00036	-0.04389	-0.00091
#2	-0.00030	-0.02704	0.00369	-0.00156	-0.00038	-0.00037	-0.00383	-0.04331	-0.00077
Mean	**-0.00053**	**-0.03226**	**0.00090**	**-0.00130**	**-0.00038**	**-0.00038**	**-0.00210**	**-0.04360**	**-0.00084**
%RSD	60.75384	22.85257	440.68253	29.12527	0.00000	2.52169	116.89762	0.93384	11.25376

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00013	-0.00145	-0.00130	-0.00352	-0.24093	-0.00151	-0.06899	-0.00104	-0.00206
#2	-0.00033	-0.00042	-0.00103	-0.00328	-0.24443	-0.00151	-0.05914	-0.00095	-0.00100
Mean	**-0.00023**	**-0.00094**	**-0.00116**	**-0.00340**	**-0.24268**	**-0.00151**	**-0.06407**	**-0.00099**	**-0.00153**
%RSD	63.73089	77.61113	16.03777	4.94078	1.01764	0.16461	10.86709	6.53884	49.18723

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.02122	-0.00157	-0.04753	-0.00405	-0.00259	-0.03512	-0.00379	-0.00942	-0.00229
#2	0.01597	0.00012	-0.04503	0.00183	-0.00440	-0.03195	-0.00355	0.00396	-0.00654
Mean	**0.01859**	**-0.00072**	**-0.04628**	**-0.00111**	**-0.00349**	**-0.03354**	**-0.00367**	**-0.00273**	**-0.00442**
%RSD	19.98883	165.72953	3.82240	375.02689	36.67172	6.68913	4.68569	346.31246	68.21386

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01636	-0.00203	0.00365	0.00220	-0.00294	0.00623	-0.03638	-0.00067	0.00077

#2	-0.01587	-0.00940	0.00361	-0.00310	-0.00269	0.00314	-0.02540	-0.00071	0.00111
Mean	**-0.01612**	**-0.00572**	**0.00363**	**-0.00045**	**-0.00281**	**0.00469**	**-0.03089**	**-0.00069**	**0.00094**
%RSD	2.16079	91.21743	0.67552	837.87189	6.24200	46.68620	25.14452	4.20689	25.24731

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00059	-0.00308	-0.00466
#2	0.00014	-0.00232	-0.00305
Mean	**-0.00023**	**-0.00270**	**-0.00385**
%RSD	228.68871	19.70853	29.63242

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:31
SampleId1 : 1111059-10 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:44:24
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE19

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00007	-0.02874	-0.00200	-0.00393	-0.00133	-0.00029	-0.00383	-0.08103	-0.00127
#2	-0.00074	-0.02176	-0.00126	-0.00423	-0.00125	-0.00031	-0.00505	-0.06922	-0.00106
Mean	**-0.00034**	**-0.02525**	**-0.00163**	**-0.00408**	**-0.00129**	**-0.00030**	**-0.00444**	**-0.07512**	**-0.00117**
%RSD	170.49384	19.56512	31.94120	5.28727	4.55677	4.55895	19.47962	11.10984	12.43069

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00068	-0.00104	-0.00102	-0.01601	-0.25341	-0.00167	-0.06854	-0.00113	-0.00263
#2	-0.00137	-0.00209	-0.00182	-0.01613	-0.26488	-0.00166	-0.07212	-0.00113	-0.00329
Mean	**-0.00102**	**-0.00157**	**-0.00142**	**-0.01607**	**-0.25914**	**-0.00166**	**-0.07033**	**-0.00113**	**-0.00296**
%RSD	47.60736	47.32456	39.54503	0.52327	3.13117	0.44889	3.59962	0.00000	15.63149

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.10569	-0.00201	-0.02661	-0.00072	0.00206	-0.03195	-0.00233	-0.00412	0.00112
#2	-0.06893	-0.00225	-0.02843	-0.00492	0.00347	-0.02560	-0.00625	-0.00200	-0.00152
Mean	**-0.08731**	**-0.00213**	**-0.02752**	**-0.00282**	**0.00276**	**-0.02878**	**-0.00429**	**-0.00306**	**-0.00020**
%RSD	29.77003	7.87756	4.67617	105.41362	35.85296	15.59061	64.51109	48.93918	929.89530

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01485	0.00125	-0.00161	-0.00434	-0.00301	0.00143	-0.03706	-0.00095	0.00245
#2	-0.02011	0.00084	0.00014	0.00172	-0.00303	-0.00029	-0.06727	-0.00173	0.00145
Mean	**-0.01748**	**0.00104**	**-0.00073**	**-0.00131**	**-0.00302**	**0.00057**	**-0.05216**	**-0.00134**	**0.00195**
%RSD	21.27640	27.76350	169.36322	326.30514	0.46565	213.77350	40.94737	40.89993	36.57017

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00006	0.00114	-0.00063
#2	-0.00129	0.00067	-0.00168

Mean	**-0.00061**	**0.00091**	**-0.00115UNDGREEN**
%RSD	155.48084	36.21621	64.63738

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:31
SampleId1 : 1111078-2 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:46:13
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE20

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00066	0.20599	-0.00010	0.00408	0.12115	-0.00015	0.00138	34.09231	-0.00052
#2	0.00038	0.21121	-0.00242	0.00423	0.12124	-0.00018	0.00173	34.11057	-0.00062
Mean	**-0.00014**	**0.20860**	**-0.00126**	**0.00416**	**0.12119**	**-0.00016**	**0.00156**	**34.10144**	**-0.00057**
%RSD	531.95590	1.77227	129.67649	2.59465	0.04867	13.87049	15.92446	0.03786	12.30709

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00031	0.00093	-0.00121	0.11462	0.77734	0.00234	4.47198	0.11258	-0.00206
#2	-0.00031	0.00105	-0.00058	0.11438	0.77560	0.00235	4.46704	0.11240	-0.00018
Mean	**-0.00031**	**0.00099**	**-0.00089**	**0.11450**	**0.77647**	**0.00235**	**4.46951**	**0.11249**	**-0.00112**
%RSD	0.24683	8.71898	50.01809	0.14702	0.15925	0.10610	0.07811	0.11576	118.81109

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.97854	0.00548	0.06349	0.00070	-0.00136	3.84192	-0.00210	-0.00666	-0.00064
#2	4.96448	0.00572	0.07214	0.00117	-0.00110	3.89604	-0.00160	-0.00665	-0.00064
Mean	**4.97151**	**0.00560**	**0.06781**	**0.00093**	**-0.00123**	**3.86898**	**-0.00185**	**-0.00666**	**-0.00064**
%RSD	0.19994	2.99686	9.01741	35.11960	14.63600	0.98908	19.27445	0.05332	0.01555

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.77085	-0.00531	0.08267	-0.00180	0.00354	-0.00050	-0.03303	-0.00036	0.00178
#2	9.74636	-0.00449	0.08280	-0.01202	0.00412	0.00251	-0.02685	-0.00040	0.00178
Mean	**9.75861**	**-0.00490**	**0.08274**	**-0.00691**	**0.00383**	**0.00101**	**-0.02994**	**-0.00038**	**0.00178**
%RSD	0.17745	11.80219	0.10885	104.54362	10.64440	211.04012	14.59294	7.66907	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00223	-0.00067	-0.00265
#2	-0.00129	-0.00035	-0.00264
Mean	**-0.00176**	**-0.00051**	**-0.00265**
%RSD	38.05812	45.08754	0.04215

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:31
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 15:48:42
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations56:07 **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19875	53.71811	0.51671	1.03563	1.05498	0.48537	0.54298	48.15844	0.50272
#2	0.19913	53.39334	0.51830	1.02660	1.05060	0.48503	0.53187	48.13637	0.49855
Mean	**0.19894**	**53.55572**	**0.51751**	**1.03112**	**1.05279**	**0.48520**	**0.53743**	**48.14741**	**0.50064**
%RSD	0.13737	0.42881	0.21748	0.61971	0.29463	0.04984	1.46104	0.03241	0.58930

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48621	0.98051	1.05065	20.45292	50.19085	0.53317	51.01887	0.99378	0.99565
#2	0.48607	0.98096	1.04474	20.42397	49.90174	0.53027	50.90579	0.99248	0.99491
Mean	**0.48614**	**0.98074**	**1.04769**	**20.43845**	**50.04629**	**0.53172**	**50.96233**	**0.99313**	**0.99528**
%RSD	0.02072	0.03234	0.39892	0.10013	0.40849	0.38515	0.15689	0.09295	0.05268

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.10764	0.99035	5.12483	0.99889	1.02006	5.34544	0.50452	1.05164	1.04705
#2	48.85023	0.98531	5.09721	1.00601	1.02354	5.32313	0.49955	1.05927	1.05557
Mean	**48.97894**	**0.98783**	**5.11102**	**1.00245**	**1.02180**	**5.33429**	**0.50203**	**1.05546**	**1.05131**
%RSD	0.37162	0.36102	0.38215	0.50171	0.24083	0.29577	0.69968	0.51099	0.57296

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.14209	1.05276	0.51301	0.30816	0.50023	0.52389	5.10252	0.48850	0.96052
#2	5.12531	1.06140	0.51142	0.30798	0.49929	0.52598	5.08947	0.48755	0.96628
Mean	**5.13370**	**1.05708**	**0.51222**	**0.30807**	**0.49976**	**0.52493**	**5.09599**	**0.48802**	**0.96340**
%RSD	0.23117	0.57840	0.21933	0.04211	0.13240	0.28087	0.18109	0.13767	0.42308

	Zr	Pb	Se
	ppm	calc	calc
#1	1.00230	1.01301	1.04858
#2	0.99951	1.01770	1.05680
Mean	**1.00091**	**1.01535**	**1.05269**
%RSD	0.19725	0.32660	0.55227

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:31
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 15:50:39
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00087	0.01579	-0.00221	-0.00423	-0.00088	0.00010	-0.00002	-0.06116	-0.00100
#2	-0.00072	0.01468	-0.00474	-0.00416	-0.00092	0.00008	-0.00106	-0.06001	-0.00072
Mean	**-0.00080**	**0.01523**	**-0.00347**	**-0.00420**	**-0.00090**	**0.00009**	**-0.00054**	**-0.06059**	**-0.00086**
%RSD	13.47730	5.15616	51.43064	1.28576	3.28348	16.85900	136.76378	1.34401	23.47104

ted: 11/21/2011 12:56:07 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00116	-0.00111	-0.00148	-0.00531	-0.25665	-0.00161	-0.03721	-0.00058	0.00031
#2	-0.00054	-0.00102	-0.00148	-0.00471	-0.26563	-0.00161	-0.03587	-0.00058	0.00031
Mean	**-0.00085**	**-0.00106**	**-0.00148**	**-0.00501**	**-0.26114**	**-0.00161**	**-0.03654**	**-0.00058**	**0.00031**
%RSD	51.54031	5.92975	0.35678	8.39321	2.43175	0.15454	2.59809	0.00000	0.00000

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.14265	-0.00150	-0.01592	-0.00261	0.00302	-0.03195	-0.00267	-0.00375	-0.00092
#2	-0.14426	-0.00062	-0.01682	0.00011	-0.00013	-0.04147	0.00039	0.00597	-0.00016
Mean	**-0.14346**	**-0.00106**	**-0.01637**	**-0.00125**	**0.00144**	**-0.03671**	**-0.00114**	**0.00111**	**-0.00054**
%RSD	0.78971	58.67499	3.93024	154.31503	153.84438	18.33307	189.16701	618.00956	100.47356

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01584	-0.00735	-0.00173	-0.00577	-0.00280	-0.00177	-0.03981	-0.00079	-0.00192
#2	-0.01459	-0.00121	-0.00169	-0.00132	-0.00283	-0.00707	-0.03020	-0.00079	-0.00091
Mean	**-0.01522**	**-0.00428**	**-0.00171**	**-0.00355**	**-0.00281**	**-0.00442**	**-0.03501**	**-0.00079**	**-0.00141**
%RSD	5.79820	101.46153	1.43367	88.77409	0.74904	84.74049	19.41279	0.01032	50.51616

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00087	0.00114	-0.00186
#2	0.00040	-0.00005	0.00189
Mean	**0.00063**	**0.00055**	**0.00001**
%RSD	52.65768	153.48719	25090.43576

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:31
SampleId1 : 1111078-8 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:52:34
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE21

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00112	-0.01210	0.00253	0.00935	0.17844	-0.00002	0.00050	118.11448	-0.00094
#2	-0.00045	-0.01543	-0.00074	0.01011	0.17735	-0.00009	-0.00487	118.84496	-0.00063
Mean	**-0.00078**	**-0.01376**	**0.00090**	**0.00973**	**0.17789**	**-0.00006**	**-0.00219**	**118.47972**	**-0.00078**
%RSD	60.48917	17.14898	257.76857	5.54581	0.43133	83.50082	173.60937	0.43596	27.90596

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00049	-0.00145	-0.00156	0.09569	1.01045	0.00780	12.69211	0.00043	-0.00108
#2	-0.00050	-0.00101	-0.00111	0.09569	1.01120	0.00773	12.66414	0.00061	-0.00133
Mean	**-0.00049**	**-0.00123**	**-0.00134**	**0.09569**	**1.01083**	**0.00777**	**12.67813**	**0.00052**	**-0.00120**
%RSD	0.25326	24.89201	23.54148	0.00000	0.05244	0.64103	0.15598	24.87137	14.44201

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.14787	-0.00093	-0.00227	-0.00239	0.00130	6.63074	-0.00440	0.00052	-0.00056
#2	7.07724	-0.00099	-0.00704	-0.00063	0.00103	6.58606	-0.00355	0.00242	0.00114
Mean	**7.11255**	**-0.00096**	**-0.00465**	**-0.00151**	**0.00117**	**6.60840**	**-0.00397**	**0.00147**	**0.00029**
%RSD	0.70215	4.99136	72.56805	82.21389	16.31102	0.47802	15.14388	91.40740	415.00944

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.18319	0.00043	0.21660	-0.02245	-0.00370	0.00937	-0.05018	-0.00081	-0.00091
#2	9.16063	-0.00285	0.21522	-0.01720	-0.00359	-0.00233	-0.03782	-0.00040	-0.00225
Mean	**9.17191**	**-0.00121**	**0.21591**	**-0.01983**	**-0.00364**	**0.00352**	**-0.04400**	**-0.00061**	**-0.00158**
%RSD	0.17395	191.67109	0.45249	18.73000	2.31392	234.95687	19.85864	47.71373	60.18833

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00065	0.00007	-0.00020
#2	-0.00089	0.00048	0.00157
Mean	**-0.00077**	**0.00028**	**0.00068**
%RSD	22.04076	104.35200	183.04128

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:32
SampleId1 : 1111078-14 SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 15:54:23
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE22

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00132	-0.00907	0.00032	0.00957	0.17956	-0.00002	-0.00540	120.89849	-0.00071
#2	-0.00065	-0.01121	-0.00484	0.01034	0.17860	-0.00003	0.00241	120.65842	-0.00102
Mean	**-0.00098**	**-0.01014**	**-0.00226**	**0.00996**	**0.17908**	**-0.00003**	**-0.00150**	**120.77846**	**-0.00087**
%RSD	48.35373	14.91936	161.18343	5.41832	0.37903	27.57832	368.87116	0.14055	25.18562

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00077	-0.00128	-0.00119	-0.00994	1.03419	0.00788	12.84865	0.00025	-0.00239
#2	-0.00042	-0.00122	-0.00119	-0.00947	1.03144	0.00779	12.79496	0.00034	-0.00206
Mean	**-0.00060**	**-0.00125**	**-0.00119**	**-0.00971**	**1.03282**	**0.00784**	**12.82180**	**0.00029**	**-0.00223**
%RSD	40.61742	3.35042	0.28476	3.46511	0.18820	0.85781	0.29606	22.19331	10.40296

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.17203	-0.00174	0.00228	-0.00384	-0.00036	6.68818	-0.00355	-0.00275	-0.00161
#2	7.11069	-0.00001	0.00183	-0.00204	-0.00071	6.64350	-0.00306	-0.00035	-0.00339
Mean	**7.14136**	**-0.00088**	**0.00206**	**-0.00294**	**-0.00054**	**6.66584**	**-0.00331**	**-0.00155**	**-0.00250**
%RSD	0.60731	139.59743	15.64804	43.35486	45.83317	0.47393	10.52082	109.41219	50.60775

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.30246	-0.00776	0.21818	-0.01107	-0.00365	0.00362	-0.05766	-0.00132	0.00279
#2	9.25454	-0.00326	0.21709	-0.01489	-0.00350	-0.00248	-0.05148	-0.00034	0.00111
Mean	**9.27850**	**-0.00551**	**0.21764**	**-0.01298**	**-0.00358**	**0.00057**	**-0.05457**	**-0.00083**	**0.00195**
%RSD	0.36520	57.82013	0.35461	20.84551	3.14527	757.61220	8.00573	83.52752	60.95022

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00179	-0.00152	-0.00199
#2	-0.00122	-0.00115	-0.00238
Mean	**-0.00151**	**-0.00134**	**-0.00218**
%RSD	26.73309	19.42150	12.73234

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:32
SampleId1 : 1111078-19 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 15:56:12
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE23

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00016	5.07161	0.00242	0.01064	0.10743	0.00003	-0.00422	60.05332	-0.00052
#2	-0.00094	5.07821	-0.00221	0.01018	0.10756	0.00001	0.00271	59.95341	-0.00083
Mean	**-0.00055**	**5.07491**	**0.00011**	**0.01041**	**0.10749**	**0.00002**	**-0.00075**	**60.00337**	**-0.00067**
%RSD	100.28812	0.09196	3098.51377	3.10810	0.08229	70.69668	649.10394	0.11775	32.82947

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00080	0.00799	0.00097	3.83859	1.66669	0.00300	6.36213	0.78225	-0.00182
#2	0.00129	0.00795	0.00106	3.82145	1.66394	0.00299	6.37786	0.78225	-0.00010
Mean	**0.00105**	**0.00797**	**0.00101**	**3.83002**	**1.66532**	**0.00300**	**6.36999**	**0.78225**	**-0.00096**
%RSD	33.13599	0.30112	6.07244	0.31640	0.11682	0.24914	0.17458	0.00000	127.04156

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.15553	0.00477	0.15113	0.00127	0.00213	7.10631	-0.00426	-0.00760	-0.00134
#2	3.16464	0.00484	0.16365	-0.00055	0.00217	7.19571	-0.00216	0.00666	-0.00049
Mean	**3.16009**	**0.00480**	**0.15739**	**0.00036**	**0.00215**	**7.15101**	**-0.00321**	**-0.00047**	**-0.00091**
%RSD	0.20386	0.99828	5.62637	358.40212	1.27364	0.88392	46.22013	2152.35439	65.70314

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	16.63281	-0.00191	0.11016	-0.00623	0.24920	-0.00457	-0.03076	0.00544	0.01590
#2	16.61571	0.00014	0.11009	-0.00545	0.24510	0.00343	-0.02594	0.00506	0.01489
Mean	**16.62426**	**-0.00089**	**0.11012**	**-0.00584**	**0.24715**	**-0.00057**	**-0.02835**	**0.00525**	**0.01539**
%RSD	0.07273	163.78647	0.04463	9.42086	1.17253	994.56503	12.01515	5.00213	4.63196

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	0.00425	0.00184	-0.00342	**UNDGREEN**
#2	0.00338	0.00126	0.00189	
Mean	**0.00382**	**0.00155**	**-0.00076**	
%RSD	16.01239	26.44018	491.32485	

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:32
SampleId1 : 1111078-35 SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 15:58:02
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE24

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00031	0.01164	0.00042	0.06092	0.14505	-0.00016	-0.00134	137.96248	-0.00090
#2	-0.00104	0.01630	-0.00232	0.06168	0.14535	-0.00016	-0.00220	137.19246	-0.00119
Mean	**-0.00067**	**0.01397**	**-0.00095**	**0.06130**	**0.14520**	**-0.00016**	**-0.00177**	**137.57747**	**-0.00105**
%RSD	76.61070	23.59552	204.36182	0.88013	0.14222	0.19870	34.62294	0.39577	19.37367

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	-0.00127	0.02214	0.49619	2.24466	0.00605	23.24081	0.38132	-0.00051
#2	-0.00020	-0.00137	0.02242	0.49487	2.24716	0.00607	23.28985	0.38067	-0.00280
Mean	**-0.00040**	**-0.00132**	**0.02228**	**0.49553**	**2.24591**	**0.00606**	**23.26533**	**0.38099**	**-0.00165**
%RSD	72.41405	5.08643	0.86206	0.18738	0.07880	0.28768	0.14902	0.12009	98.07043

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	6.87390	0.00602	-0.03002	0.00335	0.00591	12.69066	-0.00158	0.00592	0.00020
#2	6.90382	0.00440	-0.03161	0.00326	0.00548	12.69708	-0.00233	-0.01086	0.00216
Mean	**6.88886**	**0.00521**	**-0.03081**	**0.00330**	**0.00569**	**12.69387**	**-0.00195**	**-0.00247**	**0.00118**
%RSD	0.30718	22.08777	3.65364	1.98715	5.36933	0.03574	27.25631	480.49287	117.37378

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.18079	0.00084	0.30026	-0.02655	-0.00257	0.00412	-0.02368	-0.00024	0.09829
#2	4.18790	0.00289	0.30116	-0.02126	-0.00296	0.00232	-0.02230	-0.00143	0.09963
Mean	**4.18434**	**0.00186**	**0.30071**	**-0.02391**	**-0.00277**	**0.00322**	**-0.02299**	**-0.00084**	**0.09896**
%RSD	0.12008	77.78917	0.21060	15.62376	9.91253	39.57128	4.22570	100.41816	0.96151

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00078	0.00506	0.00211
#2	0.00022	0.00474	-0.00218
Mean	**0.00050**	**0.00490**	**-0.00004**
%RSD	79.83598	4.60961	8633.90667

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:32
SampleId1 : IP111117-1MB SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 15:59:51

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE25

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00014	-0.02647	-0.00400	-0.00599	-0.00125	-0.00037	-0.00140	-0.02402	-0.00080
#2	-0.00045	-0.02910	-0.00042	-0.00492	-0.00129	-0.00040	-0.00226	-0.03698	-0.00078
Mean	**-0.00030**	**-0.02778**	**-0.00221**	**-0.00545**	**-0.00127**	**-0.00038**	**-0.00183**	**-0.03050**	**-0.00079**
%RSD	75.69679	6.69308	114.50372	13.84634	2.31569	5.70882	33.41963	30.03624	1.22439

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00068	-0.00057	0.00052	0.03739	-0.23844	-0.00190	-0.06004	-0.00040	-0.00116
#2	-0.00054	-0.00054	0.00043	0.03727	-0.23071	-0.00189	-0.05691	-0.00049	-0.00190
Mean	**-0.00061**	**-0.00056**	**0.00047**	**0.03733**	**-0.23457**	**-0.00189**	**-0.05847**	**-0.00044**	**-0.00153**
%RSD	15.94065	3.64398	14.08833	0.22531	2.33126	0.39462	3.78854	14.68891	34.05268

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.16304	-0.00188	-0.01933	-0.00100	0.00133	-0.02243	-0.00698	-0.00640	-0.00108
#2	-0.16425	-0.00188	-0.00909	-0.00219	-0.00013	-0.02560	-0.00245	-0.00059	-0.00168
Mean	**-0.16365**	**-0.00188**	**-0.01421**	**-0.00160**	**0.00060**	**-0.02402**	**-0.00472**	**-0.00350**	**-0.00138**
%RSD	0.52507	0.00000	50.94060	52.58994	172.12771	9.33980	67.83272	117.39596	30.49657

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01080	0.00125	-0.00175	-0.00258	-0.00284	-0.00135	-0.03778	-0.00094	0.00111
#2	-0.01106	0.00330	-0.00180	-0.00112	-0.00275	-0.00085	-0.03298	-0.00041	-0.00057
Mean	**-0.01093**	**0.00227**	**-0.00177**	**-0.00185**	**-0.00280**	**-0.00110**	**-0.03538**	**-0.00068**	**0.00027**
%RSD	1.69966	63.74491	1.84305	55.76514	2.26310	32.28941	9.60488	55.38566	441.53231

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00034	0.00056	-0.00286
#2	-0.00015	-0.00082	-0.00132
Mean	**-0.00024**	**-0.00013**	**-0.00209**
%RSD	57.10828	746.38888	52.04079

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:32
SampleId1 : IP111117-1RVS SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 16:01:40
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE26

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00875	1.00799	0.05247	0.04574	0.04957	0.00984	0.10645	4.83529	0.01965
#2	0.01000	1.00745	0.04962	0.04566	0.04932	0.00981	0.10351	4.87768	0.01923

Mean	**0.00937**	**1.00772**	**0.05104**	**0.04570**	**0.04945**	**0.00982**	**0.10498**	**4.85649**	**0.01944**
%RSD	9.45749	0.03785	3.94198	0.11806	0.35754	0.18396	1.98461	0.61714	1.52858

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.02021	0.04991	0.04892	1.03655	7.76909	0.03967	5.02950	0.05027	0.10110
#2	0.01959	0.05010	0.04938	1.03691	7.73783	0.03953	5.03174	0.05055	0.10110
Mean	**0.01990**	**0.05001**	**0.04915**	**1.03673**	**7.75346**	**0.03960**	**5.03062**	**0.05041**	**0.10110**
%RSD	2.20244	0.26830	0.65691	0.02453	0.28512	0.23868	0.03155	0.38711	0.00000

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.27520	0.04997	1.01254	0.05156	0.05119	1.04721	0.09242	0.04956	0.05194
#2	8.25480	0.04875	1.00614	0.05387	0.05115	1.02498	0.09389	0.05195	0.05382
Mean	**8.26500**	**0.04936**	**1.00934**	**0.05272**	**0.05117**	**1.03610**	**0.09316**	**0.05075**	**0.05288**
%RSD	0.17450	1.74897	0.44882	3.09541	0.05598	1.51702	1.11647	3.33803	2.50770

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.27792	0.10444	0.04840	-0.01496	0.04765	0.10131	0.48816	0.04940	0.04985
#2	0.28071	0.10116	0.04836	-0.00846	0.04764	0.10782	0.48542	0.04957	0.05154
Mean	**0.27932**	**0.10280**	**0.04838**	**-0.01171**	**0.04764**	**0.10457**	**0.48679**	**0.04948**	**0.05070**
%RSD	0.70445	2.25515	0.06764	39.20389	0.01475	4.39766	0.39902	0.23397	2.34506

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.04867	0.05131	0.05115
#2	0.04877	0.05205	0.05319
Mean	**0.04872**	**0.05168**	**0.05217**
%RSD	0.14376	1.01443	2.77669

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:33
SampleId1 : ZZZ **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:03:31
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE27

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08680	2.08660	1.93148	0.47189	2.01640	0.04857	-0.00586	36.52737	0.04715
#2	0.08719	2.08717	1.92791	0.47502	2.01576	0.04868	-0.00153	36.73633	0.04702
Mean	**0.08700**	**2.08689**	**1.92969**	**0.47346**	**2.01608**	**0.04863**	**-0.00369**	**36.63185**	**0.04709**
%RSD	0.31706	0.01929	0.13092	0.46795	0.02244	0.16429	82.79105	0.40335	0.19315

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47555	0.19232	0.24761	1.02768	35.55886	0.47193	37.25173	0.49362	0.96575
#2	0.47700	0.19348	0.24819	1.02816	35.50246	0.47085	37.27004	0.49464	0.96954
Mean	**0.47627**	**0.19290**	**0.24790**	**1.02792**	**35.53066**	**0.47139**	**37.26088**	**0.49413**	**0.96765**

%RSD	0.21514	0.42332	0.16571	0.03298	0.11225	0.16174	0.03475	0.14574	0.27688

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	35.95504	0.47798	9.42402	0.48418	0.49572	9.74630	0.46684	1.89052	1.90283
#2	35.94164	0.47825	9.45995	0.49192	0.50020	9.77830	0.46785	1.89727	1.90474
Mean	**35.94834**	**0.47812**	**9.44199**	**0.48805**	**0.49796**	**9.76230**	**0.46735**	**1.89389**	**1.90379**
%RSD	0.02634	0.04021	0.26907	1.12090	0.63596	0.23177	0.15290	0.25207	0.07099

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.44852	0.51128	0.49523	-0.04000	0.48887	2.01823	9.93291	0.48736	0.47976
#2	1.45354	0.51867	0.49543	-0.04101	0.48975	2.01136	9.88742	0.48634	0.48449
Mean	**1.45103**	**0.51497**	**0.49533**	**-0.04051**	**0.48931**	**2.01480**	**9.91017**	**0.48685**	**0.48212**
%RSD	0.24454	1.01477	0.02834	1.76815	0.12659	0.24132	0.32456	0.14911	0.69318

	Zr	Pb	Se
	ppm	calc	calc
#1	0.98423	0.49188	1.89873
#2	0.98614	0.49744	1.90226
Mean	**0.98519**	**0.49466**	**1.90049**
%RSD	0.13734	0.79529	0.13108

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:33
SampleId1 : 1110384-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:05:20
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE28

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.07239	40.88212	0.07154	0.00568	2.29692	0.00423	0.02549	109.61266	1.13941
#2	0.07233	40.65780	0.07618	0.00767	2.28764	0.00418	0.03299	109.23814	1.13538
Mean	**0.07236**	**40.76996**	**0.07386**	**0.00668**	**2.29228**	**0.00421**	**0.02924**	**109.42540**	**1.13739**
%RSD	0.05446	0.38907	4.44072	21.01015	0.28648	0.87745	18.14884	0.24201	0.25014

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04986	0.03342	10.98278	214.40430	14.33581	0.02380	14.88090	10.78925	0.04796
#2	0.04910	0.03357	10.93927	213.86577	14.26818	0.02363	14.84341	10.75690	0.04927
Mean	**0.04948**	**0.03350**	**10.96102**	**214.13503**	**14.30200**	**0.02372**	**14.86215**	**10.77307**	**0.04861**
%RSD	1.08582	0.32227	0.28064	0.17783	0.33441	0.51411	0.17837	0.21232	1.90557

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.06811	0.05075	2.28888	58.03228	57.82052	2.63926	0.00705	-0.02846	0.01933
#2	1.05817	0.05150	2.29948	57.85945	57.79730	2.61700	0.01036	-0.01868	0.01624
Mean	**1.06314**	**0.05112**	**2.29418**	**57.94586**	**57.80891**	**2.62813**	**0.00871**	**-0.02357**	**0.01779**
%RSD	0.66146	1.03195	0.32677	0.21090	0.02840	0.59890	26.93797	29.35428	12.28466

ted: 11/21/2011 12:56:07 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	14.36362	0.00815	0.33012	0.17833	0.40117	0.00387	0.11080	0.08691	62.86600
#2	14.39551	0.00488	0.32908	0.18062	0.39625	0.00654	0.11871	0.08668	62.92086
Mean	**14.37957**	**0.00652**	**0.32960**	**0.17947**	**0.39871**	**0.00521**	**0.11476**	**0.08679**	**62.89343**
%RSD	0.15683	35.50283	0.22222	0.90273	0.87188	36.30589	4.87988	0.18503	0.06168

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00745	57.89103	0.00342
#2	0.00693	57.81799	0.00461
Mean	**0.00719**	**57.85451**	**0.00401**
%RSD	5.12805	0.08927	21.09207

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:33
SampleId1 : 1110384-2 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:07:57
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE29

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06425	40.60650	0.21116	0.00606	3.41582	0.00406	0.02414	144.42707	0.93274
#2	0.06456	40.49900	0.21063	0.00614	3.41738	0.00406	0.02546	144.74935	0.93177
Mean	**0.06440**	**40.55275**	**0.21090**	**0.00610**	**3.41660**	**0.00406**	**0.02480**	**144.58821**	**0.93226**
%RSD	0.33903	0.18743	0.17709	0.88383	0.03230	0.07944	3.76707	0.15761	0.07393

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.05577	0.04205	10.39023	207.94027	12.75296	0.02877	18.09739	9.88997	0.06581
#2	0.05554	0.04258	10.35514	208.56369	12.73418	0.02874	18.04806	9.91261	0.06482
Mean	**0.05566**	**0.04231**	**10.37269**	**208.25198**	**12.74357**	**0.02875**	**18.07272**	**9.90129**	**0.06531**
%RSD	0.29728	0.88324	0.23926	0.21168	0.10420	0.05192	0.19301	0.16171	1.06380

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.75444	0.05512	3.70305	59.45924	59.67492	2.55022	0.00380	-0.01471	0.01990
#2	0.75311	0.05526	3.67727	59.52377	59.37243	2.51842	0.00489	-0.01477	0.01755
Mean	**0.75377**	**0.05519**	**3.69016**	**59.49151**	**59.52368**	**2.53432**	**0.00435**	**-0.01474**	**0.01872**
%RSD	0.12543	0.17380	0.49403	0.07670	0.35934	0.88717	17.70412	0.31605	8.85121

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	12.47444	0.00297	0.37809	0.17807	0.62783	0.00196	0.10902	0.10120	64.24974
#2	12.41995	0.00910	0.37800	0.17782	0.64192	0.01314	0.11821	0.10169	64.60690
Mean	**12.44720**	**0.00604**	**0.37804**	**0.17794**	**0.63488**	**0.00755**	**0.11361**	**0.10145**	**64.42832**
%RSD	0.30954	71.78974	0.01743	0.09746	1.56838	104.65157	5.71861	0.34091	0.39199

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	0.00570	59.60310	0.00837
#2	0.00523	59.42283	0.00679
Mean	**0.00547**	**59.51297**	**0.00758**
%RSD	6.15710	0.21419	14.78829

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:33
SampleId1 : 1110384-3 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:16:01
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE30

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.12277	15.66620	0.07850	0.00599	0.33644	0.00503	0.00339	288.93001	0.00099
#2	0.12298	15.56205	0.07629	0.00690	0.33497	0.00494	0.00148	288.37056	0.00112
Mean	**0.12287**	**15.61413**	**0.07740**	**0.00645**	**0.33570**	**0.00498**	**0.00244**	**288.65029**	**0.00105**
%RSD	0.11781	0.47163	2.02282	10.04124	0.30828	1.31973	55.48485	0.13705	8.71928

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01600	0.08244	0.20851	79.88008	5.51512	0.02028	15.33627	1.19015	0.00350
#2	0.01642	0.08241	0.20705	79.70347	5.46535	0.02012	15.25811	1.18725	0.00432
Mean	**0.01621**	**0.08242**	**0.20778**	**79.79178**	**5.49023**	**0.02020**	**15.29719**	**1.18870**	**0.00391**
%RSD	1.80743	0.02981	0.49679	0.15651	0.64104	0.56663	0.36130	0.17242	14.78965

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.07895	0.04634	2.63283	0.43451	0.44925	19.28568	0.00592	-0.00896	0.00784
#2	1.06548	0.04671	2.62036	0.43513	0.44967	19.28568	0.00862	-0.00856	0.00670
Mean	**1.07222**	**0.04653**	**2.62660**	**0.43482**	**0.44946**	**19.28568**	**0.00727**	**-0.00876**	**0.00727**
%RSD	0.88806	0.56692	0.33567	0.10141	0.06610	0.00000	26.28375	3.26468	11.11420

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	16.76705	0.02167	1.10445	0.02677	0.40378	0.00642	-0.01594	0.06746	3.13808
#2	16.61984	0.02617	1.10084	0.02180	0.40211	0.00605	-0.00964	0.06743	3.13462
Mean	**16.69345**	**0.02392**	**1.10264**	**0.02429**	**0.40295**	**0.00624**	**-0.01279**	**0.06745**	**3.13635**
%RSD	0.62358	13.32669	0.23126	14.46857	0.29339	4.20550	34.82103	0.03588	0.07794

	Zr	Pb	Se
	ppm	calc	calc
#1	0.01483	0.44434	0.00225
#2	0.01483	0.44483	0.00162
Mean	**0.01483**	**0.44458**	**0.00193**
%RSD	0.00907	0.07760	22.94712

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:33

SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 16:17:59
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.20174	54.14486	0.52637	1.04559	1.05646	0.49348	0.54767	49.57289	0.51278
#2	0.20153	54.03935	0.52265	1.03801	1.05444	0.49283	0.55372	49.56417	0.51072
Mean	**0.20163**	**54.09211**	**0.52451**	**1.04180**	**1.05545**	**0.49315**	**0.55070**	**49.56853**	**0.51175**
%RSD	0.07105	0.13792	0.50073	0.51462	0.13564	0.09243	0.77703	0.01244	0.28540

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49699	1.00041	1.05483	20.76464	50.39472	0.53698	51.51834	1.00591	1.00941
#2	0.49651	0.99962	1.05182	20.76204	50.21690	0.53503	51.39461	1.00619	1.00966
Mean	**0.49675**	**1.00002**	**1.05333**	**20.76334**	**50.30581**	**0.53600**	**51.45647**	**1.00605**	**1.00954**
%RSD	0.06914	0.05570	0.20172	0.00885	0.24995	0.25698	0.17002	0.01967	0.01731

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	50.14740	1.01343	5.17142	1.02221	1.03545	5.39326	0.50716	1.06956	1.06184
#2	49.97288	1.01302	5.15527	1.02034	1.03496	5.29126	0.50605	1.06930	1.07165
Mean	**50.06014**	**1.01322**	**5.16335**	**1.02128**	**1.03521**	**5.34226**	**0.50660**	**1.06943**	**1.06675**
%RSD	0.24651	0.02854	0.22126	0.13000	0.03293	1.35009	0.15425	0.01688	0.65072

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.18057	1.08446	0.51875	0.31816	0.50287	0.53956	5.11262	0.49665	0.99273
#2	5.17370	1.08075	0.51833	0.32434	0.50233	0.54276	5.11125	0.49665	0.99002
Mean	**5.17714**	**1.08260**	**0.51854**	**0.32125**	**0.50260**	**0.54116**	**5.11194**	**0.49665**	**0.99138**
%RSD	0.09383	0.24200	0.05736	1.35919	0.07563	0.41881	0.01901	0.00007	0.19353

	Zr	Pb	Se
	ppm	calc	calc
#1	1.01231	1.03104	1.06441
#2	1.01080	1.03009	1.07087
Mean	**1.01155**	**1.03057**	**1.06764**
%RSD	0.10542	0.06496	0.42804

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:33
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 16:19:54
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	-0.00061	0.00719	-0.00432	-0.00660	-0.00088	0.00012	0.00293	-0.05598	-0.00068
#2	-0.00035	0.02743	0.00042	-0.00484	-0.00054	0.00024	-0.00158	-0.03583	-0.00008
Mean	**-0.00048**	**0.01731**	**-0.00195**	**-0.00572**	**-0.00071**	**0.00018**	**0.00068**	**-0.04590**	**-0.00038**
%RSD	38.13852	82.70658	172.03493	21.68593	33.20674	45.70931	470.05859	31.04431	110.91665

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00075	-0.00054	-0.00148	-0.00364	-0.21673	-0.00151	-0.03542	-0.00040	0.00080
#2	-0.00088	-0.00039	-0.00112	0.00599	-0.21524	-0.00145	-0.01976	-0.00003	-0.00051
Mean	**-0.00082**	**-0.00047**	**-0.00130**	**0.00117**	**-0.21599**	**-0.00148**	**-0.02759**	**-0.00021**	**0.00015**
%RSD	11.85234	23.84786	19.81005	579.84333	0.49005	2.85143	40.14482	122.23801	624.53834

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.16000	-0.00154	-0.01546	-0.00415	0.00065	-0.03512	-0.00280	-0.01384	0.00385
#2	-0.15044	-0.00120	-0.01728	-0.00332	0.00172	-0.03195	-0.00771	0.00622	0.00163
Mean	**-0.15522**	**-0.00137**	**-0.01637**	**-0.00373**	**0.00119**	**-0.03354**	**-0.00525**	**-0.00381**	**0.00274**
%RSD	4.35342	17.53158	7.86049	15.68821	63.95391	6.68913	66.09279	372.42784	57.07973

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01459	-0.00285	-0.00168	0.00076	-0.00245	-0.00477	-0.03501	-0.00095	-0.00024
#2	-0.01396	0.00166	-0.00146	-0.00066	-0.00267	0.00064	-0.03502	-0.00071	0.00010
Mean	**-0.01427**	**-0.00060**	**-0.00157**	**0.00005**	**-0.00256**	**-0.00207**	**-0.03501**	**-0.00083**	**-0.00007**
%RSD	3.10177	534.79084	9.88133	2001.94867	6.03649	185.05072	0.01325	21.09227	354.85472

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00049	-0.00095	-0.00204
#2	0.00067	0.00004	0.00316
Mean	**0.00058**	**-0.00045**	**0.00056**
%RSD	22.40689	155.53041	656.69482

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:34
SampleId1 : 1110384-4 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:21:48
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE31

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08197	13.42321	0.06290	0.00729	0.42966	0.00374	0.00202	351.68401	-0.00005
#2	0.08076	13.41634	0.05963	0.00782	0.42982	0.00363	0.00376	351.32814	-0.00026
Mean	**0.08136**	**13.41977**	**0.06127**	**0.00755**	**0.42974**	**0.00369**	**0.00289**	**351.50608**	**-0.00016**
%RSD	1.04682	0.03619	3.77129	4.99955	0.02755	2.14952	42.43723	0.07159	94.29252

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01011	0.05837	0.12049	50.05073	4.75506	0.01956	12.15270	0.75919	0.00629

#2	0.01031	0.05805	0.12031	50.02044	4.75481	0.01962	12.15089	0.75892	0.00801
Mean	**0.01021**	**0.05821**	**0.12040**	**50.03558**	**4.75494**	**0.01959**	**12.15180**	**0.75905**	**0.00715**
%RSD	1.42764	0.38388	0.10868	0.04281	0.00373	0.19057	0.01050	0.02597	17.00759

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.18551	0.03481	2.22251	0.10816	0.11074	23.10849	0.00019	-0.00267	0.00487
#2	1.18618	0.03234	2.19809	0.10808	0.10907	23.08907	0.00339	-0.00645	0.00682
Mean	**1.18584**	**0.03357**	**2.21030**	**0.10812**	**0.10990**	**23.09878**	**0.00179**	**-0.00456**	**0.00585**
%RSD	0.04002	5.21360	0.78119	0.05385	1.07943	0.05945	126.43837	58.55785	23.62079

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	11.60136	0.00545	1.26445	0.01630	0.26040	-0.00052	-0.01142	0.05256	1.60935
#2	11.59943	0.00586	1.26611	0.01640	0.26067	-0.00033	-0.00728	0.05292	1.60560
Mean	**11.60040**	**0.00565**	**1.26528**	**0.01635**	**0.26053**	**-0.00042**	**-0.00935**	**0.05274**	**1.60748**
%RSD	0.01175	5.12074	0.09281	0.45802	0.07290	31.77291	31.30391	0.48582	0.16503

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.01184	0.10988	0.00236
#2	0.01186	0.10874	0.00240
Mean	**0.01185**	**0.10931**	**0.00238**
%RSD	0.11912	0.74163	1.32251

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:34
SampleId1 : 1110384-5 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:23:37
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE32

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03800	24.34804	0.12892	0.73016	2.72496	0.00391	0.01513	5.02896	0.02362
#2	0.03830	24.26264	0.13504	0.73475	2.71579	0.00384	0.01825	5.04086	0.02327
Mean	**0.03815**	**24.30534**	**0.13198**	**0.73246**	**2.72038**	**0.00388**	**0.01669**	**5.03491**	**0.02344**
%RSD	0.56558	0.24845	3.27890	0.44309	0.23812	1.34269	13.18661	0.16722	1.04916

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04317	0.12498	1.72647	191.74582	15.91706	0.01204	14.48888	0.85377	0.19966
#2	0.04364	0.12447	1.72446	191.40229	15.84674	0.01194	14.45998	0.85201	0.19516
Mean	**0.04340**	**0.12473**	**1.72546**	**191.57405**	**15.88190**	**0.01199**	**14.47443**	**0.85289**	**0.19741**
%RSD	0.77530	0.28835	0.08262	0.12680	0.31310	0.62292	0.14119	0.14659	1.61457

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.98824	0.11920	0.80330	29.48031	29.42666	1.33622	0.00923	-0.01564	0.02275
#2	9.94351	0.11815	0.80673	29.43745	29.28442	1.35210	0.00797	-0.01824	0.01970

Mean	**9.96588**	**0.11867**	**0.80502**	**29.45888**	**29.35554**	**1.34416**	**0.00860**	**-0.01694**	**0.02122**
%RSD	0.31737	0.62664	0.30112	0.10287	0.34262	0.83547	10.34680	10.84883	10.16424

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.78429	0.00154	0.15185	0.02166	1.15360	0.01238	0.02941	1.72015	4.67208
#2	0.81915	0.00154	0.15139	0.02304	1.15033	0.00824	0.04132	1.71614	4.67593
Mean	**0.80172**	**0.00154**	**0.15162**	**0.02235**	**1.15197**	**0.01031**	**0.03537**	**1.71814**	**4.67401**
%RSD	3.07406	0.17439	0.21090	4.37310	0.20082	28.35611	23.80503	0.16491	0.05830

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.01673	29.44452	0.00996
#2	0.01666	29.33538	0.00706
Mean	**0.01670**	**29.38995**	**0.00851**
%RSD	0.28934	0.26260	24.09037

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:34
SampleId1 : 1110384-6 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:25:26
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE33

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.05545	16.31421	0.14791	0.00530	0.23096	0.00394	0.03041	9.01229	0.05420
#2	0.05586	16.25389	0.14158	0.00584	0.22937	0.00385	0.02618	9.00352	0.05449
Mean	**0.05565**	**16.28405**	**0.14475**	**0.00557**	**0.23016**	**0.00389**	**0.02830**	**9.00791**	**0.05435**
%RSD	0.52484	0.26192	3.09333	6.78005	0.48755	1.65880	10.57486	0.06885	0.38006

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04575	0.08760	2.95800	182.74425	4.74351	0.00666	9.44391	0.73364	0.24573
#2	0.04597	0.08754	2.93495	182.17692	4.72669	0.00663	9.39844	0.73123	0.24270
Mean	**0.04586**	**0.08757**	**2.94648**	**182.46058**	**4.73510**	**0.00664**	**9.42117**	**0.73243**	**0.24422**
%RSD	0.33206	0.05292	0.55312	0.21986	0.25126	0.37471	0.34126	0.23319	0.87827

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.60491	0.09016	0.55620	25.11703	25.05554	2.08926	0.00535	-0.00816	0.02289
#2	0.60491	0.09104	0.57354	25.04308	24.95995	2.08290	0.00361	-0.00620	0.01817
Mean	**0.60491**	**0.09060**	**0.56487**	**25.08005**	**25.00775**	**2.08608**	**0.00448**	**-0.00718**	**0.02053**
%RSD	0.00000	0.68830	2.17129	0.20849	0.27030	0.21547	27.46452	19.34071	16.23891

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	6.15113	0.00607	0.16790	0.02038	0.78362	0.00748	0.01632	2.22659	4.68294
#2	6.17967	0.01304	0.16702	0.02500	0.77836	0.00485	0.02151	2.21852	4.68469
Mean	**6.16540**	**0.00955**	**0.16746**	**0.02269**	**0.78099**	**0.00617**	**0.01891**	**2.22255**	**4.68381**

%RSD	0.32734	51.59272	0.37223	14.39033	0.47629	30.16427	19.41241	0.25660	0.02644

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00352	25.07602	0.01255
#2	0.00378	24.98763	0.01006
Mean	**0.00365**	**25.03182**	**0.01130**
%RSD	5.17267	0.24967	15.58276

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:34
SampleId1 : 1111160-2 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:31:16
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE34

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00234	116.55080	0.05858	0.58525	2.58176	0.00742	0.00432	194.90889	0.00072
#2	-0.00207	116.59212	0.05299	0.58333	2.59078	0.00741	0.00796	194.26889	0.00070
Mean	**-0.00220**	**116.57146**	**0.05579**	**0.58429**	**2.58627**	**0.00742**	**0.00614**	**194.58889**	**0.00071**
%RSD	8.60362	0.02507	7.08059	0.23131	0.24656	0.09084	41.90165	0.23256	1.88806

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.05287	0.08612	0.12033	185.66426	46.32317	0.13531	42.14193	2.05239	0.00309
#2	0.05343	0.08588	0.12015	185.20158	46.39539	0.13552	42.14009	2.05050	0.00375
Mean	**0.05315**	**0.08600**	**0.12024**	**185.43292**	**46.35928**	**0.13542**	**42.14101**	**2.05145**	**0.00342**
%RSD	0.74844	0.20267	0.10299	0.17643	0.11017	0.11360	0.00308	0.06524	13.52957

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.56296	0.11011	4.72005	0.13045	0.14617	7.83762	-0.00331	-0.01028	0.03284
#2	8.57202	0.10929	4.71795	0.13204	0.14907	7.89192	0.00050	-0.00367	0.03428
Mean	**8.56749**	**0.10970**	**4.71900**	**0.13125**	**0.14762**	**7.86477**	**-0.00141**	**-0.00698**	**0.03356**
%RSD	0.07478	0.52480	0.03150	0.85642	1.39018	0.48827	191.27515	66.99217	3.03337

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.67856	0.00968	0.67852	0.09296	0.14507	0.01133	0.31713	0.21107	1.32936
#2	0.67276	0.00599	0.68063	0.09483	0.14544	0.01053	0.30852	0.21209	1.32766
Mean	**0.67566**	**0.00783**	**0.67957**	**0.09389**	**0.14525**	**0.01093**	**0.31282**	**0.21158**	**1.32851**
%RSD	0.60678	33.27896	0.21955	1.41120	0.18395	5.16968	1.94656	0.33964	0.09054

	Zr	Pb	Se
	ppm	calc	calc
#1	0.04537	0.14094	0.01848
#2	0.04505	0.14340	0.02164
Mean	**0.04521**	**0.14217**	**0.02006**
%RSD	0.49501	1.22609	11.14136

ted: 11/21/2011 12:56:07 **User: MIKE LUNDGREEN**
Method : Paragon File : 111118A Printed : 11/21/2011 12:55:34
SampleId1 : 1111160-2D **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:33:05
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE35

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00327	115.68671	0.05436	0.23609	1.19573	0.00740	0.00935	186.91362	0.00003
#2	-0.00113	115.31836	0.06195	0.23441	1.19205	0.00742	0.00796	186.65061	0.00087
Mean	**-0.00220**	**115.50253**	**0.05816**	**0.23525**	**1.19389**	**0.00741**	**0.00866**	**186.78211**	**0.00045**
%RSD	68.67420	0.22551	9.22700	0.50489	0.21770	0.16889	11.32179	0.09957	133.26487

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.05264	0.08428	0.11797	173.28792	43.82709	0.13243	41.51898	1.90860	0.00400
#2	0.05312	0.08443	0.11833	173.02646	43.65908	0.13198	41.48593	1.90510	0.00203
Mean	**0.05288**	**0.08435**	**0.11815**	**173.15719**	**43.74308**	**0.13220**	**41.50245**	**1.90685**	**0.00301**
%RSD	0.63814	0.13054	0.21659	0.10677	0.27158	0.24026	0.05630	0.12958	46.10164

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.93992	0.10665	4.76116	0.12810	0.13820	7.75776	-0.00022	-0.00946	0.03289
#2	1.92758	0.10797	4.75696	0.13168	0.13740	7.70345	-0.00024	-0.00047	0.03676
Mean	**1.93375**	**0.10731**	**4.75906**	**0.12989**	**0.13780**	**7.73061**	**-0.00023**	**-0.00497**	**0.03482**
%RSD	0.45100	0.87179	0.06249	1.94725	0.41093	0.49668	5.63447	128.00422	7.84929

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.79384	0.01172	0.65534	0.08510	0.14920	0.00894	0.30839	0.20875	0.75422
#2	0.78397	0.00844	0.65381	0.08758	0.14898	0.00333	0.31063	0.20801	0.75084
Mean	**0.78891**	**0.01008**	**0.65457**	**0.08634**	**0.14909**	**0.00613**	**0.30951**	**0.20838**	**0.75253**
%RSD	0.88469	22.98028	0.16454	2.03302	0.10376	64.65952	0.51130	0.25348	0.31800

	Zr	Pb	Se
	ppm	calc	calc
#1	0.03164	0.13484	0.01879
#2	0.03171	0.13550	0.02436
Mean	**0.03168**	**0.13517**	**0.02157**
%RSD	0.15062	0.34369	18.26528

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:35
SampleId1 : 1111160-2L 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:34:54
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE36

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00126	22.77256	0.00779	0.10060	0.48162	0.00167	0.00254	36.77361	-0.00053
#2	-0.00018	22.56005	0.01074	0.10182	0.47723	0.00164	0.00047	36.80019	-0.00023
Mean	**-0.00072**	**22.66631**	**0.00927**	**0.10121**	**0.47943**	**0.00165**	**0.00151**	**36.78690**	**-0.00038**
%RSD	106.55712	0.66295	22.49939	0.85306	0.64872	1.12979	97.43534	0.05110	56.43228

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00971	0.01565	0.02193	34.31001	7.53818	0.01972	8.39980	0.42071	-0.00010
#2	0.01032	0.01699	0.02200	34.25272	7.44644	0.01950	8.35706	0.42061	0.00031
Mean	**0.01001**	**0.01632**	**0.02197**	**34.28137**	**7.49231**	**0.01961**	**8.37843**	**0.42066**	**0.00011**
%RSD	4.33091	5.80045	0.24272	0.11815	0.86584	0.81228	0.36071	0.01555	269.57605

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.09046	0.02230	0.92790	0.02259	0.03045	1.50140	-0.00371	0.00299	0.00816
#2	1.07269	0.02257	0.92676	0.02826	0.02703	1.51411	0.00069	0.00011	0.00329
Mean	**1.08158**	**0.02243**	**0.92733**	**0.02542**	**0.02874**	**1.50775**	**-0.00151**	**0.00155**	**0.00572**
%RSD	1.16176	0.85499	0.08719	15.77861	8.43061	0.59594	206.05381	131.49533	60.15166

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.12557	-0.00083	0.13738	0.01748	0.02688	-0.00107	0.01921	0.04202	0.25348
#2	0.13236	-0.00206	0.13594	0.01507	0.02682	0.00632	0.03916	0.04299	0.25482
Mean	**0.12896**	**-0.00145**	**0.13666**	**0.01628**	**0.02685**	**0.00262**	**0.02918**	**0.04251**	**0.25415**
%RSD	3.72298	59.95348	0.74372	10.46810	0.15707	199.38480	48.34035	1.61490	0.37492

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00857	0.02783	0.00643
#2	0.00923	0.02744	0.00223
Mean	**0.00890**	**0.02764**	**0.00433**
%RSD	5.19549	1.01446	68.64233

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:35
SampleId1 : 1111160-2MS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:36:44
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE37

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08291	169.93171	1.90669	0.38754	2.99570	0.05360	0.00989	229.41603	0.04652
#2	0.08286	170.42573	1.92368	0.39395	3.01206	0.05369	0.00176	228.94339	0.04663
Mean	**0.08289**	**170.17872**	**1.91519**	**0.39074**	**3.00388**	**0.05365**	**0.00582**	**229.17971**	**0.04657**
%RSD	0.04062	0.20527	0.62743	1.16130	0.38496	0.11176	98.72782	0.14583	0.17189

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49535	0.28357	0.37312	188.51134	91.64813	0.72490	82.98809	2.37856	0.79123
#2	0.49420	0.28452	0.37517	188.33756	91.93805	0.72827	83.18884	2.38066	0.80012
Mean	**0.49478**	**0.28405**	**0.37414**	**188.42445**	**91.79309**	**0.72658**	**83.08846**	**2.37961**	**0.79567**
%RSD	0.16482	0.23596	0.38820	0.06521	0.22333	0.32747	0.17084	0.06214	0.78969

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	43.60973	0.56868	14.02204	0.58413	0.60568	16.76551	0.16108	1.86505	1.90364
#2	43.73919	0.57021	13.96983	0.58445	0.60327	16.73010	0.16188	1.88906	1.90404
Mean	**43.67446**	**0.56945**	**13.99593**	**0.58429**	**0.60447**	**16.74780**	**0.16148**	**1.87706**	**1.90384**
%RSD	0.20961	0.19001	0.26379	0.03856	0.28130	0.14951	0.35169	0.90453	0.01479

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.10583	0.49630	1.18457	0.06493	0.30601	1.93364	9.82317	0.71708	1.08299
#2	1.10187	0.50040	1.19160	0.06577	0.30635	1.96320	9.87223	0.71709	1.07620
Mean	**1.10385**	**0.49835**	**1.18808**	**0.06535**	**0.30618**	**1.94842**	**9.84770**	**0.71708**	**1.07959**
%RSD	0.25358	0.58254	0.41801	0.90872	0.07812	1.07283	0.35222	0.00074	0.44464

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.68898	0.59850	1.89079
#2	0.69241	0.59700	1.89905
Mean	**0.69069**	**0.59775**	**1.89492**
%RSD	0.35109	0.17718	0.30828

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:35
SampleId1 : 1111160-2MSD **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:38:33
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE38

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08719	176.64150	1.99105	0.37134	3.06977	0.05560	0.00643	226.18306	0.04801
#2	0.08842	175.87788	2.00524	0.37165	3.06343	0.05571	0.00711	228.25329	0.04745
Mean	**0.08781**	**176.25969**	**1.99815**	**0.37149**	**3.06660**	**0.05566**	**0.00677**	**227.21817**	**0.04773**
%RSD	0.98667	0.30634	0.50237	0.05816	0.14636	0.14157	7.09632	0.64426	0.82455

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.51435	0.29345	0.39014	188.52643	95.80417	0.76524	85.32180	2.42088	0.82258
#2	0.51676	0.29563	0.38843	190.24266	95.19658	0.75938	85.38347	2.43505	0.83048
Mean	**0.51556**	**0.29454**	**0.38929**	**189.38454**	**95.50038**	**0.76231**	**85.35263**	**2.42796**	**0.82653**
%RSD	0.33092	0.52471	0.30930	0.64079	0.44987	0.54360	0.05109	0.41277	0.67588

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	45.70284	0.59082	14.02253	0.60063	0.62614	17.71880	0.17329	1.97031	1.97346
#2	45.43792	0.59667	14.08996	0.60097	0.62081	17.74779	0.16362	1.94868	1.97754
Mean	**45.57038**	**0.59375**	**14.05624**	**0.60080**	**0.62347**	**17.73329**	**0.16846**	**1.95950**	**1.97550**
%RSD	0.41107	0.69663	0.33921	0.03986	0.60362	0.11563	4.05814	0.78061	0.14617

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.19288	0.52053	1.21319	0.05775	0.29893	2.04254	10.39458	0.73691	1.01410
#2	1.18853	0.52094	1.21213	0.06998	0.29844	2.06883	10.36170	0.73901	1.03174
Mean	**1.19070**	**0.52074**	**1.21266**	**0.06386**	**0.29868**	**2.05568**	**10.37814**	**0.73796**	**1.02292**
%RSD	0.25802	0.05584	0.06219	13.54228	0.11541	0.90413	0.22402	0.20138	1.21948

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.73404	0.61764	1.97241
#2	0.73395	0.61420	1.96793
Mean	**0.73399**	**0.61592**	**1.97017**
%RSD	0.00939	0.39460	0.16078

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:35
SampleId1 : 1111160-3 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:40:23
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE39

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00260	139.63783	0.06807	0.00957	1.17228	0.01013	0.00921	165.38976	0.00066
#2	-0.00244	139.53207	0.06575	0.01156	1.17034	0.01000	0.01094	164.74033	0.00115
Mean	**-0.00252**	**139.58495**	**0.06691**	**0.01057**	**1.17131**	**0.01007**	**0.01008**	**165.06504**	**0.00090**
%RSD	4.50348	0.05358	2.45101	13.27396	0.11729	0.91904	12.11936	0.27821	38.56995

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.07150	0.10610	0.15763	227.13943	42.21253	0.17234	50.35944	2.20074	0.00457
#2	0.07144	0.10459	0.15799	226.33606	42.17015	0.17231	50.35944	2.19467	0.00792
Mean	**0.07147**	**0.10535**	**0.15781**	**226.73775**	**42.19134**	**0.17233**	**50.35944**	**2.19770**	**0.00625**
%RSD	0.06208	1.01174	0.16253	0.25054	0.07103	0.01151	0.00000	0.19526	37.99156

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.04258	0.14240	5.12109	0.15200	0.17318	4.66351	0.00299	-0.01777	0.01629
#2	1.04923	0.14179	5.07170	0.15428	0.17035	4.63166	0.00450	-0.01704	0.02141
Mean	**1.04590**	**0.14210**	**5.09639**	**0.15314**	**0.17176**	**4.64759**	**0.00374**	**-0.01740**	**0.01885**
%RSD	0.44943	0.30391	0.68524	1.05032	1.16350	0.48467	28.58518	2.95114	19.19784

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	16.12468	0.00935	0.79777	0.13008	0.42723	0.01419	0.05475	0.18270	0.56959

#2	16.17144	0.00567	0.79619	0.13097	0.42304	0.01475	0.05598	0.18160	0.57094
Mean	**16.14806**	**0.00751**	**0.79698**	**0.13052**	**0.42514**	**0.01447**	**0.05536**	**0.18215**	**0.57027**
%RSD	0.20474	34.67179	0.14075	0.48223	0.69690	2.75745	1.57554	0.42604	0.16757

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.05157	0.16613	0.00495
#2	0.05040	0.16500	0.00860
Mean	**0.05099**	**0.16556**	**0.00678**
%RSD	1.62721	0.48161	38.14028

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:35
SampleId1 : 1111160-4 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:42:12
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE40

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00239	135.37856	0.06374	0.00423	1.12638	0.00982	0.01194	147.97905	0.00065
#2	-0.00187	134.85494	0.05320	0.00545	1.12406	0.00984	0.00863	148.32740	0.00143
Mean	**-0.00213**	**135.11675**	**0.05847**	**0.00484**	**1.12522**	**0.00983**	**0.01028**	**148.15322**	**0.00104**
%RSD	17.14218	0.27403	12.74602	17.81552	0.14591	0.11151	22.75605	0.16626	53.02484

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06726	0.10192	0.14871	218.62580	37.10919	0.16263	49.73116	1.88886	0.00457
#2	0.06824	0.10251	0.14789	219.25708	36.94149	0.16193	49.73116	1.89226	0.00195
Mean	**0.06775**	**0.10222**	**0.14830**	**218.94144**	**37.02534**	**0.16228**	**49.73116**	**1.89056**	**0.00326**
%RSD	1.02096	0.40891	0.39381	0.20388	0.32026	0.30253	0.00000	0.12714	56.83687

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.45835	0.13033	5.29909	0.19597	0.21703	4.34181	-0.00113	-0.02181	0.01848
#2	0.46152	0.12999	5.32346	0.19889	0.20969	4.30997	0.00349	-0.02377	0.01069
Mean	**0.45994**	**0.13016**	**5.31127**	**0.19743**	**0.21336**	**4.32589**	**0.00118**	**-0.02279**	**0.01459**
%RSD	0.48688	0.18432	0.32446	1.04730	2.43186	0.52057	277.22043	6.07803	37.77292

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.53118	0.01398	0.67752	0.12904	0.31975	0.01127	0.05917	0.16029	0.55372
#2	10.55222	0.01481	0.67624	0.13322	0.31142	0.01344	0.06904	0.16164	0.55878
Mean	**10.54170**	**0.01440**	**0.67688**	**0.13113**	**0.31559**	**0.01236**	**0.06411**	**0.16097**	**0.55625**
%RSD	0.14109	4.07200	0.13347	2.25171	1.86587	12.40101	10.88596	0.59329	0.64416

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.05070	0.21002	0.00507
#2	0.05038	0.20610	-0.00078

Mean	**0.05054**	**0.20806**	**0.00214UNDGREEN**
%RSD	0.45225	1.33247	193.20859

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:35
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 16:44:42
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19862	53.22806	0.51013	1.02376	1.03727	0.48269	0.54117	48.71254	0.50552
#2	0.20040	53.18693	0.51416	1.02866	1.03731	0.48352	0.53546	48.72903	0.50640
Mean	**0.19951**	**53.20750**	**0.51215**	**1.02621**	**1.03729**	**0.48311**	**0.53832**	**48.72079**	**0.50596**
%RSD	0.62830	0.05467	0.55667	0.33771	0.00287	0.12253	0.75091	0.02393	0.12329

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48772	0.98179	1.03741	20.30239	49.60051	0.52539	50.61460	0.98642	0.99706
#2	0.48821	0.98270	1.03659	20.30716	49.54474	0.52513	50.68197	0.98763	1.00208
Mean	**0.48797**	**0.98224**	**1.03700**	**20.30477**	**49.57263**	**0.52526**	**50.64828**	**0.98702**	**0.99957**
%RSD	0.07023	0.06571	0.05608	0.01663	0.07955	0.03460	0.09406	0.08683	0.35552

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.40710	0.99615	5.03636	1.00143	1.01521	5.25301	0.50861	1.04803	1.04625
#2	49.34733	0.99836	5.03122	0.99809	1.00913	5.24982	0.50752	1.03837	1.05098
Mean	**49.37721**	**0.99725**	**5.03379**	**0.99976**	**1.01217**	**5.25141**	**0.50807**	**1.04320**	**1.04861**
%RSD	0.08560	0.15707	0.07231	0.23622	0.42520	0.04292	0.15062	0.65525	0.31939

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.08279	1.05441	0.51004	0.30833	0.49200	0.53240	5.02282	0.48921	0.96221
#2	5.08662	1.05071	0.51051	0.30918	0.49173	0.53871	5.02626	0.49028	0.96425
Mean	**5.08471**	**1.05256**	**0.51028**	**0.30875**	**0.49186**	**0.53556**	**5.02454**	**0.48974**	**0.96323**
%RSD	0.05331	0.24889	0.06475	0.19340	0.03864	0.83411	0.04836	0.15430	0.14935

	Zr	Pb	Se
	ppm	calc	calc
#1	0.99421	1.01062	1.04684
#2	0.99549	1.00545	1.04678
Mean	**0.99485**	**1.00804**	**1.04681**
%RSD	0.09121	0.36279	0.00404

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:36
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 16:46:37
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations56:07 **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00103	0.02827	-0.00010	-0.00553	-0.00067	0.00020	-0.00175	-0.03928	-0.00063
#2	0.00006	0.02863	0.00527	-0.00606	-0.00071	0.00015	-0.00435	-0.04331	-0.00025
Mean	**-0.00049**	**0.02845**	**0.00258**	**-0.00580**	**-0.00069**	**0.00017**	**-0.00305**	**-0.04130**	**-0.00044**
%RSD	157.73940	0.88277	147.17095	6.51321	4.27636	18.84220	60.23353	6.90147	61.50584

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00013	-0.00136	-0.00120	0.01348	-0.20925	-0.00166	-0.02916	-0.00030	-0.00018
#2	-0.00075	-0.00011	-0.00103	0.00789	-0.19752	-0.00164	-0.02692	-0.00030	-0.00051
Mean	**-0.00044**	**-0.00073**	**-0.00112**	**0.01069**	**-0.20339**	**-0.00165**	**-0.02804**	**-0.00030**	**-0.00034**
%RSD	100.33922	120.25520	10.84771	36.97863	4.07659	0.60427	5.64343	0.00000	67.52859

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.15834	-0.00099	-0.00932	-0.00378	0.00151	-0.01609	-0.00696	-0.00741	0.00223
#2	-0.15956	-0.00127	-0.00318	-0.00097	-0.00052	-0.03195	-0.00294	-0.00336	-0.00254
Mean	**-0.15895**	**-0.00113**	**-0.00625**	**-0.00237**	**0.00050**	**-0.02402**	**-0.00495**	**-0.00538**	**-0.00015**
%RSD	0.54061	16.97060	69.51937	83.79065	288.95374	46.69905	57.50972	53.16977	2204.47278

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01635	-0.00080	-0.00159	-0.00167	-0.00286	0.00244	-0.03777	-0.00107	0.00044
#2	-0.01524	0.00534	-0.00159	-0.00855	-0.00303	-0.00386	-0.02472	-0.00017	-0.00024
Mean	**-0.01579**	**0.00227**	**-0.00159**	**-0.00511**	**-0.00294**	**-0.00071**	**-0.03124**	**-0.00062**	**0.00010**
%RSD	4.99288	191.23428	0.00000	95.25600	4.05827	627.88015	29.53092	102.06965	470.25314

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00027	-0.00025	-0.00098
#2	0.00116	-0.00067	-0.00281
Mean	**0.00072**	**-0.00046**	**-0.00189**
%RSD	87.56765	64.34965	68.46009

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:36
SampleId1 : 1111160-5 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:48:32
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE41

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00300	128.67596	0.07418	0.00965	1.24522	0.01023	0.01304	164.58434	0.00100
#2	-0.00258	128.03473	0.06564	0.00782	1.23850	0.01012	0.01165	164.49682	0.00052
Mean	**-0.00279**	**128.35534**	**0.06991**	**0.00873**	**1.24186**	**0.01017**	**0.01235**	**164.54058**	**0.00076**
%RSD	10.62043	0.35325	8.63673	14.82100	0.38272	0.75974	7.94911	0.03761	44.32902

ted: 11/21/2011 12:56:07 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.07542	0.10396	0.17198	240.26855	40.00881	0.17414	53.98460	2.25832	0.00146
#2	0.07478	0.10374	0.17035	240.33016	39.68225	0.17294	53.78903	2.25443	0.00465
Mean	**0.07510**	**0.10385**	**0.17116**	**240.29935**	**39.84553**	**0.17354**	**53.88681**	**2.25638**	**0.00305**
%RSD	0.59621	0.14959	0.67610	0.01813	0.57952	0.48707	0.25662	0.12193	73.91114

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.79228	0.13949	5.58495	0.16541	0.18217	5.47933	0.00102	-0.02384	0.01742
#2	0.78275	0.14261	5.57697	0.16524	0.17984	5.44745	0.00326	-0.02776	0.01530
Mean	**0.78751**	**0.14105**	**5.58096**	**0.16532**	**0.18100**	**5.46339**	**0.00214**	**-0.02580**	**0.01636**
%RSD	0.85566	1.56487	0.10110	0.07365	0.90945	0.41259	73.78074	10.73818	9.14909

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.13683	0.01316	0.77505	0.13365	0.31777	0.01506	0.06572	0.17407	0.60305
#2	10.06527	0.00661	0.77136	0.13515	0.31972	0.00928	0.06568	0.17342	0.60169
Mean	**10.10105**	**0.00989**	**0.77321**	**0.13440**	**0.31875**	**0.01217**	**0.06570**	**0.17374**	**0.60237**
%RSD	0.50099	46.89781	0.33726	0.78998	0.43260	33.54742	0.04515	0.26175	0.15869

	Zr	Pb	Se
	ppm	calc	calc
#1	0.04753	0.17659	0.00368
#2	0.04690	0.17498	0.00096
Mean	**0.04721**	**0.17578**	**0.00232**
%RSD	0.93374	0.64769	82.87257

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:36
SampleId1 : 1111160-6 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:50:22
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE42

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00137	46.81959	0.05584	0.00019	0.24629	0.00335	-0.00239	72.86356	-0.00082
#2	-0.00162	46.65583	0.04635	-0.00111	0.24578	0.00335	0.00227	72.89189	-0.00003
Mean	**-0.00150**	**46.73771**	**0.05110**	**-0.00046**	**0.24604**	**0.00335**	**-0.00006**	**72.87773**	**-0.00043**
%RSD	12.10367	0.24775	13.12636	200.52616	0.14406	0.04564	5615.35482	0.02749	130.26361

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.02117	0.02473	0.03640	95.01240	7.71136	0.05046	17.04322	1.23458	0.00023
#2	0.02091	0.02442	0.03541	94.94314	7.67127	0.05026	17.04774	1.23299	0.00031
Mean	**0.02104**	**0.02458**	**0.03591**	**94.97777**	**7.69132**	**0.05036**	**17.04548**	**1.23379**	**0.00027**
%RSD	0.87598	0.89123	1.95760	0.05156	0.36852	0.28641	0.01876	0.09116	21.35299

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09872	0.03003	1.70078	0.07331	0.07723	16.49834	-0.00135	0.10262	0.10755
#2	0.09694	0.02820	1.70261	0.07238	0.07782	16.45329	-0.00122	0.09530	0.11700
Mean	**0.09783**	**0.02911**	**1.70169**	**0.07285**	**0.07752**	**16.47581**	**-0.00129**	**0.09896**	**0.11227**
%RSD	1.28071	4.44720	0.07636	0.90272	0.54068	0.19338	6.94092	5.23221	5.95246

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.02546	-0.00511	0.28546	0.04356	0.18006	0.00644	0.45920	0.25729	0.17468
#2	4.80142	0.00391	0.28456	0.05045	0.17275	0.00331	0.45169	0.25613	0.17400
Mean	**4.91344**	**-0.00060**	**0.28501**	**0.04701**	**0.17641**	**0.00487**	**0.45544**	**0.25671**	**0.17434**
%RSD	3.22423	1064.57971	0.22213	10.36632	2.92999	45.49626	1.16542	0.31977	0.27308

	Zr	Pb	Se
	ppm	calc	calc
#1	0.03887	0.07592	0.10590
#2	0.03898	0.07601	0.10977
Mean	**0.03893**	**0.07597**	**0.10784**
%RSD	0.21053	0.07977	2.53468

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:36
SampleId1 : 1111160-7 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:52:11
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE43

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00200	86.14408	0.05162	0.00797	0.56021	0.00622	0.01074	155.89795	0.00025
#2	-0.00168	86.08141	0.05563	0.00767	0.55975	0.00627	0.00674	155.97359	0.00059
Mean	**-0.00184**	**86.11274**	**0.05362**	**0.00782**	**0.55998**	**0.00624**	**0.00874**	**155.93577**	**0.00042**
%RSD	12.05395	0.05147	5.28103	2.75934	0.05824	0.54222	32.29139	0.03430	56.14797

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03821	0.05663	0.08361	148.09688	28.23799	0.09789	30.40801	2.36393	0.00465
#2	0.03814	0.05698	0.08324	148.26032	28.13707	0.09774	30.40846	2.36450	0.00506
Mean	**0.03818**	**0.05680**	**0.08343**	**148.17860**	**28.18753**	**0.09782**	**30.40824**	**2.36421**	**0.00485**
%RSD	0.12100	0.42703	0.31084	0.07800	0.25318	0.11172	0.00106	0.01705	5.96105

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.28559	0.07035	4.14912	0.14872	0.15632	22.17022	-0.00164	0.08706	0.11368
#2	0.28426	0.07069	4.16845	0.15218	0.15776	22.17992	-0.00213	0.09033	0.11772
Mean	**0.28493**	**0.07052**	**4.15879**	**0.15045**	**0.15704**	**22.17507**	**-0.00189**	**0.08870**	**0.11570**
%RSD	0.33038	0.34007	0.32863	1.62715	0.65185	0.03094	18.34746	2.60474	2.46927

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.03325	0.00871	0.45707	0.07126	0.26961	0.00434	1.12288	0.32550	0.32155
#2	8.03593	0.00380	0.45725	0.06683	0.26764	0.00611	1.12689	0.32504	0.32425
Mean	**8.03459**	**0.00626**	**0.45716**	**0.06905**	**0.26862**	**0.00523**	**1.12489**	**0.32527**	**0.32290**
%RSD	0.02361	55.52362	0.02707	4.53167	0.51848	23.95598	0.25207	0.10007	0.59056

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.05420	0.15379	0.10482
#2	0.05337	0.15590	0.10860
Mean	**0.05379**	**0.15485**	**0.10671**
%RSD	1.08539	0.96741	2.50676

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:36
SampleId1 : 1111160-8 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:54:01
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE44

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00332	89.28948	0.06617	0.00423	0.59791	0.00652	0.00096	144.03839	-0.00051
#2	-0.00146	89.22607	0.06501	0.00698	0.59606	0.00654	0.00581	144.74759	0.00041
Mean	**-0.00239**	**89.25777**	**0.06559**	**0.00561**	**0.59699**	**0.00653**	**0.00339**	**144.39299**	**-0.00005**
%RSD	55.13360	0.05024	1.25010	34.63163	0.21862	0.13311	101.23462	0.34731	1282.34642

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03905	0.06006	0.08748	158.87433	26.22575	0.10276	31.75042	2.12482	0.00121
#2	0.04071	0.06174	0.08792	159.47852	26.11423	0.10220	31.69612	2.13022	0.00498
Mean	**0.03988**	**0.06090**	**0.08770**	**159.17643**	**26.16999**	**0.10248**	**31.72327**	**2.12752**	**0.00309**
%RSD	2.94619	1.95600	0.35470	0.26840	0.30131	0.39014	0.12104	0.17946	86.02438

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.34080	0.07259	3.90316	0.13845	0.16261	21.15191	-0.00073	0.05964	0.08799
#2	0.33686	0.07530	3.93758	0.15075	0.15548	21.10021	0.00223	0.05441	0.08965
Mean	**0.33883**	**0.07395**	**3.92037**	**0.14460**	**0.15905**	**21.12606**	**0.00075**	**0.05702**	**0.08882**
%RSD	0.82230	2.59459	0.62082	6.01337	3.16903	0.17305	278.92933	6.48790	1.31866

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.46671	0.00545	0.47498	0.07790	0.25531	0.00650	0.94246	0.29623	0.36066
#2	7.34983	0.00464	0.47500	0.08200	0.24949	0.00717	0.96128	0.29741	0.36437
Mean	**7.40827**	**0.00505**	**0.47499**	**0.07995**	**0.25240**	**0.00684**	**0.95187**	**0.29682**	**0.36251**
%RSD	1.11566	11.38281	0.00348	3.62470	1.63305	6.84597	1.39806	0.28179	0.72355

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	0.05158	0.15457	0.07855**UNDGREEN**
#2	0.05222	0.15391	0.07791
Mean	**0.05190**	**0.15424**	**0.07823**
%RSD	0.85898	0.30229	0.57617

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:37
SampleId1 : 1111160-9 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:55:50
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE45

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00167	26.14060	0.04646	-0.00057	0.12161	0.00369	0.00017	110.77820	-0.00047
#2	-0.00172	26.04059	0.04583	-0.00095	0.12178	0.00362	-0.00069	110.56376	-0.00116
Mean	**-0.00170**	**26.09060**	**0.04614**	**-0.00076**	**0.12169**	**0.00366**	**-0.00026**	**110.67098**	**-0.00082**
%RSD	2.29979	0.27104	0.96896	35.37424	0.09694	1.36270	236.50325	0.13701	59.24305

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01333	0.01124	0.01870	73.36245	4.19650	0.03588	11.56117	1.63635	0.00547
#2	0.01339	0.01139	0.01889	73.35497	4.16890	0.03570	11.53187	1.63569	0.00661
Mean	**0.01336**	**0.01131**	**0.01880**	**73.35871**	**4.18270**	**0.03579**	**11.54652**	**1.63602**	**0.00604**
%RSD	0.31057	0.98269	0.68590	0.00721	0.46665	0.35445	0.17943	0.02847	13.41212

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.36378	0.01057	1.45631	0.11008	0.11627	35.81899	-0.00227	0.08019	0.09433
#2	0.35656	0.01070	1.44713	0.11226	0.11481	35.94004	-0.00091	0.07514	0.09186
Mean	**0.36017**	**0.01063**	**1.45172**	**0.11117**	**0.11554**	**35.87952**	**-0.00159**	**0.07767**	**0.09310**
%RSD	1.41669	0.90175	0.44691	1.38442	0.89638	0.23856	60.23263	4.59746	1.87907

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.59245	0.00426	0.34469	0.02833	0.22479	-0.00015	3.46827	0.55782	0.10064
#2	4.49924	0.00507	0.34452	0.02877	0.22972	-0.00025	3.46759	0.55725	0.09963
Mean	**4.54584**	**0.00467**	**0.34460**	**0.02855**	**0.22725**	**-0.00020**	**3.46793**	**0.55753**	**0.10014**
%RSD	1.44984	12.32636	0.03583	1.09509	1.53507	36.27818	0.01391	0.07314	0.71266

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.05866	0.11421	0.08962
#2	0.05955	0.11396	0.08629
Mean	**0.05911**	**0.11408**	**0.08796**
%RSD	1.05968	0.15630	2.67840

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:37
SampleId1 : 1111160-10 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:57:39

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE46

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00119	31.47412	0.04277	-0.00004	0.12841	0.00414	0.00633	71.02668	0.00091
#2	-0.00146	31.50516	0.04730	-0.00080	0.12862	0.00416	0.00375	71.13491	0.00170
Mean	**-0.00132**	**31.48964**	**0.04504**	**-0.00042**	**0.12851**	**0.00415**	**0.00504**	**71.08080**	**0.00130**
%RSD	14.52470	0.06970	7.11471	128.69022	0.11475	0.30599	36.31019	0.10766	42.89964

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01418	0.01362	0.04088	79.86209	4.90526	0.03765	11.77801	1.29149	0.01275
#2	0.01424	0.01408	0.04105	79.94117	4.91003	0.03772	11.80641	1.29299	0.01128
Mean	**0.01421**	**0.01385**	**0.04097**	**79.90163**	**4.90764**	**0.03768**	**11.79221**	**1.29224**	**0.01202**
%RSD	0.29794	2.36349	0.29449	0.06998	0.06876	0.11882	0.17031	0.08198	8.66991

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06101	0.01199	1.93638	0.21269	0.21402	23.41279	-0.00260	0.08296	0.09139
#2	0.06085	0.01175	1.93477	0.21298	0.20791	23.54230	-0.00421	0.07615	0.09081
Mean	**0.06093**	**0.01187**	**1.93558**	**0.21283**	**0.21096**	**23.47754**	**-0.00340**	**0.07956**	**0.09110**
%RSD	0.19271	1.41358	0.05882	0.09842	2.04974	0.39006	33.43479	6.05778	0.45093

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.84885	0.00386	0.19495	0.03533	0.21642	0.00442	2.99914	0.57486	0.45748
#2	4.84539	0.00467	0.19525	0.02963	0.22081	0.00916	3.01352	0.57549	0.45748
Mean	**4.84712**	**0.00427**	**0.19510**	**0.03248**	**0.21862**	**0.00679**	**3.00633**	**0.57518**	**0.45748**
%RSD	0.05057	13.49112	0.10936	12.41996	1.41875	49.40603	0.33825	0.07766	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	0.05966	0.21358	0.08859
#2	0.05992	0.20960	0.08593
Mean	**0.05979**	**0.21159**	**0.08726**
%RSD	0.30695	1.33019	2.15322

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:37
SampleId1 : 1111160-11 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 16:59:28
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE47

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00121	29.20277	0.04203	-0.00072	0.12353	0.00394	0.00514	74.74704	0.00000
#2	-0.00276	29.06013	0.03139	-0.00057	0.12378	0.00387	-0.00596	73.34146	-0.00035

Mean	**-0.00198**	**29.13145**	**0.03671**	**-0.00065**	**0.12365**	**0.00390**	**-0.00041**	**74.04425**	**-0.00018**
%RSD	55.24540	0.34622	20.49811	16.64828	0.14310	1.31541	1920.17776	1.34230	138.02190

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01397	0.01378	0.02667	77.98809	4.70810	0.03520	11.00817	1.31144	0.00948
#2	0.01217	0.01226	0.02569	76.87817	4.69203	0.03514	10.91354	1.29430	0.00882
Mean	**0.01307**	**0.01302**	**0.02618**	**77.43313**	**4.70007**	**0.03517**	**10.96085**	**1.30287**	**0.00915**
%RSD	9.74375	8.28561	2.65474	1.01356	0.24179	0.12023	0.61046	0.93016	5.05943

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.05642	0.01148	1.86555	0.14990	0.14905	24.32937	-0.00287	0.07028	0.09315
#2	0.05642	0.00931	1.86210	0.14005	0.15291	24.20949	-0.00641	0.07317	0.08832
Mean	**0.05642**	**0.01040**	**1.86383**	**0.14498**	**0.15098**	**24.26943**	**-0.00464**	**0.07173**	**0.09073**
%RSD	0.00000	14.75740	0.13084	4.80812	1.80908	0.34927	53.91949	2.84944	3.76266

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.23358	0.00349	0.19357	0.05135	0.18018	0.00384	2.80934	0.55001	0.15684
#2	4.11542	0.00512	0.19328	0.04096	0.18621	0.00296	2.78741	0.54347	0.15246
Mean	**4.17450**	**0.00431**	**0.19343**	**0.04616**	**0.18319**	**0.00340**	**2.79838**	**0.54674**	**0.15465**
%RSD	2.00156	26.77661	0.10606	15.91666	2.32629	18.16513	0.55402	0.84609	2.00064

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.05871	0.14933	0.08553
#2	0.05849	0.14863	0.08328
Mean	**0.05860**	**0.14898**	**0.08440**
%RSD	0.27081	0.33523	1.89159

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:37
SampleId1 : 1111160-12 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:01:18
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE48

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00233	33.77810	0.05499	0.00103	0.21935	0.00566	0.00384	143.06953	-0.00082
#2	-0.00276	33.90952	0.05478	0.00141	0.22035	0.00567	-0.00240	142.15971	-0.00097
Mean	**-0.00254**	**33.84381**	**0.05489**	**0.00122**	**0.21985**	**0.00566**	**0.00072**	**142.61462**	**-0.00089**
%RSD	12.05570	0.27460	0.27155	22.08974	0.32233	0.11192	609.95569	0.45111	11.96430

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01721	0.01770	0.02387	92.42464	5.31002	0.04939	15.03855	2.13467	0.01455
#2	0.01653	0.01759	0.02321	92.06575	5.31429	0.04955	15.08372	2.12956	0.01496
Mean	**0.01687**	**0.01764**	**0.02354**	**92.24519**	**5.31215**	**0.04947**	**15.06114**	**2.13212**	**0.01476**

%RSD	2.86842	0.42191	1.96009	0.27511	0.05687	0.22119	0.21209	0.16966	1.96089

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.95302	0.01738	1.71019	0.16648	0.16920	37.13484	-0.00018	0.07428	0.07964
#2	0.95888	0.01528	1.69366	0.16286	0.16860	37.02677	-0.00140	0.07295	0.08706
Mean	**0.95595**	**0.01633**	**1.70192**	**0.16467**	**0.16890**	**37.08080**	**-0.00079**	**0.07361**	**0.08335**
%RSD	0.43351	9.10224	0.68715	1.55488	0.25187	0.20609	109.70184	1.27729	6.30204

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.39210	0.00834	0.39189	0.08434	0.24205	0.00545	7.35562	0.87510	0.12486
#2	5.42925	0.00588	0.39292	0.07104	0.24091	-0.00268	7.37652	0.87140	0.12587
Mean	**5.41068**	**0.00711**	**0.39240**	**0.07769**	**0.24148**	**0.00138**	**7.36607**	**0.87325**	**0.12537**
%RSD	0.48555	24.43700	0.18689	12.11210	0.33496	415.50827	0.20063	0.29918	0.56935

	Zr	Pb	Se
	ppm	calc	calc
#1	0.08002	0.16830	0.07785
#2	0.08044	0.16669	0.08236
Mean	**0.08023**	**0.16749**	**0.08011**
%RSD	0.37141	0.67846	3.98281

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:37
SampleId1 : 1111160-13 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:03:08
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE49

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00169	45.35533	0.05162	-0.00492	0.18528	0.00385	0.00598	82.35010	-0.00055
#2	-0.00142	45.28153	0.04825	-0.00423	0.18620	0.00379	0.00285	82.32042	-0.00052
Mean	**-0.00156**	**45.31843**	**0.04994**	**-0.00458**	**0.18574**	**0.00382**	**0.00442**	**82.33526**	**-0.00054**
%RSD	12.30295	0.11515	4.77543	10.60746	0.34959	0.97315	50.11259	0.02548	3.04740

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01840	0.01750	0.02683	96.16483	5.55710	0.05418	18.25716	1.14715	0.00080
#2	0.01800	0.01723	0.02757	96.24619	5.54554	0.05410	18.23453	1.14865	0.00015
Mean	**0.01820**	**0.01736**	**0.02720**	**96.20551**	**5.55132**	**0.05414**	**18.24584**	**1.14790**	**0.00048**
%RSD	1.56617	1.11541	1.92208	0.05980	0.14730	0.11023	0.08770	0.09210	97.33880

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.45063	0.01457	2.07996	0.09948	0.10269	22.96285	-0.00078	0.07479	0.08414
#2	0.45130	0.01494	2.07996	0.09777	0.10364	22.99198	-0.00274	0.06479	0.08092
Mean	**0.45096**	**0.01475**	**2.07996**	**0.09862**	**0.10316**	**22.97741**	**-0.00176**	**0.06979**	**0.08253**
%RSD	0.10453	1.78747	0.00000	1.22114	0.65048	0.08964	78.74005	10.12794	2.76090

ted: 11/21/2011 12:56:07 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.37609	0.00517	0.52916	0.04748	0.14427	0.00502	1.66040	0.21236	0.15179
#2	3.44973	0.00804	0.53063	0.04314	0.14024	0.00475	1.64454	0.21250	0.15381
Mean	**3.41291**	**0.00661**	**0.52989**	**0.04531**	**0.14226**	**0.00489**	**1.65247**	**0.21243**	**0.15280**
%RSD	1.52582	30.72917	0.19650	6.76776	2.00184	3.99728	0.67852	0.04616	0.93454

	Zr	Pb	Se
	ppm	calc	calc
#1	0.04103	0.10162	0.08103
#2	0.04126	0.10168	0.07555
Mean	**0.04115**	**0.10165**	**0.07829**
%RSD	0.38485	0.04579	4.94780

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:37
SampleId1 : 1111160-14 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:04:58
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE50

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00222	69.45962	0.12660	0.00530	0.44958	0.00547	0.01069	133.81315	0.04647
#2	0.00311	69.16487	0.12459	0.00683	0.44749	0.00549	0.00600	133.97561	0.04805
Mean	**0.00266**	**69.31225**	**0.12559**	**0.00606**	**0.44854**	**0.00548**	**0.00835**	**133.89438**	**0.04726**
%RSD	23.60698	0.30069	1.12861	17.78785	0.33006	0.25950	39.70788	0.08579	2.36774

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04209	0.04534	0.62044	166.00539	21.60198	0.07450	28.13571	2.92019	0.00252
#2	0.04181	0.04615	0.61734	166.15915	21.44954	0.07392	28.06104	2.92086	0.00440
Mean	**0.04195**	**0.04574**	**0.61889**	**166.08227**	**21.52576**	**0.07421**	**28.09838**	**2.92052**	**0.00346**
%RSD	0.47205	1.26124	0.35352	0.06546	0.50075	0.55926	0.18792	0.01623	38.43783

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.36272	0.06649	3.95293	4.76942	4.77162	65.00930	0.00360	0.04752	0.07938
#2	0.35734	0.06774	3.98131	4.76261	4.75154	65.07630	0.00238	0.05520	0.07967
Mean	**0.36003**	**0.06711**	**3.96712**	**4.76602**	**4.76158**	**65.04280**	**0.00299**	**0.05136**	**0.07952**
%RSD	1.05747	1.32215	0.50585	0.10103	0.29827	0.07284	28.77836	10.57658	0.25504

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.33690	0.00382	0.35043	0.04162	0.24826	0.00646	0.88952	0.33463	7.54306
#2	7.33614	0.00628	0.34942	0.04564	0.24912	0.00973	0.88942	0.33483	7.58432
Mean	**7.33652**	**0.00505**	**0.34992**	**0.04363**	**0.24869**	**0.00809**	**0.88947**	**0.33473**	**7.56369**
%RSD	0.00732	34.39005	0.20469	6.50338	0.24324	28.52423	0.00832	0.04094	0.38576

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	0.03212	4.77089	0.06877
#2	0.03159	4.75523	0.07152
Mean	**0.03186**	**4.76306**	**0.07015**
%RSD	1.18366	0.23255	2.77178

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:38
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 17:07:28
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19768	52.97467	0.51713	1.01986	1.03832	0.47702	0.53651	48.02138	0.50121
#2	0.19738	53.12295	0.51268	1.01986	1.03959	0.47609	0.54223	47.86416	0.50169
Mean	**0.19753**	**53.04881**	**0.51491**	**1.01986**	**1.03896**	**0.47655**	**0.53937**	**47.94277**	**0.50145**
%RSD	0.10867	0.19765	0.61199	0.00000	0.08611	0.13902	0.74958	0.23189	0.06708

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48193	0.96819	1.04478	19.97463	49.73942	0.52828	50.28377	0.97337	0.98511
#2	0.48180	0.96671	1.04697	19.92971	49.80265	0.52948	50.32160	0.97066	0.98725
Mean	**0.48186**	**0.96745**	**1.04587**	**19.95217**	**49.77104**	**0.52888**	**50.30269**	**0.97201**	**0.98618**
%RSD	0.01989	0.10801	0.14823	0.15921	0.08982	0.16019	0.05318	0.19666	0.15358

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.38413	0.99403	5.03730	0.99383	0.99244	5.20839	0.50790	1.05368	1.04601
#2	49.50625	0.99158	5.06491	0.99261	0.99311	5.20520	0.50273	1.04745	1.04135
Mean	**49.44519**	**0.99281**	**5.05111**	**0.99322**	**0.99277**	**5.20679**	**0.50532**	**1.05056**	**1.04368**
%RSD	0.17464	0.17476	0.38655	0.08674	0.04767	0.04328	0.72365	0.41972	0.31560

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.02826	1.04824	0.51058	0.31001	0.48580	0.52385	5.03680	0.48389	0.94323
#2	5.03999	1.05401	0.51090	0.29633	0.48534	0.53124	5.02858	0.48244	0.93441
Mean	**5.03412**	**1.05113**	**0.51074**	**0.30317**	**0.48557**	**0.52755**	**5.03269**	**0.48317**	**0.93882**
%RSD	0.16475	0.38776	0.04367	3.19026	0.06668	0.99094	0.11555	0.21162	0.66386

	Zr	Pb	Se
	ppm	calc	calc
#1	0.99169	0.99290	1.04856
#2	0.99045	0.99294	1.04338
Mean	**0.99107**	**0.99292**	**1.04597**
%RSD	0.08848	0.00290	0.35042

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:38

SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 17:09:24
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00082	0.04519	-0.00305	-0.00538	-0.00067	0.00039	-0.00088	-0.02575	-0.00044
#2	-0.00015	0.04092	-0.00337	-0.00561	-0.00063	0.00031	0.00137	-0.03842	-0.00072
Mean	**-0.00048**	**0.04306**	**-0.00321**	**-0.00549**	**-0.00065**	**0.00035**	**0.00024**	**-0.03208**	**-0.00058**
%RSD	98.48051	7.00945	6.95584	2.94647	4.55163	14.70488	653.25791	27.91920	34.51117

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	-0.00079	-0.00129	0.02371	-0.23869	-0.00172	-0.02782	0.00006	0.00007
#2	-0.00075	-0.00023	-0.00121	0.01218	-0.23644	-0.00173	-0.02737	-0.00021	-0.00108
Mean	**-0.00088**	**-0.00051**	**-0.00125**	**0.01794**	**-0.23757**	**-0.00172**	**-0.02759**	**-0.00007**	**-0.00051**
%RSD	22.02499	77.13104	4.62097	45.46327	0.66829	0.14443	1.14699	260.64711	159.96645

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.15901	-0.00005	-0.00318	-0.00099	0.00096	-0.02878	-0.00292	0.00369	0.00275
#2	-0.16166	-0.00099	-0.00955	-0.00341	0.00000	-0.02560	-0.00270	0.00749	0.00044
Mean	**-0.16033**	**-0.00052**	**-0.00636**	**-0.00220**	**0.00048**	**-0.02719**	**-0.00281**	**0.00559**	**0.00159**
%RSD	1.16934	129.12518	70.80503	77.63874	140.84081	8.25007	5.77293	48.03077	102.09358

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01546	-0.00244	-0.00153	0.00092	-0.00271	-0.00426	-0.04121	-0.00074	0.00010
#2	-0.01511	-0.00776	-0.00158	0.00470	-0.00272	0.00294	-0.02953	-0.00083	0.00044
Mean	**-0.01528**	**-0.00510**	**-0.00155**	**0.00281**	**-0.00272**	**-0.00066**	**-0.03537**	**-0.00078**	**0.00027**
%RSD	1.64901	73.80928	2.10349	95.25921	0.25882	773.78443	23.35015	7.57168	88.30749

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00037	0.00031	0.00306
#2	0.00034	-0.00113	0.00279
Mean	**0.00036**	**-0.00041**	**0.00292**
%RSD	6.14503	247.12388	6.57023

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:38
SampleId1 : 1111160-15 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:11:19
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE51

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	-0.00178	145.24612	0.05552	0.00858	1.03837	0.00894	0.01061	151.47125	0.00191
#2	-0.00179	145.53452	0.05689	0.00858	1.04309	0.00891	0.00715	150.74737	0.00163
Mean	**-0.00179**	**145.39032**	**0.05621**	**0.00858**	**1.04073**	**0.00893**	**0.00888**	**151.10931**	**0.00177**
%RSD	0.44840	0.14026	1.72373	0.00000	0.32092	0.22242	27.52731	0.33873	11.05479

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06573	0.10511	0.17042	205.53195	43.76642	0.15640	48.69792	2.45113	0.00080
#2	0.06477	0.10391	0.17095	204.71396	43.89409	0.15690	48.68455	2.44761	0.00121
Mean	**0.06525**	**0.10451**	**0.17069**	**205.12295**	**43.83025**	**0.15665**	**48.69123**	**2.44937**	**0.00101**
%RSD	1.04327	0.81268	0.22096	0.28198	0.20596	0.22479	0.01941	0.10163	28.71738

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.85728	0.13406	4.80393	0.25645	0.26904	4.97575	-0.00120	-0.03567	0.02920
#2	0.85661	0.13066	4.83337	0.25395	0.26920	4.96938	0.00151	-0.01146	0.02784
Mean	**0.85695**	**0.13236**	**4.81865**	**0.25520**	**0.26912**	**4.97256**	**0.00016**	**-0.02357**	**0.02852**
%RSD	0.05522	1.81248	0.43213	0.69224	0.04198	0.09062	1218.90524	72.63249	3.36763

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.21297	0.01073	0.68607	0.10642	0.29910	0.01056	0.20472	0.21062	0.62569
#2	10.24066	0.01236	0.68965	0.10325	0.30169	0.00913	0.22039	0.20997	0.62704
Mean	**10.22681**	**0.01155**	**0.68786**	**0.10483**	**0.30039**	**0.00984**	**0.21256**	**0.21029**	**0.62637**
%RSD	0.19145	10.01695	0.36881	2.13728	0.61123	10.28724	5.21060	0.21857	0.15264

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.04386	0.26485	0.00760
#2	0.04396	0.26412	0.01475
Mean	**0.04391**	**0.26448**	**0.01118**
%RSD	0.16897	0.19394	45.26861

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:38
SampleId1 : 1111040-1 100X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:13:10
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE52

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00098	0.04634	-0.00316	0.29236	0.32724	0.00006	-0.00123	61.34690	-0.00096
#2	-0.00103	0.04029	-0.00063	0.29328	0.32841	0.00006	-0.00487	61.03460	-0.00071
Mean	**-0.00100**	**0.04332**	**-0.00190**	**0.29282**	**0.32782**	**0.00006**	**-0.00305**	**61.19075**	**-0.00083**
%RSD	3.56876	9.87758	94.29978	0.22130	0.25253	7.33487	84.41867	0.36088	21.29711

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00097	-0.00076	-0.00130	3.57100	4.76963	0.18542	5.46954	0.06490	-0.00141

#2	-0.00022	-0.00158	-0.00202	3.56195	4.78821	0.18641	5.48436	0.06499	-0.00182
Mean	**-0.00059**	**-0.00117**	**-0.00166**	**3.56648**	**4.77892**	**0.18591**	**5.47695**	**0.06495**	**-0.00161**
%RSD	90.20685	49.15952	30.85389	0.17925	0.27498	0.37454	0.19133	0.10018	17.95728

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	189.55069	-0.00082	0.00228	-0.00143	-0.00210	0.27582	-0.00257	-0.00404	0.00142
#2	189.01743	-0.00008	0.00297	-0.00262	0.00267	0.27582	0.00062	-0.00429	0.00074
Mean	**189.28406**	**-0.00045**	**0.00262**	**-0.00203**	**0.00028**	**0.27582**	**-0.00098**	**-0.00416**	**0.00108**
%RSD	0.19921	116.67399	18.38614	41.39369	1183.44179	0.00000	231.14450	4.30359	44.81030

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19057	-0.00776	5.14440	-0.00467	-0.00336	0.00284	-0.03332	-0.00112	0.00279
#2	0.19512	-0.00039	5.15164	-0.00629	-0.00338	0.00333	-0.03606	-0.00149	0.00279
Mean	**0.19285**	**-0.00408**	**5.14802**	**-0.00548**	**-0.00337**	**0.00308**	**-0.03469**	**-0.00130**	**0.00279**
%RSD	1.66780	127.88998	0.09947	20.83012	0.41753	11.34911	5.58446	20.06162	0.00000

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00013	-0.00188	-0.00040
#2	-0.00005	0.00091	-0.00094
Mean	**-0.00009**	**-0.00048**	**-0.00067**
%RSD	59.97030	406.55188	57.20293

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:38
SampleId1 : 1111040-3 100X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:15:00
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE53

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00014	0.01913	-0.00242	0.48565	0.25827	0.00004	-0.00227	101.86143	-0.00081
#2	-0.00004	0.00412	-0.00716	0.49084	0.25865	0.00000	-0.00331	101.67614	-0.00118
Mean	**-0.00009**	**0.01163**	**-0.00479**	**0.48824**	**0.25846**	**0.00002**	**-0.00279**	**101.76878**	**-0.00099**
%RSD	78.81356	91.29999	69.93753	0.75265	0.10287	112.62863	26.27025	0.12875	26.27818

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00031	-0.00126	-0.00193	0.98525	8.77651	0.35610	9.56591	0.04576	-0.00239
#2	-0.00031	-0.00130	-0.00139	0.97339	8.77651	0.35617	9.55871	0.04576	-0.00149
Mean	**-0.00031**	**-0.00128**	**-0.00166**	**0.97932**	**8.77651**	**0.35614**	**9.56231**	**0.04576**	**-0.00194**
%RSD	0.08577	1.91225	22.98122	0.85652	0.00000	0.01385	0.05327	0.00000	32.83506

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	283.85930	-0.00127	-0.04435	-0.00063	-0.00049	0.57733	-0.00049	-0.00500	-0.00183
#2	282.47041	-0.00110	-0.03889	-0.00176	-0.00252	0.57098	-0.00293	-0.01016	-0.00328

Mean	**283.16485**	**-0.00118**	**-0.04162**	**-0.00119**	**-0.00150**	**0.57416**	**-0.00171**	**-0.00758**	**-0.00256**
%RSD	0.34683	10.14987	9.27434	67.34952	95.18731	0.78184	100.83083	48.18918	40.14599

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.15673	-0.00121	8.95142	-0.01019	-0.00342	-0.00415	-0.03568	-0.00072	0.01187
#2	0.15458	-0.00531	8.96028	-0.00730	-0.00335	-0.00265	-0.02950	-0.00048	0.01153
Mean	**0.15565**	**-0.00326**	**8.95585**	**-0.00874**	**-0.00338**	**-0.00340**	**-0.03259**	**-0.00060**	**0.01170**
%RSD	0.97777	88.92082	0.06994	23.38427	1.45493	31.18375	13.42416	28.72282	2.03198

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00046	-0.00054	-0.00288
#2	-0.00001	-0.00226	-0.00557
Mean	**0.00022**	**-0.00140**	**-0.00423**
%RSD	145.06083	87.28466	44.94758

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:39
SampleId1 : 1111040-4 100X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:16:50
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE54

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00128	0.13876	-0.00200	0.42528	2.15054	0.00008	0.00119	104.16855	-0.00123
#2	-0.00050	0.14590	0.00169	0.42383	2.14896	0.00006	-0.00522	104.44303	-0.00043
Mean	**-0.00089**	**0.14233**	**-0.00016**	**0.42455**	**2.14975**	**0.00007**	**-0.00202**	**104.30579**	**-0.00083**
%RSD	61.73292	3.54803	1654.30303	0.24179	0.05200	20.00935	224.81065	0.18607	67.59902

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00090	-0.00198	-0.00256	1.31255	11.36887	0.47461	9.75051	0.03923	-0.00198
#2	0.00027	-0.00157	-0.00175	1.31928	11.36254	0.47363	9.76492	0.03951	-0.00067
Mean	**-0.00031**	**-0.00178**	**-0.00215**	**1.31592**	**11.36570**	**0.47412**	**9.75772**	**0.03937**	**-0.00133**
%RSD	262.60756	16.04637	26.65451	0.36150	0.03940	0.14524	0.10442	0.49556	69.88715

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	280.58842	-0.00201	-0.07004	-0.00343	0.00214	0.00929	-0.00354	-0.01338	-0.00381
#2	280.23354	-0.00062	-0.08210	0.00013	0.00115	0.01247	-0.00194	0.00076	-0.00304
Mean	**280.41098**	**-0.00132**	**-0.07607**	**-0.00165**	**0.00165**	**0.01088**	**-0.00274**	**-0.00631**	**-0.00342**
%RSD	0.08949	74.65604	11.20261	152.75881	42.67649	20.62038	41.22384	158.48665	15.85931

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03946	-0.00776	13.71544	-0.00991	-0.00335	0.00308	-0.05170	-0.00123	0.00581
#2	0.04072	0.00371	13.72955	-0.01049	-0.00331	-0.00191	-0.04278	-0.00086	0.00649
Mean	**0.04009**	**-0.00203**	**13.72249**	**-0.01020**	**-0.00333**	**0.00058**	**-0.04724**	**-0.00104**	**0.00615**

%RSD	2.21245	399.80026	0.07272	4.00429	0.84505	605.41132	13.35361	25.00820	7.72785

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00021	0.00029	-0.00699
#2	-0.00003	0.00081	-0.00177
Mean	**-0.00012**	**0.00055**	**-0.00438**
%RSD	104.84557	67.16092	84.19129

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:39
SampleId1 : 1111040-5 100X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:18:40
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE55

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00045	0.23035	-0.00084	0.43582	1.19328	0.00020	-0.00036	91.17433	-0.00088
#2	-0.00031	0.22648	-0.00421	0.44056	1.19294	0.00018	-0.00261	91.40201	-0.00116
Mean	**-0.00038**	**0.22842**	**-0.00253**	**0.43819**	**1.19311**	**0.00019**	**-0.00149**	**91.28817**	**-0.00102**
%RSD	27.53549	1.19825	94.29463	0.76448	0.02003	10.16779	106.84452	0.17636	19.64277

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00052	-0.00177	-0.00166	0.98453	9.88435	0.39248	8.50148	0.03785	-0.00002
#2	-0.00024	-0.00115	-0.00112	0.97878	9.89219	0.39268	8.53613	0.03767	-0.00182
Mean	**-0.00038**	**-0.00146**	**-0.00139**	**0.98166**	**9.88827**	**0.39258**	**8.51880**	**0.03776**	**-0.00092**
%RSD	51.04503	30.20931	27.29479	0.41430	0.05605	0.03516	0.28757	0.34445	139.03891

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	271.47267	-0.00130	-0.07164	-0.00466	-0.00043	0.05688	-0.00328	-0.00714	-0.00336
#2	272.08496	-0.00096	-0.07618	-0.00152	-0.00126	0.04736	-0.00147	-0.00322	-0.00396
Mean	**271.77881**	**-0.00113**	**-0.07391**	**-0.00309**	**-0.00084**	**0.05212**	**-0.00238**	**-0.00518**	**-0.00366**
%RSD	0.15930	21.21325	4.35101	71.78157	69.19162	12.91220	54.04202	53.49563	11.53903

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.02568	-0.00531	10.41322	-0.00423	-0.00323	0.00475	-0.03362	-0.00101	0.02867
#2	0.02541	-0.00449	10.41646	-0.00962	-0.00335	0.00046	-0.02401	-0.00060	0.02666
Mean	**0.02554**	**-0.00490**	**10.41484**	**-0.00692**	**-0.00329**	**0.00260**	**-0.02881**	**-0.00080**	**0.02766**
%RSD	0.75907	11.83383	0.02203	55.07855	2.56581	116.68794	23.59612	35.93905	5.15570

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00011	-0.00184	-0.00462
#2	0.00031	-0.00135	-0.00371
Mean	**0.00010**	**-0.00159**	**-0.00417**
%RSD	300.65322	21.94570	15.38144

ted: 11/21/2011 12:56:07 **User: MIKE LUNDGREEN**
Method : Paragon File : 111118A Printed : 11/21/2011 12:55:39
SampleId1 : 1111040-7 100X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:20:30
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE56

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00107	0.01801	-0.00295	0.29511	0.30203	0.00028	-0.00574	60.76929	-0.00075
#2	-0.00108	0.00954	-0.00158	0.29473	0.30148	0.00023	-0.00175	61.22272	-0.00095
Mean	**-0.00108**	**0.01378**	**-0.00226**	**0.29492**	**0.30176**	**0.00026**	**-0.00375**	**60.99601**	**-0.00085**
%RSD	0.47382	43.45920	42.76209	0.09155	0.12733	14.52748	75.31934	0.52565	16.72951

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00066	-0.00126	-0.00166	3.49673	4.84950	0.18888	5.46909	0.06398	-0.00034
#2	-0.00032	-0.00054	-0.00175	3.51456	4.84045	0.18838	5.48885	0.06453	-0.00133
Mean	**-0.00049**	**-0.00090**	**-0.00170**	**3.50565**	**4.84498**	**0.18863**	**5.47897**	**0.06426**	**-0.00083**
%RSD	49.07392	56.12129	4.08023	0.35963	0.13196	0.18785	0.25502	0.60752	83.28290

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	187.81909	-0.00015	0.00001	-0.00182	-0.00012	0.27900	-0.00354	-0.00202	-0.00064
#2	187.38916	-0.00076	-0.01296	-0.00333	-0.00055	0.27582	-0.00318	-0.00845	-0.00242
Mean	**187.60412**	**-0.00045**	**-0.00647**	**-0.00258**	**-0.00033**	**0.27741**	**-0.00336**	**-0.00523**	**-0.00153**
%RSD	0.16205	95.46051	141.60865	41.60824	92.86169	0.80888	7.40029	86.87118	82.39594

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.18415	-0.00408	5.16867	-0.00513	-0.00349	-0.00290	-0.04288	-0.00117	0.00548
#2	0.18363	-0.00531	5.17026	-0.00120	-0.00315	0.00031	-0.03329	-0.00121	0.00581
Mean	**0.18389**	**-0.00469**	**5.16946**	**-0.00317**	**-0.00332**	**-0.00129**	**-0.03809**	**-0.00119**	**0.00565**
%RSD	0.20145	18.52866	0.02181	87.73586	7.20444	175.56944	17.82262	2.21994	4.20889

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00032	-0.00068	-0.00110
#2	-0.00019	-0.00148	-0.00443
Mean	**-0.00026**	**-0.00108**	**-0.00276**
%RSD	36.44946	52.19640	85.21677

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:39
SampleId1 : 1111051-1 100X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:22:21
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE57

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00092	0.13390	-0.00147	0.42360	1.36672	0.00036	-0.00366	88.46844	-0.00080
#2	-0.00081	0.12911	-0.00737	0.42123	1.36465	0.00033	-0.00072	88.47337	-0.00077
Mean	**-0.00086**	**0.13151**	**-0.00442**	**0.42241**	**1.36568**	**0.00034**	**-0.00219**	**88.47090**	**-0.00078**
%RSD	9.07451	2.57721	94.28760	0.39649	0.10741	5.86756	95.14277	0.00394	1.91888

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00007	0.00116	-0.00184	0.66701	9.87146	0.38325	8.01113	0.02783	-0.00214
#2	-0.00042	0.00047	-0.00183	0.66869	9.83935	0.38202	7.99044	0.02774	-0.00149
Mean	**-0.00024**	**0.00081**	**-0.00183**	**0.66785**	**9.85541**	**0.38263**	**8.00079**	**0.02778**	**-0.00182**
%RSD	101.40899	59.76276	0.20573	0.17719	0.23037	0.22743	0.18286	0.23404	25.49440

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	259.96284	0.02810	-0.05754	-0.00051	-0.00077	-0.00974	-0.00541	0.00323	-0.00028
#2	258.82942	0.02878	-0.06732	0.00013	-0.00085	0.00295	-0.00442	-0.00800	-0.00240
Mean	**259.39613**	**0.02844**	**-0.06243**	**-0.00019**	**-0.00081**	**-0.00340**	**-0.00492**	**-0.00238**	**-0.00134**
%RSD	0.30897	1.68639	11.07626	240.41436	6.96755	264.13786	14.27128	333.28715	112.34538

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00739	-0.00694	11.08723	-0.00767	-0.00357	-0.00379	-0.04439	-0.00090	0.00951
#2	-0.00624	-0.00367	11.06625	-0.00593	-0.00349	-0.00419	-0.05126	-0.00107	0.00750
Mean	**-0.00681**	**-0.00531**	**11.07674**	**-0.00680**	**-0.00353**	**-0.00399**	**-0.04782**	**-0.00099**	**0.00850**
%RSD	11.92753	43.67445	0.13395	18.08874	1.59480	7.14594	10.15249	11.70877	16.76949

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00003	-0.00068	0.00089
#2	-0.00034	-0.00052	-0.00427
Mean	**-0.00015**	**-0.00060**	**-0.00169**
%RSD	173.74565	18.80468	216.26070

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:39
SampleId1 : 1111051-2 100X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:24:11
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE58

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00087	0.13950	-0.00369	0.43529	1.39831	0.00042	-0.00297	90.47685	-0.00093
#2	-0.00004	0.14123	-0.00590	0.43368	1.39441	0.00039	0.00068	90.62915	-0.00090
Mean	**-0.00045**	**0.14036**	**-0.00479**	**0.43448**	**1.39636**	**0.00040**	**-0.00115**	**90.55300**	**-0.00092**
%RSD	129.13978	0.87171	32.63729	0.26114	0.19731	5.89790	224.92452	0.11893	2.64476

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00023	-0.00179	-0.00202	0.64681	10.21411	0.39513	8.19016	0.02755	-0.00100
#2	-0.00024	-0.00139	-0.00185	0.64920	10.12913	0.39247	8.18836	0.02774	-0.00149
Mean	**-0.00023**	**-0.00159**	**-0.00193**	**0.64801**	**10.17162**	**0.39380**	**8.18926**	**0.02765**	**-0.00124**
%RSD	1.68186	17.79642	6.29660	0.26084	0.59077	0.47876	0.01554	0.47042	27.93316

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	263.75998	-0.00320	-0.06823	-0.00486	-0.00064	-0.00340	-0.00427	-0.00421	-0.00224
#2	262.54731	-0.00266	-0.06641	-0.00125	0.00017	-0.00022	-0.00342	-0.00685	-0.00224
Mean	**263.15364**	**-0.00293**	**-0.06732**	**-0.00305**	**-0.00024**	**-0.00181**	**-0.00385**	**-0.00553**	**-0.00224**
%RSD	0.32585	13.10461	1.91097	83.38895	240.37241	123.87586	15.60729	33.78128	0.00940

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00612	-0.00121	11.36360	-0.00197	-0.00342	-0.00250	-0.04163	-0.00107	0.00817
#2	-0.00551	0.00043	11.33525	0.00034	-0.00337	0.00131	-0.02927	-0.00128	0.00850
Mean	**-0.00582**	**-0.00039**	**11.34942**	**-0.00082**	**-0.00339**	**-0.00059**	**-0.03545**	**-0.00117**	**0.00834**
%RSD	7.41895	297.03613	0.17659	200.02515	1.03619	455.99730	24.64406	12.28989	2.85126

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00040	-0.00204	-0.00289
#2	-0.00035	-0.00031	-0.00377
Mean	**-0.00037**	**-0.00118**	**-0.00333**
%RSD	9.59593	104.47325	18.64332

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:39
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 17:26:41
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.20087	54.12374	0.53284	1.04835	1.06355	0.48795	0.55135	48.91819	0.51353
#2	0.20157	53.97806	0.52499	1.04712	1.05907	0.48930	0.55894	49.23628	0.51401
Mean	**0.20122**	**54.05090**	**0.52891**	**1.04773**	**1.06131**	**0.48863**	**0.55515**	**49.07724**	**0.51377**
%RSD	0.24687	0.19058	1.04993	0.08270	0.29791	0.19543	0.96699	0.45830	0.06603

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49391	0.98513	1.07466	20.39272	50.84836	0.54284	51.37845	0.98931	1.01403
#2	0.49653	0.99155	1.06731	20.45619	50.53430	0.53881	51.31936	0.99332	1.01040
Mean	**0.49522**	**0.98834**	**1.07098**	**20.42446**	**50.69133**	**0.54082**	**51.34891**	**0.99131**	**1.01222**
%RSD	0.37418	0.45930	0.48550	0.21977	0.43809	0.52656	0.08137	0.28600	0.25326

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	50.09435	1.02317	5.16323	1.01411	1.01428	5.31994	0.51739	1.09177	1.05487
#2	49.87589	1.02529	5.16721	1.01669	1.01550	5.37732	0.51581	1.07074	1.06720
Mean	**49.98512**	**1.02423**	**5.16522**	**1.01540**	**1.01489**	**5.34863**	**0.51660**	**1.08125**	**1.06104**
%RSD	0.30903	0.14589	0.05449	0.17984	0.08511	0.75853	0.21691	1.37545	0.82153

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.12760	1.07500	0.52273	0.31955	0.49287	0.55215	5.14590	0.49518	0.95679
#2	5.12343	1.07747	0.52124	0.32042	0.49324	0.54394	5.11352	0.49597	0.97340
Mean	**5.12552**	**1.07623**	**0.52198**	**0.31999**	**0.49306**	**0.54804**	**5.12971**	**0.49558**	**0.96510**
%RSD	0.05748	0.16228	0.20261	0.19220	0.05282	1.05937	0.44628	0.11309	1.21734

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	1.01463	1.01422	1.06716
#2	1.01482	1.01590	1.06838
Mean	**1.01473**	**1.01506**	**1.06777**
%RSD	0.01355	0.11666	0.08070

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:40
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 17:28:36
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00059	0.05648	-0.00105	-0.00492	-0.00071	0.00055	-0.00314	-0.04245	-0.00034
#2	-0.00004	0.04966	-0.00621	-0.00530	-0.00067	0.00052	0.00345	-0.04475	-0.00030
Mean	**0.00027**	**0.05307**	**-0.00363**	**-0.00511**	**-0.00069**	**0.00053**	**0.00016**	**-0.04360**	**-0.00032**
%RSD	163.60912	9.09784	100.43922	5.27729	4.27636	4.08594	2942.64662	3.73535	7.76385

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	-0.00073	-0.00121	0.00635	-0.25690	-0.00173	-0.02200	-0.00021	-0.00100
#2	0.00001	-0.00014	-0.00176	0.00516	-0.25465	-0.00172	-0.02871	-0.00030	-0.00042
Mean	**-0.00030**	**-0.00044**	**-0.00148**	**0.00575**	**-0.25578**	**-0.00172**	**-0.02535**	**-0.00026**	**-0.00071**
%RSD	146.30745	96.44739	26.10930	14.61689	0.62069	0.28916	18.72350	25.12931	56.96894

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.15055	-0.00018	-0.01546	0.00045	0.00031	-0.03512	-0.00159	-0.00311	0.00036
#2	-0.15409	-0.00072	-0.00613	0.00118	-0.00257	-0.02878	-0.00110	-0.00816	-0.00407
Mean	**-0.15232**	**-0.00045**	**-0.01080**	**0.00082**	**-0.00113**	**-0.03195**	**-0.00134**	**-0.00564**	**-0.00186**
%RSD	1.64122	84.85378	61.08141	62.91980	179.67520	14.04249	25.72422	63.29128	168.61030

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01838	-0.00531	-0.00129	0.00745	-0.00271	0.00184	-0.03227	-0.00038	0.00044

#2	-0.01662	-0.00039	-0.00140	0.00714	-0.00259	-0.00016	-0.02952	-0.00017	0.00010
Mean	**-0.01750**	**-0.00285**	**-0.00135**	**0.00729**	**-0.00265**	**0.00084**	**-0.03090**	**-0.00028**	**0.00027**
%RSD	7.13275	122.01143	6.07150	3.05100	3.18152	168.47277	6.28681	52.35072	88.30749

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00027	0.00036	-0.00080
#2	0.00057	-0.00132	-0.00543
Mean	**0.00042**	**-0.00048**	**-0.00312**
%RSD	49.99971	245.42454	105.17693

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:40
SampleId1 : IP111117-1LCS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:49:44
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE1

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08733	2.21258	1.98173	0.48450	2.07367	0.04906	-0.00511	36.28825	0.04627
#2	0.08764	2.20081	1.97826	0.48458	2.07299	0.04903	-0.00632	36.24001	0.04666
Mean	**0.08749**	**2.20669**	**1.98000**	**0.48454**	**2.07333**	**0.04904**	**-0.00572**	**36.26413**	**0.04646**
%RSD	0.24981	0.37709	0.12381	0.01115	0.02329	0.04075	15.00080	0.09406	0.58947

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47697	0.18990	0.25783	1.01353	36.73147	0.49202	37.36527	0.48464	0.97819
#2	0.47517	0.18967	0.25737	1.01437	36.65040	0.49083	37.33414	0.48409	0.98066
Mean	**0.47607**	**0.18979**	**0.25760**	**1.01395**	**36.69093**	**0.49142**	**37.34970**	**0.48437**	**0.97943**
%RSD	0.26717	0.08341	0.12643	0.05851	0.15623	0.17257	0.05894	0.08108	0.17842

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	36.94842	0.50035	9.41827	0.48192	0.48661	9.74630	0.48939	1.94294	1.91177
#2	36.82128	0.49675	9.46929	0.48292	0.48833	9.73030	0.48173	1.95255	1.91725
Mean	**36.88485**	**0.49855**	**9.44378**	**0.48242**	**0.48747**	**9.73830**	**0.48556**	**1.94774**	**1.91451**
%RSD	0.24375	0.51105	0.38202	0.14635	0.24890	0.11617	1.11481	0.34909	0.20210

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.67459	0.51745	0.51140	-0.02707	0.47641	2.10771	10.12246	0.48715	0.46086
#2	1.67357	0.53223	0.51111	-0.03215	0.47657	2.08756	10.13004	0.48662	0.45951
Mean	**1.67408**	**0.52484**	**0.51125**	**-0.02961**	**0.47649**	**2.09764**	**10.12625**	**0.48689**	**0.46018**
%RSD	0.04339	1.99171	0.04039	12.13515	0.02363	0.67927	0.05294	0.07751	0.20745

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	1.00188	0.48505	1.92215
#2	1.00167	0.48653	1.92900

Mean	**1.00178**	**0.48579**	**1.92558UNDGREEN**
%RSD	0.01503	0.21499	0.25161

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:40
SampleId1 : 1110384-1 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:51:31
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00627	3.95387	0.00411	-0.00545	0.23501	0.00088	-0.00089	10.60065	0.11497
#2	0.00632	3.95206	0.00895	-0.00492	0.23292	0.00082	-0.00005	10.56225	0.11490
Mean	**0.00629**	**3.95297**	**0.00653**	**-0.00519**	**0.23396**	**0.00085**	**-0.00047**	**10.58145**	**0.11493**
%RSD	0.58671	0.03233	52.46177	7.27954	0.63112	4.63949	126.25845	0.25659	0.04400

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00425	0.00209	1.12797	18.87232	0.85904	-0.00009	1.45743	1.08625	0.00383
#2	0.00453	0.00228	1.11904	18.77280	0.85079	-0.00012	1.45116	1.08037	0.00514
Mean	**0.00439**	**0.00218**	**1.12350**	**18.82256**	**0.85491**	**-0.00010**	**1.45429**	**1.08331**	**0.00449**
%RSD	4.48415	6.07188	0.56198	0.37386	0.68191	21.51452	0.30494	0.38393	20.64141

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.06523	0.00497	0.21808	5.28648	5.23069	0.22822	-0.00096	-0.00470	0.00026
#2	-0.06628	0.00365	0.22765	5.27026	5.23447	0.22505	-0.00022	-0.00469	0.00109
Mean	**-0.06575**	**0.00431**	**0.22286**	**5.27837**	**5.23258**	**0.22664**	**-0.00059**	**-0.00469**	**0.00068**
%RSD	1.12968	21.68605	3.03538	0.21738	0.05113	0.99004	88.98889	0.19385	87.08211

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.18920	-0.00412	0.03248	0.02426	0.03719	-0.00230	-0.03070	0.00782	5.86101
#2	1.23550	-0.00535	0.03230	0.02501	0.03441	0.00626	-0.02926	0.00764	5.84579
Mean	**1.21235**	**-0.00474**	**0.03239**	**0.02463**	**0.03580**	**0.00198**	**-0.02998**	**0.00773**	**5.85340**
%RSD	2.70042	18.29647	0.40398	2.15537	5.49804	305.59660	3.39860	1.67370	0.18379

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00173	5.24927	-0.00139
#2	0.00146	5.24639	-0.00083
Mean	**0.00160**	**5.24783**	**-0.00111**
%RSD	11.85507	0.03881	35.53084

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:40
SampleId1 : 1110384-2 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:53:20
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE3

Final concentrations**56:07** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00527	3.73566	0.01970	-0.00461	0.33117	0.00077	0.00438	13.21237	0.09004
#2	0.00481	3.73281	0.02075	-0.00667	0.33029	0.00078	0.00160	13.11170	0.08915
Mean	**0.00504**	**3.73424**	**0.02022**	**-0.00564**	**0.33073**	**0.00077**	**0.00299**	**13.16203**	**0.08959**
%RSD	6.38002	0.05388	3.68332	25.80144	0.18774	1.02243	65.75819	0.54083	0.70099

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00517	0.00324	1.00862	17.53412	0.68442	0.00014	1.69084	0.95510	0.00629
#2	0.00399	0.00265	1.00745	17.43312	0.67968	0.00014	1.68143	0.95100	0.00481
Mean	**0.00458**	**0.00295**	**1.00804**	**17.48362**	**0.68205**	**0.00014**	**1.68614**	**0.95305**	**0.00555**
%RSD	18.13324	14.04634	0.08198	0.40846	0.49201	3.54260	0.39457	0.30423	18.76990

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.09148	0.00467	0.33018	5.13675	4.82477	0.19967	-0.00034	-0.00793	0.00212
#2	-0.09237	0.00477	0.33998	5.11970	4.97816	0.20601	-0.00463	-0.00870	0.00227
Mean	**-0.09193**	**0.00472**	**0.33508**	**5.12823**	**4.90146**	**0.20284**	**-0.00249**	**-0.00831**	**0.00219**
%RSD	0.68027	1.52432	2.06823	0.23518	2.21292	2.21235	121.98946	6.47311	4.84379

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.03602	-0.00169	0.03547	0.02194	0.05548	-0.00037	-0.01194	0.00899	5.77930
#2	1.03946	0.00241	0.03528	0.01994	0.05737	-0.00342	-0.03178	0.00803	5.72026
Mean	**1.03774**	**0.00036**	**0.03538**	**0.02094**	**0.05643**	**-0.00189**	**-0.02186**	**0.00851**	**5.74978**
%RSD	0.23415	804.95375	0.36992	6.76543	2.36707	114.13398	64.18703	7.97900	0.72600

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00060	4.92866	-0.00123
#2	0.00033	5.02529	-0.00138
Mean	**0.00047**	**4.97698**	**-0.00131**
%RSD	40.79161	1.37293	8.29785

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:40
SampleId1 : 1110384-5 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:55:10
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE4

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00402	2.23848	0.00874	0.06061	0.25832	0.00068	0.00098	0.41838	0.00133
#2	0.00361	2.24234	0.01401	0.06039	0.25773	0.00070	-0.00145	0.41578	0.00154
Mean	**0.00381**	**2.24041**	**0.01137**	**0.06050**	**0.25802**	**0.00069**	**-0.00023**	**0.41708**	**0.00144**
%RSD	7.63907	0.12183	32.73789	0.26753	0.16028	1.92678	733.14538	0.43964	10.43911

ted: 11/21/2011 12:56:07 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00351	0.01118	0.16278	15.83832	0.97972	-0.00095	1.31856	0.08100	0.01742
#2	0.00344	0.01122	0.16269	15.82398	0.97697	-0.00097	1.32036	0.08100	0.01783
Mean	**0.00348**	**0.01120**	**0.16273**	**15.83115**	**0.97834**	**-0.00096**	**1.31946**	**0.08100**	**0.01762**
%RSD	1.41250	0.23269	0.03603	0.06404	0.19866	1.55936	0.09602	0.00000	1.64215

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.63389	0.01202	0.06326	2.63426	2.56871	0.08544	0.00016	-0.00963	0.00254
#2	0.63462	0.01097	0.06554	2.63928	2.56951	0.09496	-0.00474	-0.00800	-0.00138
Mean	**0.63426**	**0.01150**	**0.06440**	**2.63677**	**2.56911**	**0.09020**	**-0.00229**	**-0.00882**	**0.00058**
%RSD	0.08065	6.46318	2.49874	0.13441	0.02181	7.46207	151.33089	13.09867	477.60508

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04596	-0.00461	0.01292	0.01416	0.10688	-0.00082	-0.02177	0.16505	0.44533
#2	0.04219	-0.00298	0.01293	0.00438	0.10682	0.00397	-0.03206	0.16488	0.44297
Mean	**0.04407**	**-0.00380**	**0.01292**	**0.00927**	**0.10685**	**0.00158**	**-0.02691**	**0.16497**	**0.44415**
%RSD	6.04870	30.52829	0.06325	74.53277	0.03948	214.74744	27.03318	0.07141	0.37609

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00107	2.59054	-0.00151
#2	0.00152	2.59274	-0.00358
Mean	**0.00130**	**2.59164**	**-0.00255**
%RSD	24.75869	0.05996	57.46118

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:41
SampleId1 : 1110384-6 10X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 17:56:59
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE5

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00513	1.55980	0.01053	-0.00576	0.02116	0.00076	0.00385	0.79912	0.00451
#2	0.00471	1.55832	0.00790	-0.00599	0.02103	0.00072	0.00177	0.79076	0.00483
Mean	**0.00492**	**1.55906**	**0.00922**	**-0.00587**	**0.02109**	**0.00074**	**0.00281**	**0.79494**	**0.00467**
%RSD	5.97014	0.06727	20.20353	2.75512	0.41890	3.62048	52.23117	0.74373	4.89974

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00339	0.00702	0.28918	15.05084	0.14360	-0.00133	0.85367	0.06941	0.02151
#2	0.00346	0.00721	0.29019	15.00369	0.12962	-0.00136	0.84964	0.06923	0.02127
Mean	**0.00343**	**0.00711**	**0.28968**	**15.02726**	**0.13661**	**-0.00135**	**0.85166**	**0.06932**	**0.02139**
%RSD	1.40151	1.88962	0.24484	0.22190	7.23488	1.48057	0.33462	0.18773	0.81185

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.10420	0.00870	0.04506	2.29707	2.22501	0.15524	-0.00319	-0.00022	-0.00222
#2	-0.10519	0.00782	0.03732	2.28987	2.23135	0.16793	-0.00442	-0.01094	-0.00035
Mean	**-0.10469**	**0.00826**	**0.04119**	**2.29347**	**2.22818**	**0.16159**	**-0.00381**	**-0.00558**	**-0.00129**
%RSD	0.67189	7.54521	13.28146	0.22210	0.20117	5.55404	22.83134	135.94386	102.53587

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48085	0.00034	0.01481	0.00559	0.07157	-0.00350	-0.03428	0.21369	0.43217
#2	0.49362	-0.00212	0.01478	0.00617	0.07190	0.00008	-0.03768	0.21425	0.43116
Mean	**0.48724**	**-0.00089**	**0.01480**	**0.00588**	**0.07173**	**-0.00171**	**-0.03598**	**0.21397**	**0.43166**
%RSD	1.85239	195.94924	0.16575	6.96026	0.32342	148.31381	6.68394	0.18655	0.16582

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00011	2.24901	-0.00155
#2	0.00020	2.25084	-0.00388
Mean	**0.00016**	**2.24992**	**-0.00271**
%RSD	41.67641	0.05749	60.60101

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:41
SampleId1 : 1111160-3 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 17:58:48
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00093	27.06003	0.00916	-0.00400	0.23651	0.00231	-0.00533	32.12065	-0.00060
#2	-0.00098	26.87005	0.01496	-0.00378	0.23467	0.00229	0.00074	31.97322	-0.00022
Mean	**-0.00095**	**26.96504**	**0.01206**	**-0.00389**	**0.23559**	**0.00230**	**-0.00229**	**32.04693**	**-0.00041**
%RSD	3.49553	0.49818	33.96756	4.15986	0.55156	0.76547	187.02532	0.32530	65.59328

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01346	0.02052	0.02949	42.55526	6.87859	0.02558	10.14455	0.45484	0.00039
#2	0.01400	0.02125	0.02886	42.32067	6.81563	0.02533	10.07880	0.45271	-0.00018
Mean	**0.01373**	**0.02089**	**0.02918**	**42.43797**	**6.84711**	**0.02545**	**10.11167**	**0.45378**	**0.00011**
%RSD	2.79593	2.45502	1.52929	0.39088	0.65015	0.70385	0.45982	0.33163	377.40601

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03207	0.02918	1.00522	0.02968	0.03375	0.89162	0.00139	-0.00898	0.00216
#2	0.02930	0.02945	1.00980	0.03221	0.03396	0.88527	-0.00083	-0.00568	0.00356
Mean	**0.03068**	**0.02932**	**1.00751**	**0.03095**	**0.03385**	**0.88845**	**0.00028**	**-0.00733**	**0.00286**
%RSD	6.37593	0.65427	0.32117	5.77589	0.44257	0.50540	559.25549	31.85988	34.63397

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.71647	0.00034	0.16151	0.02885	0.07478	0.00287	-0.00838	0.03630	0.11982
#2	2.72104	-0.00171	0.16013	0.02915	0.07715	0.00207	-0.01508	0.03584	0.11713
Mean	**2.71876**	**-0.00069**	**0.16082**	**0.02900**	**0.07597**	**0.00247**	**-0.01173**	**0.03607**	**0.11847**
%RSD	0.11886	211.04179	0.60682	0.73329	2.21176	22.94306	40.42253	0.89111	1.60657

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.01035	0.03239	-0.00155
#2	0.01026	0.03338	0.00048
Mean	**0.01030**	**0.03289**	**-0.00053**
%RSD	0.59074	2.11385	269.66387

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:41
SampleId1 : 1111160-4 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:00:37
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE7

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	26.57205	0.01453	-0.00561	0.22941	0.00232	0.00157	29.61108	-0.00089
#2	-0.00108	26.38725	0.01232	-0.00416	0.22808	0.00228	0.00279	29.57511	-0.00055
Mean	**-0.00105**	**26.47965**	**0.01343**	**-0.00488**	**0.22874**	**0.00230**	**0.00218**	**29.59310**	**-0.00072**
%RSD	3.85916	0.49350	11.64727	20.99380	0.41311	1.30852	39.46573	0.08593	33.57939

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01314	0.02044	0.02778	41.72074	6.07667	0.02435	10.10177	0.39722	-0.00075
#2	0.01293	0.02081	0.02759	41.65111	6.02786	0.02423	10.10132	0.39703	-0.00018
Mean	**0.01303**	**0.02062**	**0.02768**	**41.68593**	**6.05226**	**0.02429**	**10.10154**	**0.39713**	**-0.00047**
%RSD	1.12943	1.27564	0.48075	0.11810	0.57018	0.36881	0.00315	0.03292	87.01338

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.05616	0.02772	1.05465	0.03785	0.04237	0.84399	-0.00291	-0.01369	0.00276
#2	-0.05826	0.02708	1.04183	0.03902	0.04363	0.84082	-0.00046	-0.01140	0.00308
Mean	**-0.05721**	**0.02740**	**1.04824**	**0.03843**	**0.04300**	**0.84241**	**-0.00168**	**-0.01255**	**0.00292**
%RSD	2.59693	1.66253	0.86453	2.13884	2.08521	0.26650	103.05089	12.88257	7.90529

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.93774	-0.00292	0.13822	0.03045	0.06000	0.00110	-0.02360	0.03274	0.11847
#2	1.93912	0.00732	0.13746	0.03047	0.05994	0.00108	-0.01531	0.03305	0.11814
Mean	**1.93843**	**0.00220**	**0.13784**	**0.03046**	**0.05997**	**0.00109**	**-0.01946**	**0.03290**	**0.11830**
%RSD	0.05044	329.31773	0.39246	0.03718	0.08205	1.58787	30.11317	0.67445	0.20111

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	0.01051	0.04086	-0.00272 **UNDGREEN**
#2	0.01039	0.04210	-0.00174
Mean	**0.01045**	**0.04148**	**-0.00223**
%RSD	0.81218	2.10176	31.04142

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:41
SampleId1 : 1111160-5 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:02:26
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE8

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00076	24.63018	0.01590	-0.00393	0.24691	0.00233	0.00089	31.46749	-0.00072
#2	-0.00118	24.03878	0.00969	-0.00568	0.24127	0.00225	0.00158	30.84466	-0.00045
Mean	**-0.00097**	**24.33448**	**0.01280**	**-0.00481**	**0.24409**	**0.00229**	**0.00123**	**31.15607**	**-0.00059**
%RSD	30.16504	1.71848	34.33886	25.81698	1.63353	2.44443	39.66166	1.41355	32.72730

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01461	0.02031	0.03150	44.24123	6.38188	0.02533	10.59770	0.45678	-0.00083
#2	0.01364	0.01987	0.03105	43.30996	6.21202	0.02469	10.33372	0.44846	0.00056
Mean	**0.01412**	**0.02009**	**0.03128**	**43.77559**	**6.29695**	**0.02501**	**10.46571**	**0.45262**	**-0.00014**
%RSD	4.86578	1.53283	1.01535	1.50428	1.90740	1.81100	1.78354	1.30098	711.93698

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01070	0.02749	1.08143	0.03132	0.03299	1.01545	-0.00070	-0.01171	0.00480
#2	-0.01380	0.02722	1.05717	0.03167	0.03620	1.00593	-0.00277	-0.00227	0.00018
Mean	**-0.01225**	**0.02735**	**1.06930**	**0.03149**	**0.03459**	**1.01069**	**-0.00173**	**-0.00699**	**0.00249**
%RSD	17.88362	0.70131	1.60439	0.78631	6.54732	0.66648	84.21843	95.49932	131.03824

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.82516	0.00077	0.15403	0.02836	0.05927	0.00477	-0.01776	0.03527	0.12184
#2	1.78011	0.00077	0.15026	0.02317	0.05950	0.00477	-0.02468	0.03342	0.11881
Mean	**1.80263**	**0.00077**	**0.15214**	**0.02577**	**0.05938**	**0.00477**	**-0.02122**	**0.03434**	**0.12032**
%RSD	1.76736	0.02456	1.75145	14.23911	0.27227	0.11030	23.04913	3.82481	1.77962

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00969	0.03244	-0.00070
#2	0.01022	0.03469	-0.00063
Mean	**0.00996**	**0.03356**	**-0.00067**
%RSD	3.81967	4.74706	6.74210

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:41
SampleId1 : 1111040-1 1000X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:04:15

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE9

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00165	0.01258	-0.00116	0.02247	0.03211	0.00025	-0.00314	6.09248	-0.00097
#2	-0.00029	0.01702	-0.00695	0.02231	0.03203	0.00022	-0.00228	6.07560	-0.00047
Mean	**-0.00097**	**0.01480**	**-0.00405**	**0.02239**	**0.03207**	**0.00023**	**-0.00271**	**6.08404**	**-0.00072**
%RSD	99.37966	21.19598	101.02360	0.48186	0.18371	9.38646	22.63371	0.19610	48.91014

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00118	-0.00164	-0.00257	0.35754	0.07746	0.01161	0.50263	0.00576	-0.00296
#2	-0.00104	-0.00148	-0.00211	0.35504	0.07870	0.01154	0.50263	0.00576	-0.00059
Mean	**-0.00111**	**-0.00156**	**-0.00234**	**0.35629**	**0.07808**	**0.01158**	**0.50263**	**0.00576**	**-0.00178**
%RSD	8.71615	7.24751	13.87989	0.49700	1.13009	0.47307	0.00000	0.00000	94.54801

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	19.05548	-0.00116	-0.00568	-0.00138	0.00094	-0.00657	-0.00441	-0.00594	-0.00042
#2	18.96144	-0.00164	-0.01341	-0.00390	-0.00283	-0.00340	-0.00452	-0.00367	-0.00153
Mean	**19.00846**	**-0.00140**	**-0.00955**	**-0.00264**	**-0.00094**	**-0.00498**	**-0.00446**	**-0.00480**	**-0.00098**
%RSD	0.34983	23.95040	57.29208	67.66885	283.15118	45.01508	1.64707	33.37108	80.14954

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00235	-0.00326	0.52608	0.00176	-0.00314	-0.00042	-0.04006	-0.00141	0.00010
#2	-0.00321	0.00002	0.52370	0.00248	-0.00297	0.00198	-0.04555	-0.00125	0.00044
Mean	**-0.00278**	**-0.00162**	**0.52489**	**0.00212**	**-0.00305**	**0.00078**	**-0.04281**	**-0.00133**	**0.00027**
%RSD	22.02110	143.08897	0.32113	23.97111	3.91296	217.21594	9.06977	8.65439	88.30749

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00070	0.00017	-0.00226
#2	-0.00063	-0.00318	-0.00224
Mean	**-0.00066**	**-0.00151**	**-0.00225**
%RSD	7.77645	157.53549	0.49994

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:41
SampleId1 : 1111040-3 1000X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 18:06:04
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE10

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00055	0.01120	-0.00042	0.04253	0.02574	0.00018	0.00015	10.41308	-0.00073
#2	-0.00123	0.00445	-0.00042	0.04429	0.02566	0.00015	-0.00245	10.39814	-0.00082

Mean	**-0.00089**	**0.00783**	**-0.00042**	**0.04341**	**0.02570**	**0.00016**	**-0.00115**	**10.40561**	**-0.00077**
%RSD	53.79845	60.97001	0.00000	2.85846	0.22926	10.78637	160.37681	0.10155	8.72917

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00085	-0.00154	-0.00193	0.08867	0.35004	0.02463	0.96294	0.00402	-0.00288
#2	-0.00064	-0.00145	-0.00221	0.08820	0.35079	0.02450	0.95667	0.00392	-0.00100
Mean	**-0.00074**	**-0.00150**	**-0.00207**	**0.08843**	**0.35042**	**0.02456**	**0.95981**	**0.00397**	**-0.00194**
%RSD	19.60451	4.30069	9.46627	0.38061	0.15114	0.36469	0.46190	1.63739	68.65520

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	32.77284	-0.00011	-0.01319	0.00013	0.00074	0.00929	-0.00086	-0.00326	-0.00440
#2	32.62239	-0.00133	-0.00682	-0.00228	-0.00103	0.03150	-0.00329	0.00331	0.00063
Mean	**32.69762**	**-0.00072**	**-0.01000**	**-0.00108**	**-0.00015**	**0.02040**	**-0.00208**	**0.00003**	**-0.00188**
%RSD	0.32535	119.32511	45.03512	158.14388	849.64308	76.98926	82.86565	17033.79416	188.67400

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00601	-0.00285	0.94820	-0.00156	-0.00325	-0.00013	-0.03988	-0.00081	0.00145
#2	-0.00790	0.00002	0.94678	0.00402	-0.00308	-0.00123	-0.03439	-0.00122	0.00111
Mean	**-0.00696**	**-0.00141**	**0.94749**	**0.00123**	**-0.00316**	**-0.00068**	**-0.03713**	**-0.00102**	**0.00128**
%RSD	19.25859	143.34332	0.10644	321.23269	3.77769	114.20286	10.45975	28.45656	18.60459

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00028	0.00053	-0.00402
#2	-0.00078	-0.00145	0.00152
Mean	**-0.00053**	**-0.00046**	**-0.00125**
%RSD	67.21095	306.33972	313.99259

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:42
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 18:08:34
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19949	53.27504	0.52191	1.03762	1.04549	0.48083	0.54607	48.38600	0.50586
#2	0.20008	53.16753	0.52223	1.03732	1.04191	0.48223	0.55228	48.65251	0.50939
Mean	**0.19979**	**53.22129**	**0.52207**	**1.03747**	**1.04370**	**0.48153**	**0.54918**	**48.51925**	**0.50762**
%RSD	0.20932	0.14284	0.04312	0.02088	0.24287	0.20509	0.80017	0.38841	0.49049

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48588	0.97390	1.05927	20.02923	49.90254	0.53083	50.61921	0.97579	0.99368
#2	0.48712	0.97666	1.05437	20.06669	49.73358	0.52883	50.65797	0.97765	0.99533
Mean	**0.48650**	**0.97528**	**1.05682**	**20.04796**	**49.81806**	**0.52983**	**50.63859**	**0.97672**	**0.99450**

%RSD	0.18020	0.19983	0.32790	0.13211	0.23981	0.26604	0.05413	0.13498	0.11715

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.45106	1.00514	5.07193	0.99197	1.00762	5.24982	0.50916	1.06333	1.04154
#2	49.36699	1.01138	5.06959	1.00266	0.99780	5.26894	0.51038	1.04651	1.04026
Mean	**49.40902**	**1.00826**	**5.07076**	**0.99731**	**1.00271**	**5.25938**	**0.50977**	**1.05492**	**1.04090**
%RSD	0.12031	0.43740	0.03264	0.75807	0.69279	0.25711	0.16990	1.12735	0.08719

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.03099	1.05977	0.51391	0.32170	0.48571	0.53689	5.02232	0.48677	0.94119
#2	5.04070	1.07212	0.51253	0.32519	0.48557	0.54100	4.99891	0.48768	0.95306
Mean	**5.03584**	**1.06595**	**0.51322**	**0.32344**	**0.48564**	**0.53895**	**5.01061**	**0.48723**	**0.94713**
%RSD	0.13640	0.81935	0.18993	0.76327	0.02029	0.53935	0.33042	0.13217	0.88588

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.99979	1.00241	1.04880
#2	1.00001	0.99942	1.04234
Mean	**0.99990**	**1.00091**	**1.04557**
%RSD	0.01563	0.21139	0.43666

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:42
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 18:10:30
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00071	0.02816	-0.00095	-0.00622	-0.00133	0.00046	-0.00210	-0.08333	-0.00086
#2	-0.00076	0.03090	0.00147	-0.00576	-0.00125	0.00047	-0.00158	-0.08419	-0.00074
Mean	**-0.00074**	**0.02953**	**0.00026**	**-0.00599**	**-0.00129**	**0.00047**	**-0.00184**	**-0.08376**	**-0.00080**
%RSD	5.02879	6.54873	649.54057	5.40494	4.55677	1.76332	19.98226	0.72909	10.38524

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00130	-0.00129	-0.00266	-0.01244	-0.27636	-0.00198	-0.06451	-0.00086	-0.00141
#2	-0.00081	-0.00117	-0.00238	-0.01315	-0.28409	-0.00199	-0.06228	-0.00086	-0.00034
Mean	**-0.00106**	**-0.00123**	**-0.00252**	**-0.01280**	**-0.28022**	**-0.00198**	**-0.06340**	**-0.00086**	**-0.00087**
%RSD	32.26897	7.23578	7.66860	3.94194	1.95135	0.12547	2.49595	0.00000	86.00257

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.17878	-0.00181	-0.01319	-0.00642	-0.00012	-0.02878	-0.00489	0.00395	0.00197
#2	-0.17944	-0.00171	-0.01523	-0.00136	0.00019	-0.03195	-0.00390	-0.00905	0.00044
Mean	**-0.17911**	**-0.00176**	**-0.01421**	**-0.00389**	**0.00003**	**-0.03036**	**-0.00440**	**-0.00255**	**0.00121**
%RSD	0.26164	4.09257	10.18807	91.87302	617.14298	7.38805	15.87622	360.18654	89.96451

ted: 11/21/2011 12:56:07 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02620	-0.00121	-0.00192	0.00748	-0.00308	-0.00178	-0.04187	-0.00104	-0.00091
#2	-0.02341	-0.00121	-0.00194	0.00388	-0.00314	-0.00048	-0.04255	-0.00083	-0.00124
Mean	**-0.02481**	**-0.00121**	**-0.00193**	**0.00568**	**-0.00311**	**-0.00113**	**-0.04221**	**-0.00093**	**-0.00108**
%RSD	7.93187	0.00406	0.42351	44.80645	1.35675	81.64980	1.14923	15.47321	22.10204

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00028	-0.00221	0.00263
#2	-0.00013	-0.00033	-0.00272
Mean	**-0.00021**	**-0.00127**	**-0.00005**
%RSD	51.08498	104.74494	8293.21763

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:42
SampleId1 : 1111040-4 1000X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 18:12:25
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE11

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00056	0.05638	-0.00411	0.03765	0.22553	0.00065	-0.00158	10.54730	-0.00068
#2	-0.00014	0.05961	-0.00200	0.03673	0.22365	0.00062	-0.00331	10.51623	-0.00079
Mean	**-0.00035**	**0.05799**	**-0.00305**	**0.03719**	**0.22459**	**0.00064**	**-0.00245**	**10.53177**	**-0.00074**
%RSD	85.00620	3.93947	48.77131	1.74068	0.59166	3.62940	50.18037	0.20858	10.55415

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00070	-0.00130	-0.00148	0.13140	0.50211	0.03377	0.99698	0.00356	-0.00116
#2	-0.00064	-0.00133	-0.00221	0.13045	0.50310	0.03347	0.98802	0.00346	-0.00026
Mean	**-0.00067**	**-0.00131**	**-0.00184**	**0.13093**	**0.50261**	**0.03362**	**0.99250**	**0.00351**	**-0.00071**
%RSD	6.92553	1.71113	27.93021	0.51434	0.14053	0.62893	0.63813	1.85178	89.52267

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	32.56991	-0.00032	-0.01842	-0.00118	-0.00175	-0.02878	-0.00293	-0.00376	0.00140
#2	32.37578	-0.00123	-0.01296	-0.00142	0.00172	-0.02878	-0.00194	-0.00111	-0.00124
Mean	**32.47284**	**-0.00077**	**-0.01569**	**-0.00130**	**-0.00001**	**-0.02878**	**-0.00244**	**-0.00244**	**0.00008**
%RSD	0.42273	83.61457	24.60738	13.12699	16672.12574	0.00000	28.66836	76.88808	2214.95608

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01573	-0.00531	1.48893	0.00121	-0.00297	-0.00011	-0.03647	-0.00117	0.00077
#2	-0.01434	-0.00121	1.47691	0.00542	-0.00277	-0.00291	-0.03579	-0.00072	-0.00158
Mean	**-0.01503**	**-0.00326**	**1.48292**	**0.00331**	**-0.00287**	**-0.00151**	**-0.03613**	**-0.00095**	**-0.00040**
%RSD	6.54373	88.89779	0.57320	89.86799	4.89847	131.06104	1.34488	33.58107	412.73688

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	-0.00028	-0.00156	-0.00032
#2	-0.00047	0.00068	-0.00119
Mean	**-0.00038**	**-0.00044**	**-0.00076**
%RSD	35.81824	358.71463	82.28822

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:42
SampleId1 : 1111040-5 1000X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 18:14:14
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE12

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00113	0.06466	-0.00074	0.03971	0.12386	0.00070	-0.00383	9.28219	-0.00070
#2	-0.00133	0.05661	-0.00432	0.03727	0.12428	0.00062	-0.00280	9.24767	-0.00099
Mean	**-0.00123**	**0.06063**	**-0.00253**	**0.03849**	**0.12407**	**0.00066**	**-0.00331**	**9.26493**	**-0.00085**
%RSD	11.64474	9.38663	100.18815	4.48540	0.23771	7.94498	22.14570	0.26339	23.51756

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00112	-0.00117	-0.00211	0.09224	0.40397	0.02745	0.85188	0.00319	-0.00083
#2	-0.00181	-0.00179	-0.00220	0.09081	0.39648	0.02735	0.83890	0.00310	-0.00010
Mean	**-0.00147**	**-0.00148**	**-0.00216**	**0.09153**	**0.40023**	**0.02740**	**0.84539**	**0.00314**	**-0.00047**
%RSD	33.17934	29.73255	2.76998	1.10327	1.32339	0.25427	1.08621	2.06845	111.87438

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	31.57197	-0.00052	-0.01000	-0.00375	-0.00008	-0.01926	-0.00330	-0.00540	0.00080
#2	31.46612	-0.00157	-0.01501	-0.00443	0.00049	-0.02560	-0.00316	-0.00831	-0.00099
Mean	**31.51905**	**-0.00105**	**-0.01250**	**-0.00409**	**0.00021**	**-0.02243**	**-0.00323**	**-0.00685**	**-0.00009**
%RSD	0.23746	71.09313	28.30269	11.74137	194.88965	20.00051	2.96055	30.01219	1346.12800

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01863	-0.00367	1.10857	0.00619	-0.00307	-0.00353	-0.03645	-0.00110	0.00178
#2	-0.01723	0.00125	1.10919	0.00306	-0.00300	0.00197	-0.04469	-0.00151	0.00514
Mean	**-0.01793**	**-0.00121**	**1.10888**	**0.00462**	**-0.00303**	**-0.00078**	**-0.04057**	**-0.00130**	**0.00346**
%RSD	5.53771	287.32266	0.03921	47.84481	1.62178	498.34221	14.35862	22.22340	68.64710

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00061	-0.00130	-0.00126
#2	-0.00070	-0.00115	-0.00343
Mean	**-0.00066**	**-0.00122**	**-0.00234**
%RSD	9.77250	8.74976	65.20245

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:42

SampleId1 : 1111040-7 1000X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:16:03
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE13

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	0.03201	-0.00032	0.02338	0.02978	0.00055	-0.00297	6.10702	-0.00086
#2	0.00002	0.03060	0.00011	0.02392	0.02995	0.00048	-0.00054	6.11750	-0.00067
Mean	**-0.00050**	**0.03131**	**-0.00010**	**0.02365**	**0.02986**	**0.00052**	**-0.00175**	**6.11226**	**-0.00077**
%RSD	146.80074	3.17412	283.90580	1.59674	0.39457	9.32848	97.87706	0.12116	17.36041

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00105	-0.00133	-0.00202	0.35194	0.05549	0.01184	0.51382	0.00576	-0.00075
#2	-0.00084	-0.00067	-0.00230	0.35253	0.05824	0.01187	0.51203	0.00595	-0.00051
Mean	**-0.00094**	**-0.00100**	**-0.00216**	**0.35224**	**0.05687**	**0.01185**	**0.51293**	**0.00585**	**-0.00063**
%RSD	15.50012	46.71554	8.90797	0.11969	3.41355	0.16799	0.24688	2.22069	27.59082

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	19.36705	-0.00157	-0.01023	-0.00335	0.00142	-0.00657	0.00001	0.00631	-0.00290
#2	19.37021	-0.00089	-0.01114	-0.00201	0.00039	-0.00022	-0.00354	-0.00518	0.00128
Mean	**19.36863**	**-0.00123**	**-0.01068**	**-0.00268**	**0.00090**	**-0.00340**	**-0.00177**	**0.00056**	**-0.00081**
%RSD	0.01156	38.92337	6.02258	35.35704	80.82637	132.06841	142.46584	1437.58493	365.34603

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00373	-0.00080	0.53304	0.00764	-0.00298	-0.00272	-0.03594	-0.00117	0.00010
#2	-0.00133	-0.00408	0.53555	0.00921	-0.00308	-0.00332	-0.03662	-0.00076	0.00044
Mean	**-0.00253**	**-0.00244**	**0.53429**	**0.00842**	**-0.00303**	**-0.00302**	**-0.03628**	**-0.00097**	**0.00027**
%RSD	67.01204	95.01816	0.33256	13.16074	2.32062	14.06610	1.33882	29.96533	88.30749

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00085	-0.00017	0.00017
#2	-0.00062	-0.00041	-0.00087
Mean	**-0.00074**	**-0.00029**	**-0.00035**
%RSD	21.99699	58.22122	209.48909

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:43
SampleId1 : 1111051-1 1000X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:17:52
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE14

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	-0.00040	0.03695	-0.00748	0.03612	0.14067	0.00050	-0.00089	9.04094	-0.00049
#2	-0.00102	0.03790	-0.00453	0.03788	0.14101	0.00048	-0.00002	9.04562	-0.00083
Mean	**-0.00071**	**0.03742**	**-0.00600**	**0.03700**	**0.14084**	**0.00049**	**-0.00045**	**9.04328**	**-0.00066**
%RSD	62.40455	1.78430	34.73591	3.35349	0.16756	3.87832	135.31731	0.03658	37.00845

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00082	-0.00154	-0.00211	0.05571	0.39598	0.02620	0.78382	0.00218	-0.00124
#2	-0.00062	-0.00082	-0.00202	0.05536	0.39074	0.02628	0.79277	0.00209	-0.00214
Mean	**-0.00072**	**-0.00118**	**-0.00207**	**0.05553**	**0.39336**	**0.02624**	**0.78830**	**0.00213**	**-0.00169**
%RSD	20.32518	43.06093	3.09134	0.45446	0.94254	0.21807	0.80334	3.04974	37.59644

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	29.87670	0.00341	-0.01796	-0.00135	0.00052	-0.02560	-0.00330	-0.00136	0.00028
#2	29.93355	0.00267	-0.02206	-0.00174	-0.00038	-0.04147	-0.00380	0.00041	-0.00423
Mean	**29.90512**	**0.00304**	**-0.02001**	**-0.00154**	**0.00007**	**-0.03354**	**-0.00355**	**-0.00048**	**-0.00198**
%RSD	0.13440	17.34919	14.46892	18.18816	869.55238	33.44570	10.06369	262.75191	161.61729

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02431	0.00125	1.17678	0.00250	-0.00319	0.00196	-0.03986	-0.00045	0.00245
#2	-0.02343	0.00002	1.18094	0.00519	-0.00312	0.00286	-0.03917	-0.00061	0.00178
Mean	**-0.02387**	**0.00063**	**1.17886**	**0.00384**	**-0.00315**	**0.00241**	**-0.03951**	**-0.00053**	**0.00212**
%RSD	2.60392	137.12172	0.24931	49.46644	1.56042	26.46955	1.22906	21.74948	22.44544

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00057	-0.00010	-0.00026
#2	-0.00076	-0.00083	-0.00269
Mean	**-0.00066**	**-0.00047**	**-0.00148**
%RSD	19.69823	111.61946	116.08773

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:43
SampleId1 : 1111051-2 1000X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 18:19:43
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE15

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	0.03422	-0.00463	0.03078	0.12536	0.00043	0.00085	8.10291	-0.00054
#2	-0.00081	0.03263	-0.00358	0.03071	0.12516	0.00040	-0.00644	8.10175	-0.00091
Mean	**-0.00071**	**0.03343**	**-0.00411**	**0.03074**	**0.12526**	**0.00041**	**-0.00280**	**8.10233**	**-0.00073**
%RSD	20.20067	3.37256	18.13214	0.17547	0.11773	5.77357	184.20743	0.01019	35.88710

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00105	-0.00095	-0.00257	0.04465	0.30810	0.02281	0.70232	0.00172	-0.00247

#2	-0.00174	-0.00151	-0.00283	0.04382	0.30635	0.02278	0.69202	0.00163	-0.00133
Mean	**-0.00139**	**-0.00123**	**-0.00270**	**0.04423**	**0.30723**	**0.02280**	**0.69717**	**0.00167**	**-0.00190**
%RSD	34.89194	32.24495	6.98644	1.33125	0.40222	0.07642	1.04453	3.88821	42.69118

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	26.62584	-0.00147	-0.02024	-0.00267	0.00027	-0.02243	-0.00343	-0.00363	0.00215
#2	26.62693	-0.00194	-0.01705	-0.00343	0.00002	-0.03829	-0.00183	-0.00351	-0.00057
Mean	**26.62638**	**-0.00171**	**-0.01864**	**-0.00305**	**0.00014**	**-0.03036**	**-0.00263**	**-0.00357**	**0.00079**
%RSD	0.00288	19.66785	12.07746	17.78579	125.53372	36.94031	43.20884	2.38136	243.70893

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02242	-0.00776	1.05144	0.00539	-0.00304	0.00155	-0.03916	-0.00123	0.00145
#2	-0.02455	-0.00735	1.05161	0.00637	-0.00305	-0.00095	-0.04671	-0.00131	0.00111
Mean	**-0.02348**	**-0.00756**	**1.05153**	**0.00588**	**-0.00304**	**0.00030**	**-0.04294**	**-0.00127**	**0.00128**
%RSD	6.41337	3.83194	0.01112	11.83430	0.23093	592.47316	12.43587	4.56160	18.60459

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00064	-0.00071	0.00023
#2	-0.00108	-0.00113	-0.00155
Mean	**-0.00086**	**-0.00092**	**-0.00066**
%RSD	36.55770	32.39447	190.34700

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:43
SampleId1 : 1111160-2A **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:21:31
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE16

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00302	110.68549	2.09938	0.52791	2.81985	0.05438	0.00570	217.87419	0.04782
#2	-0.00259	110.63444	2.09178	0.52806	2.81533	0.05426	0.00553	218.32958	0.04923
Mean	**-0.00280**	**110.65996**	**2.09558**	**0.52799**	**2.81759**	**0.05432**	**0.00561**	**218.10189**	**0.04852**
%RSD	10.77091	0.03262	0.25631	0.02047	0.11346	0.15481	2.16775	0.14764	2.05589

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.51520	0.26180	0.37052	165.57568	81.62111	0.69733	76.58515	2.30854	0.96221
#2	0.51451	0.26211	0.37116	165.57591	81.77234	0.70016	76.89058	2.30636	0.96295
Mean	**0.51485**	**0.26195**	**0.37084**	**165.57580**	**81.69673**	**0.69875**	**76.73786**	**2.30745**	**0.96258**
%RSD	0.09599	0.08549	0.12212	0.00010	0.13089	0.28619	0.28144	0.06693	0.05446

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	44.03727	0.58919	4.33504	0.60767	0.61519	7.12228	0.49755	2.20116	2.18533
#2	44.22983	0.59086	4.34832	0.60918	0.61321	7.10631	0.50028	2.18947	2.20510

Mean	**44.13355**	**0.59002**	**4.34168**	**0.60842**	**0.61420**	**7.11429**	**0.49891**	**2.19532**	**2.19522**
%RSD	0.30852	0.19971	0.21640	0.17557	0.22795	0.15865	0.38671	0.37649	0.63664

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.05231	0.52703	1.11139	0.13435	0.71209	2.07879	0.28343	0.66933	0.86596
#2	10.01397	0.52908	1.10914	0.14044	0.71256	2.08755	0.27862	0.67114	0.86765
Mean	**10.03314**	**0.52806**	**1.11026**	**0.13740**	**0.71233**	**2.08317**	**0.28103**	**0.67023**	**0.86681**
%RSD	0.27021	0.27488	0.14310	3.13112	0.04647	0.29739	1.20945	0.19089	0.13818

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	1.91246	0.61268	2.19060
#2	1.89749	0.61187	2.19989
Mean	**1.90498**	**0.61227**	**2.19525**
%RSD	0.55565	0.09442	0.29925

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:43
SampleId1 : IP111117-2MB **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:23:24
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE17

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00086	0.03541	-0.00379	-0.00660	-0.00108	0.00038	-0.00592	-0.04360	-0.00068
#2	-0.00092	0.03864	-0.00421	-0.00576	-0.00100	0.00038	-0.00019	-0.04187	-0.00049
Mean	**-0.00089**	**0.03702**	**-0.00400**	**-0.00618**	**-0.00104**	**0.00038**	**-0.00305**	**-0.04274**	**-0.00059**
%RSD	4.28328	6.18107	7.44374	9.60321	5.64887	1.51805	132.48016	2.85814	23.36654

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00137	-0.00129	-0.00211	0.06000	-0.27835	-0.00209	-0.05780	-0.00030	-0.00108
#2	-0.00109	-0.00035	-0.00156	0.06107	-0.27212	-0.00207	-0.05467	-0.00030	-0.00124
Mean	**-0.00123**	**-0.00082**	**-0.00183**	**0.06053**	**-0.27524**	**-0.00208**	**-0.05624**	**-0.00030**	**-0.00116**
%RSD	15.85479	81.10789	20.99651	1.25088	1.60221	0.59867	3.93930	0.00000	9.96730

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.17110	-0.00120	-0.01137	-0.00337	0.00023	-0.02878	-0.00366	0.00040	-0.00117
#2	-0.17110	-0.00167	-0.00977	-0.00214	0.00160	-0.04464	-0.00465	-0.01070	0.00224
Mean	**-0.17110**	**-0.00144**	**-0.01057**	**-0.00275**	**0.00092**	**-0.03671**	**-0.00416**	**-0.00515**	**0.00054**
%RSD	0.00000	23.38464	10.65293	31.58444	105.94904	30.55513	16.84341	152.45871	447.27183

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01521	0.00043	-0.00182	0.00948	-0.00303	-0.00625	-0.04604	-0.00106	0.00313
#2	-0.01584	-0.00449	-0.00177	0.00557	-0.00301	-0.00475	-0.04535	-0.00078	0.00279
Mean	**-0.01552**	**-0.00203**	**-0.00180**	**0.00752**	**-0.00302**	**-0.00550**	**-0.04569**	**-0.00092**	**0.00296**

%RSD	2.88288	171.30874	1.81934	36.75546	0.46565	19.30563	1.06127	22.02809	8.03474

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00014	-0.00097	-0.00064
#2	0.00048	0.00036	-0.00207
Mean	**0.00031**	**-0.00031**	**-0.00136**
%RSD	77.51662	307.25573	74.29495

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:43
SampleId1 : IP111117-2RVS SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 18:25:25
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE18

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00882	1.03224	0.04646	0.04215	0.04920	0.00973	0.09570	4.62457	0.01915
#2	0.00944	1.02921	0.04635	0.04177	0.04878	0.00965	0.10385	4.62283	0.01877
Mean	**0.00913**	**1.03072**	**0.04641**	**0.04196**	**0.04899**	**0.00969**	**0.09977**	**4.62370**	**0.01896**
%RSD	4.79787	0.20843	0.16058	0.64287	0.60148	0.62148	5.77446	0.02663	1.42298

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01773	0.04754	0.05094	1.00550	7.96149	0.03734	4.83151	0.04770	0.09561
#2	0.01835	0.04801	0.05085	1.00598	7.91509	0.03721	4.80727	0.04779	0.09594
Mean	**0.01804**	**0.04777**	**0.05089**	**1.00574**	**7.93829**	**0.03727**	**4.81939**	**0.04774**	**0.09578**
%RSD	2.43012	0.69127	0.13370	0.03370	0.41333	0.24692	0.35567	0.13624	0.24186

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.23655	0.04807	0.93248	0.04493	0.05103	0.96465	0.09252	0.03730	0.04665
#2	8.19393	0.04966	0.92744	0.04777	0.04720	0.93290	0.09325	0.04450	0.04520
Mean	**8.21524**	**0.04887**	**0.92996**	**0.04635**	**0.04912**	**0.94877**	**0.09289**	**0.04090**	**0.04593**
%RSD	0.36684	2.30634	0.38258	4.32764	5.51280	2.36646	0.55903	12.44765	2.23083

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.25243	0.09993	0.04834	0.00152	0.04502	0.09588	0.46484	0.04735	0.04649
#2	0.25343	0.09830	0.04815	0.00007	0.04440	0.09429	0.47170	0.04788	0.04683
Mean	**0.25293**	**0.09911**	**0.04825**	**0.00079**	**0.04471**	**0.09509**	**0.46827**	**0.04762**	**0.04666**
%RSD	0.28009	1.16896	0.28827	128.56458	0.99050	1.18790	1.03685	0.79003	0.50955

	Zr	Pb	Se
	ppm	calc	calc
#1	0.04830	0.04900	0.04354
#2	0.04883	0.04739	0.04497
Mean	**0.04856**	**0.04820**	**0.04425**
%RSD	0.76782	2.36142	2.28672

ted: 11/21/2011 12:56:07 User: MIKE LUNDGREEN
Method : Paragon File : 111118A Printed : 11/21/2011 12:55:43
SampleId1 : IP111117-2LCS SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 18:27:13
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE19

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08833	2.09001	1.87985	0.46303	1.98569	0.04539	0.00032	35.70227	0.04603
#2	0.08731	2.10003	1.89554	0.46280	1.99686	0.04552	-0.00141	35.74041	0.04577
Mean	**0.08782**	**2.09502**	**1.88770**	**0.46291**	**1.99128**	**0.04545**	**-0.00055**	**35.72134**	**0.04590**
%RSD	0.82767	0.33795	0.58769	0.03502	0.39679	0.19632	224.02862	0.07549	0.40141

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.46388	0.18643	0.25017	0.99795	35.97602	0.46192	36.13684	0.47168	0.94310
#2	0.46382	0.18679	0.25128	0.99723	36.05859	0.46323	36.22332	0.47316	0.95381
Mean	**0.46385**	**0.18661**	**0.25073**	**0.99759**	**36.01730**	**0.46258**	**36.18008**	**0.47242**	**0.94846**
%RSD	0.00881	0.13478	0.31197	0.05097	0.16210	0.19890	0.16900	0.22165	0.79822

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	35.63545	0.48492	0.00024	0.47189	0.47009	-0.01291	0.46300	1.81947	1.80741
#2	35.69430	0.48417	-0.01364	0.47468	0.47395	-0.02878	0.46581	1.83622	1.81166
Mean	**35.66488**	**0.48454**	**-0.00670**	**0.47329**	**0.47202**	**-0.02085**	**0.46440**	**1.82784**	**1.80953**
%RSD	0.11668	0.10912	146.40257	0.41707	0.57799	53.80617	0.42793	0.64817	0.16614

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.58397	0.50966	0.49223	-0.01869	0.46473	2.02753	-0.03912	0.47532	0.45276
#2	1.58126	0.50802	0.49487	-0.02451	0.46678	2.03356	-0.05835	0.47623	0.45208
Mean	**1.58262**	**0.50884**	**0.49355**	**-0.02160**	**0.46576**	**2.03055**	**-0.04874**	**0.47578**	**0.45242**
%RSD	0.12125	0.22858	0.37811	19.04931	0.31130	0.21013	27.89021	0.13425	0.10550

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00471	0.47069	1.81142
#2	0.00379	0.47419	1.81984
Mean	**0.00425**	**0.47244**	**1.81563**
%RSD	15.33204	0.52431	0.32773

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:44
SampleId1 : 1111162-1 SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 18:32:26
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE20

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00283	80.17530	0.05626	0.01469	1.05085	0.00711	0.00507	175.76846	0.00045
#2	-0.00215	79.93688	0.05352	0.01446	1.04819	0.00704	0.00750	176.13277	0.00032
Mean	**-0.00249**	**80.05609**	**0.05489**	**0.01457**	**1.04952**	**0.00708**	**0.00628**	**175.95062**	**0.00039**
%RSD	19.25443	0.21058	3.53015	1.11064	0.17902	0.69934	27.32443	0.14641	24.60625

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.05807	0.06876	0.10646	173.37229	16.63314	0.10269	45.99075	1.94988	0.00440
#2	0.05890	0.06889	0.10655	173.40544	16.54210	0.10206	45.88813	1.95243	0.00490
Mean	**0.05849**	**0.06883**	**0.10650**	**173.38887**	**16.58762**	**0.10237**	**45.93944**	**1.95116**	**0.00465**
%RSD	0.99322	0.12936	0.06072	0.01352	0.38811	0.43422	0.15795	0.09247	7.46804

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.38465	0.09352	3.50432	0.10629	0.11684	9.71750	-0.00177	-0.01717	0.02056
#2	1.37568	0.09399	3.54539	0.10959	0.11566	9.73030	0.00227	-0.01251	0.01903
Mean	**1.38017**	**0.09376**	**3.52486**	**0.10794**	**0.11625**	**9.72390**	**0.00025**	**-0.01484**	**0.01980**
%RSD	0.45933	0.35816	0.82397	2.16378	0.71716	0.09307	1137.79172	22.22643	5.45228

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.59150	0.00263	0.69762	0.10167	0.21769	0.00224	0.15178	0.15476	0.38022
#2	7.53030	0.00304	0.69642	0.09804	0.21812	0.00295	0.15107	0.15533	0.37954
Mean	**7.56090**	**0.00283**	**0.69702**	**0.09986**	**0.21790**	**0.00260**	**0.15143**	**0.15505**	**0.37988**
%RSD	0.57233	10.20657	0.12134	2.56854	0.14201	19.43428	0.33117	0.26434	0.12556

	Zr	Pb	Se
	ppm	calc	calc
#1	0.04130	0.11333	0.00800
#2	0.04128	0.11364	0.00853
Mean	**0.04129**	**0.11348**	**0.00826**
%RSD	0.03544	0.19534	4.57837

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:44
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 18:34:56
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19851	52.37424	0.50918	1.01297	1.01990	0.47505	0.53313	48.27687	0.50311
#2	0.19743	52.33902	0.51576	1.01572	1.02154	0.47646	0.54024	48.42362	0.50447
Mean	**0.19797**	**52.35663**	**0.51247**	**1.01434**	**1.02072**	**0.47576**	**0.53669**	**48.35025**	**0.50379**
%RSD	0.38406	0.04756	0.90769	0.19218	0.11391	0.21047	0.93656	0.21461	0.19201

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47992	0.96713	1.03305	19.83051	48.93893	0.51806	49.92534	0.96647	0.98091
#2	0.48206	0.97097	1.03276	19.88167	48.82509	0.51657	49.97469	0.96861	0.98585
Mean	**0.48099**	**0.96905**	**1.03291**	**19.85609**	**48.88201**	**0.51731**	**49.95002**	**0.96754**	**0.98338**
%RSD	0.31511	0.27970	0.02013	0.18217	0.16468	0.20324	0.06987	0.15668	0.35541

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.86648	0.99298	4.95145	0.98577	0.98963	5.13827	0.50218	1.03067	1.02773
#2	48.68080	0.99546	4.98957	0.98201	0.98831	5.15421	0.49921	1.04176	1.02085
Mean	**48.77364**	**0.99422**	**4.97051**	**0.98389**	**0.98897**	**5.14624**	**0.50069**	**1.03622**	**1.02429**
%RSD	0.26920	0.17693	0.54239	0.27031	0.09426	0.21895	0.41967	0.75635	0.47471

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.96294	1.05319	0.50228	0.30974	0.47850	0.52971	4.88488	0.48070	0.94526
#2	4.96330	1.05731	0.50338	0.31287	0.47952	0.53336	4.91167	0.48416	0.95102
Mean	**4.96312**	**1.05525**	**0.50283**	**0.31130**	**0.47901**	**0.53153**	**4.89828**	**0.48243**	**0.94814**
%RSD	0.00514	0.27579	0.15604	0.71233	0.14988	0.48467	0.38676	0.50705	0.42983

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.98116	0.98835	1.02871
#2	0.98358	0.98621	1.02781
Mean	**0.98237**	**0.98728**	**1.02826**
%RSD	0.17441	0.15268	0.06160

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:44
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 18:36:52
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	0.02773	0.00032	-0.00492	-0.00104	0.00040	-0.00106	-0.06951	-0.00065
#2	-0.00035	0.03216	-0.00769	-0.00576	-0.00104	0.00039	0.00085	-0.06490	-0.00104
Mean	**-0.00048**	**0.02995**	**-0.00369**	**-0.00534**	**-0.00104**	**0.00040**	**-0.00010**	**-0.06721**	**-0.00085**
%RSD	37.29919	10.45656	153.56035	11.11242	0.00000	1.26213	1294.07466	4.84633	32.10835

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00095	-0.00079	-0.00175	-0.00590	-0.24143	-0.00188	-0.05019	-0.00067	0.00048
#2	-0.00068	-0.00080	-0.00185	-0.00328	-0.23844	-0.00188	-0.05154	-0.00058	-0.00067
Mean	**-0.00082**	**-0.00079**	**-0.00180**	**-0.00459**	**-0.23994**	**-0.00188**	**-0.05086**	**-0.00063**	**-0.00010**
%RSD	23.88503	0.48882	3.89037	40.27683	0.88224	0.26480	1.86654	10.37742	832.95983

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	-0.17127	-0.00177	-0.00932	-0.00384	0.00207	-0.02878	-0.00268	-0.00653	0.00087
#2	-0.17016	-0.00160	-0.01387	-0.00114	0.00047	-0.04781	-0.00281	-0.00248	0.00027
Mean	**-0.17072**	**-0.00169**	**-0.01159**	**-0.00249**	**0.00127**	**-0.03829**	**-0.00274**	**-0.00450**	**0.00057**
%RSD	0.45754	7.09471	27.74930	76.55184	88.72598	35.14735	3.40693	63.53146	74.19274

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02632	-0.00367	-0.00180	0.00322	-0.00293	0.00473	-0.04050	-0.00103	-0.00057
#2	-0.02343	-0.00735	-0.00179	0.00112	-0.00298	0.00274	-0.03020	-0.00075	-0.00091
Mean	**-0.02488**	**-0.00551**	**-0.00179**	**0.00217**	**-0.00295**	**0.00373**	**-0.03535**	**-0.00089**	**-0.00074**
%RSD	8.19558	47.30234	0.45630	68.48461	1.18959	37.76007	20.59459	22.75065	32.15183

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00014	0.00010	-0.00160
#2	0.00003	-0.00006	-0.00065
Mean	**-0.00006**	**0.00002**	**-0.00112**
%RSD	218.07170	608.66398	59.92682

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:44
SampleId1 : 1111162-1D **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:38:47
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE21

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00217	81.75479	0.05963	0.01446	1.06540	0.00757	0.00819	185.23391	0.00039
#2	-0.00174	81.56331	0.06048	0.01598	1.06684	0.00766	0.00628	185.05752	0.00050
Mean	**-0.00195**	**81.65905**	**0.06005**	**0.01522**	**1.06612**	**0.00761**	**0.00723**	**185.14571**	**0.00045**
%RSD	15.31427	0.16581	0.99286	7.08881	0.09513	0.83085	18.63857	0.06737	17.28069

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06135	0.07048	0.11172	179.30588	16.99181	0.10700	46.88836	2.07454	0.00309
#2	0.06121	0.07061	0.11191	179.28389	16.95736	0.10695	46.80088	2.07492	0.00653
Mean	**0.06128**	**0.07055**	**0.11182**	**179.29489**	**16.97459**	**0.10697**	**46.84462**	**2.07473**	**0.00481**
%RSD	0.15953	0.13058	0.11936	0.00867	0.14349	0.03714	0.13205	0.01291	50.49844

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.46430	0.09677	3.68075	0.11383	0.11729	12.21278	-0.00217	-0.02152	0.02168
#2	1.47075	0.09701	3.66287	0.11427	0.11599	12.23202	0.00178	-0.02632	0.01460
Mean	**1.46753**	**0.09689**	**3.67181**	**0.11405**	**0.11664**	**12.22240**	**-0.00019**	**-0.02392**	**0.01814**
%RSD	0.31074	0.17328	0.34439	0.27373	0.78359	0.11131	1440.36574	14.18597	27.57484

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.32246	0.01042	0.72379	0.10327	0.20730	0.00044	0.15873	0.15775	0.38966

#2	7.17511	0.01001	0.72491	0.10110	0.20853	0.00572	0.14981	0.15795	0.39135
Mean	**7.24879**	**0.01022**	**0.72435**	**0.10219**	**0.20791**	**0.00308**	**0.15427**	**0.15785**	**0.39051**
%RSD	1.43731	2.84427	0.10996	1.50367	0.41606	121.40607	4.08446	0.08979	0.30539

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.04297	0.11614	0.00729
#2	0.04309	0.11542	0.00097
Mean	**0.04303**	**0.11578**	**0.00413**
%RSD	0.18634	0.43675	108.05975

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:44
SampleId1 : 1111162-1L 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:40:36
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE22

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00108	15.77473	0.01611	-0.00156	0.21501	0.00203	0.00184	34.28101	-0.00071
#2	-0.00093	15.70275	0.00190	-0.00240	0.21354	0.00194	0.00011	34.54437	-0.00021
Mean	**-0.00101**	**15.73874**	**0.00901**	**-0.00198**	**0.21427**	**0.00198**	**0.00097**	**34.41269**	**-0.00046**
%RSD	10.59857	0.32339	111.64634	29.92211	0.48227	3.26306	126.11206	0.54114	77.27253

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01106	0.01355	0.01940	32.68289	2.41087	0.01519	9.31741	0.40730	0.00031
#2	0.01188	0.01430	0.01948	32.78209	2.40562	0.01507	9.29085	0.40831	-0.00059
Mean	**0.01147**	**0.01393**	**0.01944**	**32.73249**	**2.40825**	**0.01513**	**9.30413**	**0.40780**	**-0.00014**
%RSD	5.07916	3.80211	0.30947	0.21429	0.15437	0.55940	0.20185	0.17637	460.66202

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08842	0.01867	0.71602	0.02043	0.02307	1.94941	-0.00111	-0.00277	0.00340
#2	0.08742	0.01976	0.71008	0.02183	0.02335	1.94624	-0.00333	-0.00454	0.00572
Mean	**0.08792**	**0.01921**	**0.71305**	**0.02113**	**0.02321**	**1.94782**	**-0.00222**	**-0.00365**	**0.00456**
%RSD	0.80154	3.99327	0.58894	4.66841	0.86773	0.11537	70.65197	34.31341	36.00099

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.62720	-0.00083	0.14254	0.02745	0.02590	0.00454	0.00109	0.03132	0.08079
#2	0.62630	0.00121	0.14214	0.03100	0.02591	-0.00071	0.00858	0.03138	0.08147
Mean	**0.62675**	**0.00019**	**0.14234**	**0.02922**	**0.02590**	**0.00191**	**0.00483**	**0.03135**	**0.08113**
%RSD	0.10149	760.92395	0.19581	8.58279	0.02714	194.07085	109.50222	0.13565	0.58630

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00754	0.02219	0.00134
#2	0.00763	0.02285	0.00230

Mean	**0.00759**	**0.02252**	**0.00182UNDGREEN**
%RSD	0.84032	2.05530	37.12640

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:45
SampleId1 : 1111162-1MS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:42:26
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE23

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08771	120.52640	1.94480	0.34247	3.05388	0.05221	0.00635	211.86697	0.04643
#2	0.08898	119.65169	1.95043	0.33895	3.03584	0.05216	0.00374	212.11298	0.04691
Mean	**0.08835**	**120.08904**	**1.94761**	**0.34071**	**3.04486**	**0.05218**	**0.00505**	**211.98998**	**0.04667**
%RSD	1.01428	0.51504	0.20444	0.72920	0.41906	0.06870	36.60260	0.08206	0.72443

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.51206	0.26984	0.37489	179.51890	61.90748	0.68173	85.65369	2.35956	0.88843
#2	0.51224	0.26966	0.37217	179.72692	61.36854	0.67530	85.40889	2.35965	0.89123
Mean	**0.51215**	**0.26975**	**0.37353**	**179.62291**	**61.63801**	**0.67851**	**85.53129**	**2.35960**	**0.88983**
%RSD	0.02502	0.04699	0.51403	0.08189	0.61827	0.67015	0.20238	0.00285	0.22244

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	43.48901	0.56902	3.53495	0.57751	0.57886	10.79311	0.30068	1.84793	1.82803
#2	43.05568	0.57072	3.53170	0.57320	0.57729	10.78350	0.30108	1.83906	1.84890
Mean	**43.27234**	**0.56987**	**3.53333**	**0.57536**	**0.57807**	**10.78830**	**0.30088**	**1.84349**	**1.83846**
%RSD	0.70810	0.21096	0.06502	0.53073	0.19145	0.06297	0.09297	0.34039	0.80247

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.39462	0.50561	1.21398	0.08960	0.42228	2.01457	0.16545	0.64995	0.81719
#2	10.36438	0.50232	1.20738	0.09050	0.42276	1.99904	0.14814	0.64979	0.81414
Mean	**10.37950**	**0.50396**	**1.21068**	**0.09005**	**0.42252**	**2.00681**	**0.15679**	**0.64987**	**0.81566**
%RSD	0.20607	0.46098	0.38548	0.70671	0.07995	0.54738	7.80520	0.01798	0.26420

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.06027	0.57841	1.83466
#2	0.05996	0.57593	1.84562
Mean	**0.06012**	**0.57717**	**1.84014**
%RSD	0.37130	0.30407	0.42121

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:45
SampleId1 : 1111162-1MSD **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:44:16
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE24

Final concentrations**56:08** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08908	123.29891	1.94913	0.33827	3.07042	0.05231	0.01014	211.85562	0.04653
#2	0.08808	122.91563	1.94902	0.33636	3.05095	0.05220	0.00615	212.57072	0.04653
Mean	**0.08858**	**123.10727**	**1.94907**	**0.33731**	**3.06068**	**0.05226**	**0.00814**	**212.21317**	**0.04653**
%RSD	0.79635	0.22015	0.00393	0.40029	0.44988	0.14229	34.63723	0.23827	0.00113

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.51260	0.27264	0.37589	185.13482	62.34971	0.68470	86.63465	2.39815	0.88974
#2	0.51354	0.27229	0.37307	185.58454	62.02765	0.67922	86.35486	2.39815	0.88497
Mean	**0.51307**	**0.27246**	**0.37448**	**185.35968**	**62.18868**	**0.68196**	**86.49476**	**2.39815**	**0.88736**
%RSD	0.12876	0.09012	0.53290	0.17156	0.36619	0.56808	0.22873	0.00000	0.38050

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	43.54697	0.57712	3.56396	0.57541	0.58075	9.36559	0.30609	1.82217	1.84678
#2	43.36142	0.57579	3.54470	0.57509	0.57902	9.25364	0.29939	1.80036	1.84088
Mean	**43.45420**	**0.57645**	**3.55433**	**0.57525**	**0.57989**	**9.30962**	**0.30274**	**1.81127**	**1.84383**
%RSD	0.30193	0.16268	0.38324	0.03916	0.21051	0.85031	1.56410	0.85162	0.22609

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.75177	0.50070	1.21757	0.10319	0.40578	2.01591	0.16300	0.65470	0.82768
#2	9.76571	0.50193	1.21111	0.08930	0.40896	1.99545	0.16612	0.65310	0.82870
Mean	**9.75874**	**0.50131**	**1.21434**	**0.09624**	**0.40737**	**2.00568**	**0.16456**	**0.65390**	**0.82819**
%RSD	0.10106	0.17323	0.37607	10.20024	0.55105	0.72120	1.34362	0.17286	0.08674

	Zr	Pb	Se
	ppm	calc	calc
#1	0.05947	0.57897	1.83859
#2	0.06016	0.57771	1.82739
Mean	**0.05982**	**0.57834**	**1.83299**
%RSD	0.81161	0.15376	0.43192

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:45
SampleId1 : 1111162-2 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:46:11
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE25

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00182	48.99156	0.04066	0.01011	0.65166	0.00502	-0.00203	125.68451	-0.00001
#2	-0.00136	48.68194	0.03856	0.01095	0.64583	0.00492	0.00230	125.98393	0.00050
Mean	**-0.00159**	**48.83675**	**0.03961**	**0.01053**	**0.64875**	**0.00497**	**0.00014**	**125.83422**	**0.00024**
%RSD	20.37172	0.44830	3.76226	5.63625	0.63594	1.52114	2241.01862	0.16825	149.61647

ted: 11/21/2011 12:56:08 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03370	0.04131	0.05783	110.14928	15.33327	0.05849	38.10349	1.72287	0.00653
#2	0.03425	0.04202	0.05745	110.19179	15.17389	0.05780	37.91982	1.72155	0.00825
Mean	**0.03397**	**0.04167**	**0.05764**	**110.17053**	**15.25358**	**0.05815**	**38.01165**	**1.72221**	**0.00739**
%RSD	1.14082	1.21361	0.45780	0.02729	0.73880	0.84231	0.34167	0.05415	16.44264

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.23679	0.05475	3.16819	0.07515	0.08277	4.69856	-0.00122	0.01130	0.03510
#2	0.23252	0.05462	3.12002	0.07720	0.08140	4.65714	0.00160	0.02052	0.03562
Mean	**0.23466**	**0.05468**	**3.14410**	**0.07618**	**0.08208**	**4.67785**	**0.00019**	**0.01591**	**0.03536**
%RSD	1.28643	0.17541	1.08326	1.89858	1.17961	0.62601	1060.47279	40.96959	1.03916

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.78218	-0.00225	0.35477	0.06333	0.18472	-0.00004	0.26143	0.19672	0.24910
#2	3.76414	0.00308	0.35233	0.06276	0.18203	0.00079	0.27376	0.19706	0.25146
Mean	**3.77316**	**0.00042**	**0.35355**	**0.06304**	**0.18337**	**0.00037**	**0.26760**	**0.19689**	**0.25028**
%RSD	0.33815	903.96334	0.48905	0.63768	1.03545	155.84051	3.25827	0.12064	0.66623

	Zr	Pb	Se
	ppm	calc	calc
#1	0.02980	0.08023	0.02717
#2	0.03044	0.08000	0.03059
Mean	**0.03012**	**0.08011**	**0.02888**
%RSD	1.48686	0.20498	8.36349

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:45
SampleId1 : 1111162-3 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:48:03
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE26

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00176	51.63076	0.03992	0.01057	0.65355	0.00512	0.00699	124.80100	0.00005
#2	-0.00191	51.50335	0.03592	0.00851	0.65318	0.00506	0.00456	124.26743	-0.00004
Mean	**-0.00184**	**51.56705**	**0.03792**	**0.00954**	**0.65336**	**0.00509**	**0.00578**	**124.53422**	**0.00000**
%RSD	5.82511	0.17471	7.46591	15.27313	0.04089	0.78071	29.70971	0.30296	1293.33719

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03632	0.04424	0.06057	115.04942	16.27617	0.06129	40.36595	1.63522	0.00498
#2	0.03528	0.04377	0.06066	114.75140	16.27056	0.06124	40.25771	1.63259	0.00563
Mean	**0.03580**	**0.04400**	**0.06061**	**114.90041**	**16.27336**	**0.06126**	**40.31183**	**1.63390**	**0.00530**
%RSD	2.04268	0.75244	0.11022	0.18340	0.02437	0.05275	0.18987	0.11401	8.72831

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.23668	0.05655	3.19621	0.07967	0.08511	4.25901	-0.00139	0.00226	0.03166
#2	0.23890	0.05723	3.19297	0.08065	0.08460	4.25583	-0.00297	0.00014	0.02717
Mean	**0.23779**	**0.05689**	**3.19459**	**0.08016**	**0.08485**	**4.25742**	**-0.00218**	**0.00120**	**0.02942**
%RSD	0.65949	0.84309	0.07178	0.86582	0.42805	0.05289	51.29047	124.61601	10.79417

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.41679	0.00226	0.35632	0.05552	0.18507	0.00268	0.24574	0.19710	0.26695
#2	3.38519	0.00472	0.35590	0.05711	0.18564	0.00005	0.24113	0.19581	0.26662
Mean	**3.40099**	**0.00349**	**0.35611**	**0.05631**	**0.18536**	**0.00137**	**0.24343**	**0.19645**	**0.26678**
%RSD	0.65692	49.83110	0.08324	2.00515	0.21626	135.81103	1.33719	0.46308	0.08930

	Zr	Pb	Se
	ppm	calc	calc
#1	0.03065	0.08330	0.02187
#2	0.03013	0.08328	0.01817
Mean	**0.03039**	**0.08329**	**0.02002**
%RSD	1.20605	0.01339	13.06505

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:45
SampleId1 : 1111162-4 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:49:53
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE27

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00155	39.56177	0.02454	0.00118	0.17660	0.00406	0.00208	57.15297	-0.00044
#2	-0.00114	39.27482	0.02075	-0.00034	0.17602	0.00400	0.00069	56.95366	-0.00026
Mean	**-0.00135**	**39.41830**	**0.02265**	**0.00042**	**0.17631**	**0.00403**	**0.00139**	**57.05332**	**-0.00035**
%RSD	21.98217	0.51476	11.84168	256.87902	0.23434	1.17129	70.64627	0.24702	36.21960

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01511	0.01659	0.03061	80.94844	6.77434	0.04343	15.67517	1.38932	0.01832
#2	0.01518	0.01634	0.03079	80.75903	6.71038	0.04309	15.64082	1.38707	0.01889
Mean	**0.01515**	**0.01647**	**0.03070**	**80.85374**	**6.74236**	**0.04326**	**15.65799**	**1.38819**	**0.01861**
%RSD	0.30320	1.07163	0.42336	0.16565	0.67073	0.54044	0.15510	0.11463	2.17765

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00722	0.01521	2.05349	0.10803	0.11273	11.18711	-0.00075	0.07994	0.10758
#2	0.00496	0.01423	2.07812	0.10770	0.11070	11.21594	-0.00098	0.09435	0.10328
Mean	**0.00609**	**0.01472**	**2.06581**	**0.10787**	**0.11171**	**11.20152**	**-0.00086**	**0.08714**	**0.10543**
%RSD	26.33446	4.72327	0.84303	0.21646	1.28781	0.18202	19.43363	11.69644	2.88511

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.54372	0.00441	0.19868	0.04931	0.09955	0.00423	1.59656	0.43950	0.15751
#2	2.53155	-0.00092	0.19787	0.04643	0.10101	0.00335	1.59394	0.43700	0.15616
Mean	**2.53764**	**0.00174**	**0.19827**	**0.04787**	**0.10028**	**0.00379**	**1.59525**	**0.43825**	**0.15684**
%RSD	0.33893	216.18522	0.28975	4.25268	1.02360	16.40892	0.11609	0.40328	0.60701

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.04372	0.11117	0.09837
#2	0.04394	0.10970	0.10030
Mean	**0.04383**	**0.11043**	**0.09934**
%RSD	0.34290	0.93934	1.37443

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:46
SampleId1 : 1111162-5 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:51:43
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE28

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00132	31.70736	0.02444	0.00149	0.16178	0.00358	0.00135	79.88235	0.00012
#2	-0.00089	31.49227	0.02444	0.00362	0.16158	0.00353	0.00205	79.74196	-0.00013
Mean	**-0.00110**	**31.59982**	**0.02444**	**0.00256**	**0.16168**	**0.00356**	**0.00170**	**79.81215**	**-0.00001**
%RSD	27.04528	0.48131	0.00000	59.09225	0.09125	1.04673	28.91430	0.12439	2215.11936

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01483	0.01625	0.02462	72.22518	6.77610	0.03758	14.03916	1.49206	0.00621
#2	0.01428	0.01657	0.02571	72.03687	6.71945	0.03727	13.96693	1.48868	0.00580
Mean	**0.01456**	**0.01641**	**0.02517**	**72.13103**	**6.74777**	**0.03742**	**14.00305**	**1.49037**	**0.00600**
%RSD	2.67411	1.36252	3.07476	0.18460	0.59367	0.59161	0.36475	0.16038	4.82271

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04967	0.01382	2.17529	0.08893	0.09231	15.22451	-0.00219	0.18908	0.19898
#2	0.05011	0.01538	2.16907	0.09175	0.08955	15.25666	-0.00342	0.18581	0.19621
Mean	**0.04989**	**0.01460**	**2.17218**	**0.09034**	**0.09093**	**15.24059**	**-0.00281**	**0.18745**	**0.19759**
%RSD	0.62758	7.55297	0.20243	2.20661	2.14521	0.14917	31.01372	1.23250	0.99100

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.68884	-0.00058	0.17027	0.03510	0.15834	0.00156	1.11753	0.40732	0.14371
#2	3.65672	0.00270	0.16933	0.03696	0.15817	0.00989	1.11285	0.40588	0.14135
Mean	**3.67278**	**0.00106**	**0.16980**	**0.03603**	**0.15826**	**0.00573**	**1.11519**	**0.40660**	**0.14253**
%RSD	0.61842	218.52695	0.39126	3.65581	0.07554	102.77546	0.29673	0.24898	1.16871

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	0.04157	0.09118	0.19568**UNDGREEN**
#2	0.04105	0.09028	0.19275
Mean	**0.04131**	**0.09073**	**0.19421**
%RSD	0.89347	0.70236	1.06862

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:46
SampleId1 : 1111162-6 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:53:33
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE29

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00176	45.58759	0.05457	0.00187	0.23618	0.00485	0.00259	99.31262	-0.00015
#2	-0.00200	45.40870	0.05310	0.00332	0.23476	0.00485	0.00345	99.08893	-0.00063
Mean	**-0.00188**	**45.49814**	**0.05384**	**0.00259**	**0.23547**	**0.00485**	**0.00302**	**99.20077**	**-0.00039**
%RSD	9.08037	0.27802	1.93803	39.50875	0.42643	0.01309	20.12480	0.15945	88.04572

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.02344	0.03565	0.03279	96.49059	8.11106	0.05813	17.99194	1.89113	0.07506
#2	0.02309	0.03522	0.03254	96.19978	8.08382	0.05780	17.95257	1.88640	0.07760
Mean	**0.02327**	**0.03543**	**0.03267**	**96.34518**	**8.09744**	**0.05797**	**17.97226**	**1.88877**	**0.07633**
%RSD	1.05189	0.84905	0.54666	0.21343	0.23789	0.39890	0.15490	0.17674	2.35177

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19882	0.03329	2.38985	0.13421	0.13164	13.88785	0.00113	0.19103	0.20565
#2	0.20043	0.03400	2.37232	0.12867	0.13415	13.79794	0.00091	0.18852	0.20755
Mean	**0.19962**	**0.03364**	**2.38109**	**0.13144**	**0.13290**	**13.84290**	**0.00102**	**0.18977**	**0.20660**
%RSD	0.56934	1.49678	0.52042	2.97818	1.33571	0.45928	15.15577	0.93680	0.65186

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.33049	0.00112	0.45315	0.04110	0.10660	0.00314	3.46696	0.52085	0.19959
#2	2.35892	0.00276	0.45147	0.04665	0.10661	0.00580	3.44103	0.52010	0.19656
Mean	**2.34470**	**0.00194**	**0.45231**	**0.04388**	**0.10661**	**0.00447**	**3.45399**	**0.52048**	**0.19807**
%RSD	0.85750	59.72870	0.26266	8.94595	0.00659	42.16639	0.53077	0.10252	1.08182

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.05590	0.13250	0.20078
#2	0.05560	0.13233	0.20121
Mean	**0.05575**	**0.13241**	**0.20100**
%RSD	0.37290	0.09030	0.15238

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:46
SampleId1 : 1111162-7 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 18:55:23

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE30

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00205	37.81756	0.02928	0.00248	0.15165	0.00368	0.00234	44.77062	-0.00020
#2	-0.00117	37.92509	0.02939	0.00370	0.15185	0.00362	0.00235	45.11647	-0.00055
Mean	**-0.00161**	**37.87133**	**0.02934**	**0.00309**	**0.15175**	**0.00365**	**0.00234**	**44.94355**	**-0.00038**
%RSD	38.86835	0.20078	0.25395	27.93155	0.09721	1.11314	0.18118	0.54413	64.83784

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01277	0.01627	0.02079	86.62553	6.86172	0.04593	16.36176	1.06571	0.00735
#2	0.01304	0.01665	0.02115	87.09526	6.85618	0.04584	16.38889	1.07066	0.00899
Mean	**0.01291**	**0.01646**	**0.02097**	**86.86039**	**6.85895**	**0.04589**	**16.37533**	**1.06819**	**0.00817**
%RSD	1.48044	1.61481	1.22340	0.38239	0.05712	0.13550	0.11713	0.32749	14.16922

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01337	0.01094	1.82946	0.10134	0.10988	11.81522	-0.00267	0.11524	0.13329
#2	0.01126	0.01125	1.83360	0.10628	0.10743	11.89536	-0.00278	0.10394	0.13330
Mean	**0.01231**	**0.01109**	**1.83153**	**0.10381**	**0.10866**	**11.85529**	**-0.00273**	**0.10959**	**0.13330**
%RSD	12.07212	1.94523	0.15975	3.36142	1.59435	0.47800	2.91450	7.28749	0.00521

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.52034	0.00111	0.10875	0.03954	0.11718	-0.00410	1.25678	0.66390	0.16087
#2	2.53745	0.00233	0.10894	0.03651	0.11973	0.00430	1.25783	0.66543	0.16087
Mean	**2.52890**	**0.00172**	**0.10885**	**0.03802**	**0.11846**	**0.00010**	**1.25731**	**0.66466**	**0.16087**
%RSD	0.47854	50.36454	0.12041	5.63525	1.51949	5914.59954	0.05927	0.16281	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	0.03166	0.10704	0.12728
#2	0.03188	0.10705	0.12353
Mean	**0.03177**	**0.10704**	**0.12540**
%RSD	0.48238	0.00605	2.11700

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:46
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 18:57:53
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19870	52.44778	0.51374	1.01488	1.02732	0.47393	0.53664	47.79053	0.50215
#2	0.19754	52.36351	0.51374	1.01465	1.02285	0.47418	0.53610	47.94929	0.50038

Mean	**0.19812**	**52.40565**	**0.51374**	**1.01477**	**1.02508**	**0.47405**	**0.53637**	**47.86991**	**0.50126**
%RSD	0.41275	0.11371	0.00000	0.01601	0.30831	0.03711	0.07135	0.23451	0.24847

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47917	0.96000	1.04137	19.73368	49.29620	0.52252	50.01759	0.96069	0.98322
#2	0.47944	0.96179	1.03841	19.73368	49.05942	0.51972	49.95947	0.96134	0.98116
Mean	**0.47930**	**0.96089**	**1.03989**	**19.73368**	**49.17781**	**0.52112**	**49.98853**	**0.96101**	**0.98219**
%RSD	0.03989	0.13198	0.20167	0.00000	0.34046	0.37990	0.08221	0.04800	0.14827

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.00647	0.99233	5.02373	0.98479	0.98482	5.19564	0.50029	1.03419	1.02521
#2	48.83085	0.99168	4.99963	0.97926	0.98926	5.17652	0.49802	1.02893	1.02883
Mean	**48.91866**	**0.99201**	**5.01168**	**0.98203**	**0.98704**	**5.18608**	**0.49915**	**1.03156**	**1.02702**
%RSD	0.25385	0.04615	0.34000	0.39838	0.31800	0.26073	0.32106	0.36039	0.24898

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.95100	1.05031	0.50514	0.30065	0.47771	0.53433	4.96405	0.48113	0.92865
#2	4.95730	1.04661	0.50362	0.30490	0.47765	0.52768	4.91246	0.48162	0.94018
Mean	**4.95415**	**1.04846**	**0.50438**	**0.30277**	**0.47768**	**0.53100**	**4.93826**	**0.48138**	**0.93441**
%RSD	0.08998	0.24988	0.21288	0.99434	0.00884	0.88484	0.73872	0.07239	0.87218

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.98561	0.98481	1.02820
#2	0.98261	0.98593	1.02886
Mean	**0.98411**	**0.98537**	**1.02853**
%RSD	0.21568	0.08026	0.04546

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:46
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 18:59:49
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00092	0.04251	-0.00232	-0.00591	-0.00092	0.00048	-0.00175	-0.05713	-0.00064
#2	-0.00009	0.06300	-0.00063	-0.00454	-0.00054	0.00056	0.00085	-0.03237	-0.00050
Mean	**-0.00051**	**0.05276**	**-0.00147**	**-0.00522**	**-0.00073**	**0.00052**	**-0.00045**	**-0.04475**	**-0.00057**
%RSD	115.13259	27.47232	80.83322	18.58218	36.29236	10.05038	409.10895	39.12173	17.65299

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00068	-0.00079	-0.00166	0.00540	-0.23944	-0.00181	-0.04303	-0.00049	0.00015
#2	-0.00033	-0.00014	-0.00158	0.02550	-0.22447	-0.00172	-0.02603	0.00006	0.00170
Mean	**-0.00051**	**-0.00047**	**-0.00162**	**0.01545**	**-0.23195**	**-0.00177**	**-0.03453**	**-0.00021**	**0.00093**

%RSD	48.18583	99.22551	3.64882	92.01408	4.56309	3.66181	34.82881	183.35728	118.77313

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.16834	-0.00137	-0.01819	-0.00323	0.00023	-0.04464	-0.00182	0.00483	0.00010
#2	-0.16039	-0.00059	-0.01341	0.00175	-0.00090	-0.01926	0.00014	-0.00387	0.00113
Mean	**-0.16436**	**-0.00098**	**-0.01580**	**-0.00074**	**-0.00034**	**-0.03195**	**-0.00084**	**0.00048**	**0.00061**
%RSD	3.42182	56.40525	21.37646	476.72876	236.68732	56.17008	165.70532	1280.94005	118.06383

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02279	-0.00490	-0.00173	0.00123	-0.00295	-0.00247	-0.03845	-0.00058	-0.00192
#2	-0.01977	-0.00039	-0.00152	0.00576	-0.00281	0.00365	-0.02885	0.00008	-0.00091
Mean	**-0.02128**	**-0.00264**	**-0.00162**	**0.00350**	**-0.00288**	**0.00059**	**-0.03365**	**-0.00025**	**-0.00141**
%RSD	10.04090	120.51930	9.06134	91.69081	3.41709	730.96857	20.16901	183.56555	50.51616

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00006	-0.00093	0.00168
#2	0.00034	-0.00001	-0.00054
Mean	**0.00020**	**-0.00047**	**0.00057**
%RSD	97.32355	137.12929	274.56288

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:46
SampleId1 : 1111162-8 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:01:47
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE31

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00121	36.72138	0.04477	0.00401	0.59946	0.00455	-0.00092	109.11728	0.00003
#2	-0.00090	36.34385	0.03223	0.00500	0.59426	0.00448	0.00411	109.17230	0.00020
Mean	**-0.00105**	**36.53262**	**0.03850**	**0.00450**	**0.59686**	**0.00452**	**0.00159**	**109.14479**	**0.00012**
%RSD	21.08598	0.73074	23.02820	15.57904	0.61624	1.11102	222.90382	0.03565	99.43521

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03904	0.03506	0.05232	110.87857	7.44165	0.05130	35.55178	1.44428	0.00367
#2	0.03904	0.03484	0.05259	110.76885	7.36302	0.05074	35.39537	1.44241	0.00440
Mean	**0.03904**	**0.03495**	**0.05246**	**110.82371**	**7.40233**	**0.05102**	**35.47358**	**1.44335**	**0.00404**
%RSD	0.00599	0.44815	0.36391	0.07000	0.75108	0.77980	0.31178	0.09194	12.90580

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.24367	0.05316	2.57996	0.06317	0.06823	2.71558	0.00249	-0.01012	0.00935
#2	0.23518	0.05428	2.55665	0.06512	0.06639	2.74420	-0.00375	-0.01112	0.00746
Mean	**0.23943**	**0.05372**	**2.56830**	**0.06414**	**0.06731**	**2.72989**	**-0.00063**	**-0.01062**	**0.00840**
%RSD	2.50536	1.47319	0.64187	2.15134	1.92863	0.74138	702.44891	6.61665	15.95527

ted: 11/21/2011 12:56:08 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.94952	0.00270	0.36638	0.05256	0.16142	0.00507	0.09134	0.10719	0.23327
#2	1.93394	0.00106	0.36376	0.05844	0.15953	0.00873	0.09485	0.10713	0.23360
Mean	**1.94173**	**0.00188**	**0.36507**	**0.05550**	**0.16048**	**0.00690**	**0.09309**	**0.10716**	**0.23343**
%RSD	0.56724	61.64027	0.50757	7.49327	0.83254	37.47818	2.66427	0.04104	0.10203

	Zr	Pb	Se
	ppm	calc	calc
#1	0.03736	0.06654	0.00287
#2	0.03651	0.06597	0.00127
Mean	**0.03694**	**0.06626**	**0.00207**
%RSD	1.62282	0.61333	54.53390

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:47
SampleId1 : 1111162-9 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:03:39
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE32

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00177	56.39527	0.03624	0.01179	0.78080	0.00556	0.00435	122.95577	0.00017
#2	-0.00187	56.20459	0.04224	0.01438	0.77605	0.00556	0.00470	123.14258	0.00015
Mean	**-0.00182**	**56.29993**	**0.03924**	**0.01308**	**0.77843**	**0.00556**	**0.00453**	**123.04918**	**0.00016**
%RSD	4.06836	0.23948	10.82316	14.01835	0.43153	0.06942	5.41208	0.10735	9.85435

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04066	0.04962	0.07533	124.71694	22.25878	0.06975	43.24562	1.59007	0.00440
#2	0.04148	0.04962	0.07551	124.73651	22.11777	0.06934	43.11331	1.58838	0.00342
Mean	**0.04107**	**0.04962**	**0.07542**	**124.72672**	**22.18828**	**0.06955**	**43.17946**	**1.58922**	**0.00391**
%RSD	1.41158	0.00105	0.17147	0.01110	0.44938	0.41100	0.21668	0.07531	17.74758

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.52060	0.06682	3.89734	0.08021	0.09000	3.96289	-0.00329	-0.01087	0.01778
#2	0.51748	0.06594	3.85177	0.08299	0.08809	3.90877	0.00283	-0.01352	0.01310
Mean	**0.51904**	**0.06638**	**3.87456**	**0.08160**	**0.08904**	**3.93583**	**-0.00023**	**-0.01220**	**0.01544**
%RSD	0.42410	0.93928	0.83167	2.41321	1.51356	0.97233	1882.57999	15.38003	21.44327

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.13684	0.00556	0.40320	0.06179	0.16618	-0.00156	0.08535	0.13661	0.30571
#2	3.12301	0.00474	0.40163	0.06482	0.16589	0.00905	0.08396	0.13624	0.30773
Mean	**3.12992**	**0.00515**	**0.40242**	**0.06330**	**0.16603**	**0.00375**	**0.08466**	**0.13642**	**0.30672**
%RSD	0.31246	11.24920	0.27649	3.37903	0.12282	200.09329	1.15808	0.18901	0.46622

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	0.02088	0.08674	0.00824
#2	0.02122	0.08639	0.00423
Mean	**0.02105**	**0.08656**	**0.00623**
%RSD	1.13200	0.28091	45.43685

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:47
SampleId1 : 1111162-10 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:05:29
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE33

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00126	35.15581	0.02075	0.00462	0.38299	0.00364	-0.00125	76.68845	-0.00003
#2	-0.00050	34.98796	0.02222	0.00568	0.38148	0.00361	0.00448	76.77422	0.00015
Mean	**-0.00088**	**35.07189**	**0.02149**	**0.00515**	**0.38224**	**0.00362**	**0.00162**	**76.73133**	**0.00006**
%RSD	61.03739	0.33841	4.85337	14.66490	0.27864	0.49401	250.62920	0.07903	213.10604

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.02182	0.02834	0.03741	82.71893	9.02724	0.03891	24.43888	1.32118	0.00211
#2	0.02250	0.02942	0.03720	82.67488	8.97699	0.03868	24.37936	1.32155	0.00097
Mean	**0.02216**	**0.02888**	**0.03730**	**82.69691**	**9.00212**	**0.03880**	**24.40912**	**1.32137**	**0.00154**
%RSD	2.19272	2.64568	0.39318	0.03767	0.39475	0.41674	0.17241	0.02005	52.62489

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09595	0.03125	2.57442	0.05445	0.05934	4.10617	-0.00002	0.01251	0.02179
#2	0.09501	0.03247	2.55157	0.05938	0.05714	4.10935	0.00314	0.00951	0.02349
Mean	**0.09548**	**0.03186**	**2.56300**	**0.05691**	**0.05824**	**4.10776**	**0.00156**	**0.01101**	**0.02264**
%RSD	0.69713	2.70925	0.63044	6.13388	2.66085	0.05481	143.67200	19.25056	5.29230

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.71547	0.00635	0.19662	0.04804	0.19036	0.00716	0.10434	0.20468	0.17905
#2	3.67580	0.00266	0.19616	0.04759	0.18984	0.00276	0.13732	0.20622	0.17973
Mean	**3.69563**	**0.00451**	**0.19639**	**0.04782**	**0.19010**	**0.00496**	**0.12083**	**0.20545**	**0.17939**
%RSD	0.75911	57.85378	0.16715	0.66852	0.19607	62.76397	19.30416	0.53283	0.26540

	Zr	Pb	Se
	ppm	calc	calc
#1	0.02048	0.05771	0.01870
#2	0.02087	0.05789	0.01883
Mean	**0.02067**	**0.05780**	**0.01877**
%RSD	1.34236	0.22299	0.49839

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:47

SampleId1 : 1111162-11 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:07:19
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE34

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00076	41.31233	0.02949	0.01148	0.47312	0.00428	0.00468	145.39039	-0.00028
#2	-0.00169	41.41234	0.03308	0.01026	0.47534	0.00426	0.00191	144.88605	-0.00031
Mean	**-0.00123**	**41.36234**	**0.03128**	**0.01087**	**0.47423**	**0.00427**	**0.00330**	**145.13822**	**-0.00029**
%RSD	53.62643	0.17096	8.09658	7.93931	0.33101	0.44460	59.49999	0.24571	5.90893

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03380	0.03602	0.04339	94.56362	12.57204	0.04659	38.12868	1.64614	0.00056
#2	0.03291	0.03555	0.04358	94.34255	12.63801	0.04674	38.09478	1.64312	0.00121
Mean	**0.03335**	**0.03578**	**0.04348**	**94.45308**	**12.60502**	**0.04666**	**38.11173**	**1.64463**	**0.00088**
%RSD	1.89654	0.92226	0.30497	0.16550	0.37006	0.21852	0.06289	0.12947	52.32262

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.15748	0.04702	2.79824	0.06621	0.06760	2.22594	0.00147	-0.00133	0.00639
#2	0.15986	0.04861	2.77467	0.06310	0.06964	2.25455	-0.00194	-0.00977	0.00762
Mean	**0.15867**	**0.04782**	**2.78645**	**0.06466**	**0.06862**	**2.24024**	**-0.00023**	**-0.00555**	**0.00701**
%RSD	1.06166	2.35704	0.59820	3.40423	2.10269	0.90303	1030.09961	107.46611	12.44518

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.45257	-0.00023	0.29668	0.04329	0.21434	-0.00133	0.00633	0.09343	0.20700
#2	5.44761	0.00550	0.29747	0.04680	0.21572	0.00088	-0.00107	0.09322	0.20700
Mean	**5.45009**	**0.00263**	**0.29708**	**0.04504**	**0.21503**	**-0.00022**	**0.00263**	**0.09333**	**0.20700**
%RSD	0.06427	153.97341	0.18824	5.51056	0.45136	693.54838	199.15325	0.15649	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	0.01807	0.06714	0.00382
#2	0.01728	0.06746	0.00183
Mean	**0.01767**	**0.06730**	**0.00282**
%RSD	3.16332	0.34091	49.71408

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:47
SampleId1 : 1111162-12 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:09:09
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE35

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	-0.00107	60.74648	0.03308	0.00873	0.62203	0.00496	-0.00104	118.05202	-0.00025
#2	-0.00149	60.74161	0.03782	0.01034	0.61960	0.00493	0.00294	118.82617	0.00031
Mean	**-0.00128**	**60.74405**	**0.03545**	**0.00954**	**0.62082**	**0.00495**	**0.00095**	**118.43909**	**0.00003**
%RSD	22.90398	0.00567	9.45846	11.87910	0.27720	0.43881	296.90943	0.46219	1265.28780

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03580	0.04994	0.06265	109.48055	19.34585	0.06155	41.36890	1.40535	0.00015
#2	0.03565	0.05041	0.06183	110.00200	19.22506	0.06117	41.34870	1.41117	0.00039
Mean	**0.03573**	**0.05017**	**0.06224**	**109.74127**	**19.28546**	**0.06136**	**41.35880**	**1.40826**	**0.00027**
%RSD	0.28372	0.66465	0.92797	0.33599	0.44287	0.44161	0.03452	0.29198	64.05895

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19051	0.05777	3.26919	0.08051	0.08421	2.50253	-0.00186	-0.01304	0.00992
#2	0.18796	0.05872	3.29005	0.07887	0.08347	2.54386	0.00292	-0.01209	0.01079
Mean	**0.18923**	**0.05824**	**3.27962**	**0.07969**	**0.08384**	**2.52319**	**0.00053**	**-0.01257**	**0.01036**
%RSD	0.95259	1.15284	0.44969	1.45658	0.62500	1.15839	637.21945	5.32691	5.95494

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.47549	-0.00020	0.28900	0.05604	0.18162	0.00564	0.02501	0.12252	0.24404
#2	3.48857	0.00144	0.28803	0.06305	0.18271	0.00696	0.02328	0.12274	0.24640
Mean	**3.48203**	**0.00062**	**0.28852**	**0.05954**	**0.18216**	**0.00630**	**0.02414**	**0.12263**	**0.24522**
%RSD	0.26558	185.82906	0.23939	8.33137	0.42079	14.80060	5.06144	0.12908	0.67993

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.02783	0.08298	0.00228
#2	0.02755	0.08193	0.00317
Mean	**0.02769**	**0.08245**	**0.00272**
%RSD	0.71296	0.89262	23.28745

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:47
SampleId1 : 1111162-13 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:11:00
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE36

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00252	108.30214	0.05573	0.00568	0.96704	0.00848	0.00756	111.29018	0.00005
#2	-0.00262	107.16867	0.05362	0.00706	0.96017	0.00842	0.00877	110.88612	0.00078
Mean	**-0.00257**	**107.73541**	**0.05468**	**0.00637**	**0.96361**	**0.00845**	**0.00816**	**111.08815**	**0.00042**
%RSD	2.80436	0.74393	2.72596	15.24223	0.50397	0.48196	10.44654	0.25720	122.79363

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06112	0.08709	0.12100	186.18581	33.12495	0.11609	40.99995	2.04596	0.00318

#2	0.06077	0.08719	0.11964	185.62111	32.79643	0.11487	40.74990	2.03697	0.00179
Mean	**0.06094**	**0.08714**	**0.12032**	**185.90346**	**32.96069**	**0.11548**	**40.87492**	**2.04146**	**0.00248**
%RSD	0.40699	0.07832	0.79940	0.21479	0.70477	0.74598	0.43257	0.31135	39.65789

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.58015	0.10234	3.46558	0.12047	0.13178	3.95016	-0.00209	-0.02066	0.01626
#2	0.57409	0.10071	3.40365	0.12459	0.13557	3.97881	-0.00223	-0.02641	0.01393
Mean	**0.57712**	**0.10152**	**3.43461**	**0.12253**	**0.13368**	**3.96448**	**-0.00216**	**-0.02353**	**0.01509**
%RSD	0.74281	1.13406	1.27496	2.37692	2.00514	0.51106	4.42622	17.24878	10.90989

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.85545	0.00598	0.51481	0.10534	0.15461	0.00460	0.03457	0.18840	0.42441
#2	3.80706	0.00189	0.51167	0.10305	0.15315	0.00456	0.03015	0.18686	0.42610
Mean	**3.83125**	**0.00393**	**0.51324**	**0.10419**	**0.15388**	**0.00458**	**0.03236**	**0.18763**	**0.42525**
%RSD	0.89311	73.61767	0.43297	1.55292	0.67173	0.60349	9.66157	0.58142	0.28052

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.03506	0.12802	0.00396
#2	0.03521	0.13192	0.00050
Mean	**0.03514**	**0.12997**	**0.00223**
%RSD	0.31237	2.12186	109.87385

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:48
SampleId1 : 1111162-14 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:12:50
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE37

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00191	106.74513	0.05837	0.00919	1.06903	0.00861	0.01040	214.06198	0.00076
#2	-0.00192	107.13518	0.06153	0.00820	1.07262	0.00861	0.00763	213.63389	0.00074
Mean	**-0.00192**	**106.94016**	**0.05995**	**0.00870**	**1.07082**	**0.00861**	**0.00901**	**213.84794**	**0.00075**
%RSD	0.37819	0.25791	3.72977	8.06325	0.23680	0.04882	21.73877	0.14155	2.03724

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06417	0.08810	0.12673	191.45304	29.73396	0.12748	51.02210	2.43391	0.00269
#2	0.06411	0.08822	0.12736	191.47724	29.81720	0.12798	51.06964	2.43581	0.00367
Mean	**0.06414**	**0.08816**	**0.12705**	**191.46514**	**29.77558**	**0.12773**	**51.04587**	**2.43486**	**0.00318**
%RSD	0.06917	0.09513	0.34857	0.00894	0.19766	0.27785	0.06586	0.05525	21.86302

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.68861	0.10390	4.39099	0.12737	0.13632	5.68018	0.00291	-0.02886	0.01818
#2	0.69206	0.10529	4.43226	0.12679	0.13840	5.74395	0.00072	-0.02343	0.01622

Mean	**0.69034**	**0.10459**	**4.41163**	**0.12708**	**0.13736**	**5.71207**	**0.00181**	**-0.02614**	**0.01720**
%RSD	0.35359	0.94026	0.66157	0.32519	1.07198	0.78943	85.63096	14.69491	8.03442

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.13240	0.00186	0.62727	0.10161	0.17931	0.00207	0.02824	0.18221	0.44499
#2	4.12438	0.00308	0.62913	0.09858	0.17880	-0.00032	0.04127	0.18300	0.44567
Mean	**4.12839**	**0.00247**	**0.62820**	**0.10010**	**0.17906**	**0.00088**	**0.03475**	**0.18260**	**0.44533**
%RSD	0.13738	35.19855	0.20958	2.14008	0.20422	192.50079	26.50902	0.30310	0.10717

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.02886	0.13334	0.00251
#2	0.02916	0.13453	0.00302
Mean	**0.02901**	**0.13394**	**0.00277**
%RSD	0.73265	0.63054	12.92727

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:48
SampleId1 : 1111162-15 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:14:40
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE38

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00202	51.40576	0.04962	0.00599	0.51175	0.00509	0.00180	92.81583	0.00021
#2	-0.00238	51.39439	0.03824	0.00767	0.51200	0.00506	0.00093	92.60326	0.00008
Mean	**-0.00220**	**51.40008**	**0.04393**	**0.00683**	**0.51188**	**0.00508**	**0.00136**	**92.70954**	**0.00015**
%RSD	11.77243	0.01565	18.31922	17.38058	0.03473	0.48468	45.07115	0.16213	64.41286

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03388	0.07031	0.06093	109.47957	13.89653	0.06396	28.08881	1.44091	0.01562
#2	0.03326	0.06990	0.06074	109.24171	13.85434	0.06383	28.05967	1.43941	0.01554
Mean	**0.03357**	**0.07011**	**0.06084**	**109.36064**	**13.87543**	**0.06390**	**28.07424**	**1.44016**	**0.01558**
%RSD	1.30094	0.41342	0.21456	0.15380	0.21499	0.14005	0.07340	0.07371	0.37157

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.25531	0.54835	2.65916	0.08432	0.08992	5.16058	-0.00047	-0.00084	0.03249
#2	0.25404	0.54172	2.68849	0.08394	0.09288	5.13508	-0.00279	0.00954	0.03883
Mean	**0.25467**	**0.54504**	**2.67382**	**0.08413**	**0.09140**	**5.14783**	**-0.00163**	**0.00435**	**0.03566**
%RSD	0.35412	0.86015	0.77571	0.32438	2.29424	0.35021	100.86738	168.82149	12.57599

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.82715	0.00231	0.32765	0.06967	0.13826	-0.00272	0.59767	0.26186	0.26055
#2	2.81928	-0.00301	0.32756	0.06889	0.13754	-0.00262	0.60127	0.26116	0.25988
Mean	**2.82321**	**-0.00035**	**0.32760**	**0.06928**	**0.13790**	**-0.00267**	**0.59947**	**0.26151**	**0.26021**

%RSD	0.19705	1077.00593	0.02010	0.78925	0.37222	2.72209	0.42412	0.18977	0.18310

	Zr	Pb	Se
	ppm	calc	calc
#1	0.03359	0.08805	0.02139
#2	0.03327	0.08990	0.02907
Mean	**0.03343**	**0.08898**	**0.02523**
%RSD	0.67365	1.46974	21.53987

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:48
SampleId1 : IP111118-2MB SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 19:16:48
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE39

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00056	0.06887	0.00095	-0.00713	-0.00079	0.00035	0.00276	0.00966	-0.00081
#2	-0.00087	0.07561	-0.00168	-0.00805	-0.00075	0.00036	-0.00123	0.01715	-0.00097
Mean	**-0.00071**	**0.07224**	**-0.00037**	**-0.00759**	**-0.00077**	**0.00035**	**0.00076**	**0.01341**	**-0.00089**
%RSD	30.84489	6.59850	505.63303	8.52826	3.81492	0.94400	370.46683	39.48273	12.24475

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	-0.00070	-0.00193	0.09093	-0.26912	-0.00203	-0.03900	0.00034	-0.00092
#2	-0.00081	-0.00123	-0.00220	0.10176	-0.27436	-0.00203	-0.03587	0.00052	-0.00051
Mean	**-0.00071**	**-0.00097**	**-0.00207**	**0.09635**	**-0.27174**	**-0.00203**	**-0.03744**	**0.00043**	**-0.00071**
%RSD	20.47703	38.81232	9.17209	7.94821	1.36316	0.24550	5.91727	30.17879	40.69209

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.18679	-0.00157	-0.01228	0.00005	0.00014	-0.02878	-0.00134	-0.00111	-0.00337
#2	-0.18668	-0.00164	-0.01455	-0.00054	0.00027	-0.03512	-0.00366	-0.00288	-0.00099
Mean	**-0.18673**	**-0.00160**	**-0.01341**	**-0.00024**	**0.00020**	**-0.03195**	**-0.00250**	**-0.00199**	**-0.00218**
%RSD	0.04182	2.98777	11.99206	172.41227	46.98833	14.04249	65.53454	62.90777	77.43561

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02179	0.00739	-0.00161	0.00663	-0.00285	-0.00323	-0.03370	-0.00073	0.00077
#2	-0.02039	-0.00080	-0.00159	0.00207	-0.00299	-0.00113	-0.03920	-0.00040	-0.00024
Mean	**-0.02109**	**0.00330**	**-0.00160**	**0.00435**	**-0.00292**	**-0.00218**	**-0.03645**	**-0.00057**	**0.00027**
%RSD	4.68944	175.75147	1.02136	74.12234	3.37055	68.27036	10.66890	41.20489	264.92144

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00089	0.00011	-0.00262
#2	-0.00066	0.00000	-0.00162
Mean	**-0.00078**	**0.00005**	**-0.00212**
%RSD	20.49747	142.65873	33.47278

ted: 11/21/2011 12:56:08 **User: MIKE LUNDGREEN**
Method : Paragon File : 111118A Printed : 11/21/2011 12:55:48
SampleId1 : IP111118-2RVS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:18:38
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE40

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00971	1.04966	0.04540	0.04604	0.04866	0.01016	0.10644	4.66520	0.01897
#2	0.00913	1.07058	0.04920	0.04429	0.04874	0.01008	0.09847	4.68639	0.01938
Mean	**0.00942**	**1.06012**	**0.04730**	**0.04516**	**0.04870**	**0.01012**	**0.10245**	**4.67579**	**0.01918**
%RSD	4.35723	1.39545	5.67138	2.74742	0.12102	0.54243	5.50345	0.32040	1.52542

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01925	0.04688	0.04849	0.95542	7.71136	0.03900	4.88134	0.04705	0.09488
#2	0.01883	0.04694	0.04803	0.98693	7.70203	0.03895	4.88718	0.04760	0.09791
Mean	**0.01904**	**0.04691**	**0.04826**	**0.97117**	**7.70669**	**0.03897**	**4.88426**	**0.04733**	**0.09639**
%RSD	1.53019	0.08854	0.67450	2.29436	0.08559	0.09574	0.08449	0.82460	2.22297

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.24862	0.04732	0.98898	0.04908	0.04769	1.00275	0.09534	0.05270	0.05380
#2	8.23590	0.04749	0.97731	0.04535	0.04541	1.00910	0.09574	0.05485	0.05253
Mean	**8.24226**	**0.04741**	**0.98314**	**0.04722**	**0.04655**	**1.00593**	**0.09554**	**0.05377**	**0.05316**
%RSD	0.10915	0.25290	0.83916	5.59443	3.46390	0.44642	0.29112	2.82477	1.69218

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.27150	0.10075	0.04807	0.00064	0.04500	0.10257	0.46213	0.04763	0.04817
#2	0.27428	0.09911	0.04814	0.00148	0.04465	0.10388	0.46966	0.04743	0.04918
Mean	**0.27289**	**0.09993**	**0.04810**	**0.00106**	**0.04482**	**0.10323**	**0.46589**	**0.04753**	**0.04868**
%RSD	0.72028	1.15960	0.10205	55.45743	0.56456	0.90325	1.14316	0.29528	1.46532

	Zr	Pb	Se
	ppm	calc	calc
#1	0.04757	0.04815	0.05343
#2	0.04788	0.04539	0.05330
Mean	**0.04772**	**0.04677**	**0.05337**
%RSD	0.44812	4.18012	0.17654

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:48
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 19:20:57
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19768	52.70973	0.51342	1.01542	1.02829	0.47351	0.53509	47.77841	0.50279
#2	0.19940	52.54210	0.51756	1.01702	1.02449	0.47444	0.54598	48.04966	0.50448
Mean	**0.19854**	**52.62592**	**0.51549**	**1.01622**	**1.02639**	**0.47397**	**0.54054**	**47.91404**	**0.50363**
%RSD	0.61189	0.22524	0.56764	0.11190	0.26144	0.13823	1.42488	0.40030	0.23790

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47889	0.96093	1.04923	19.66721	49.42445	0.52475	50.11170	0.95761	0.97885
#2	0.48214	0.96505	1.04139	19.71247	49.17170	0.52137	50.03743	0.96162	0.97720
Mean	**0.48052**	**0.96299**	**1.04531**	**19.68984**	**49.29807**	**0.52306**	**50.07456**	**0.95962**	**0.97803**
%RSD	0.47757	0.30269	0.53078	0.16254	0.36253	0.45595	0.10488	0.29531	0.11911

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.22369	0.99492	5.05555	0.98467	0.98915	5.19883	0.50644	1.03760	1.02279
#2	49.01498	0.99584	5.05696	0.98834	0.98217	5.18608	0.50576	1.04677	1.03493
Mean	**49.11933**	**0.99538**	**5.05625**	**0.98651**	**0.98566**	**5.19245**	**0.50610**	**1.04218**	**1.02886**
%RSD	0.30045	0.06537	0.01964	0.26346	0.50054	0.17361	0.09449	0.62205	0.83481

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.96949	1.04373	0.50708	0.31467	0.47696	0.54119	4.92970	0.48104	0.92662
#2	4.96398	1.04826	0.50605	0.31003	0.47642	0.53421	4.94618	0.48236	0.93204
Mean	**4.96673**	**1.04599**	**0.50656**	**0.31235**	**0.47669**	**0.53770**	**4.93794**	**0.48170**	**0.92933**
%RSD	0.07834	0.30617	0.14349	1.05055	0.07973	0.91888	0.23596	0.19419	0.41266

	Zr	Pb	Se
	ppm	calc	calc
#1	0.98440	0.98765	1.02772
#2	0.98393	0.98422	1.03888
Mean	**0.98416**	**0.98594**	**1.03330**
%RSD	0.03329	0.24598	0.76335

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:48
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 19:22:54
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00030	0.04260	0.00579	-0.00454	-0.00050	0.00032	0.00068	-0.03871	-0.00056
#2	-0.00035	0.02790	-0.00253	-0.00568	-0.00083	0.00024	0.00033	-0.05684	-0.00058
Mean	**-0.00033**	**0.03525**	**0.00163**	**-0.00511**	**-0.00067**	**0.00028**	**0.00050**	**-0.04777**	**-0.00057**
%RSD	11.13622	29.48652	360.28558	15.83186	35.27762	21.81573	48.49388	26.84536	2.41782

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00047	-0.00079	-0.00130	0.01669	-0.23295	-0.00175	-0.02826	-0.00003	0.00015
#2	-0.00026	-0.00029	-0.00112	0.00504	-0.25091	-0.00184	-0.03945	-0.00040	-0.00018
Mean	**-0.00037**	**-0.00054**	**-0.00121**	**0.01087**	**-0.24193**	**-0.00180**	**-0.03386**	**-0.00021**	**-0.00002**
%RSD	39.60472	65.23040	10.61695	75.83801	5.24978	3.32712	23.36804	122.23801	1500.62053

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.15856	-0.00106	-0.00249	0.00011	0.00091	-0.03512	-0.00341	-0.00135	0.00300
#2	-0.16768	-0.00062	-0.01205	-0.00053	-0.00008	-0.03195	0.00001	0.00193	0.00019
Mean	**-0.16312**	**-0.00084**	**-0.00727**	**-0.00021**	**0.00042**	**-0.03354**	**-0.00170**	**0.00029**	**0.00159**
%RSD	3.95075	37.01649	92.91611	213.27639	168.56993	6.68913	142.01861	798.49974	124.86276

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01951	-0.00121	-0.00153	0.00228	-0.00257	-0.00066	-0.03502	-0.00058	0.00010
#2	-0.01712	-0.00162	-0.00169	0.00609	-0.00266	-0.00316	-0.03433	-0.00054	-0.00057
Mean	**-0.01831**	**-0.00141**	**-0.00161**	**0.00418**	**-0.00262**	**-0.00191**	**-0.03468**	**-0.00056**	**-0.00024**
%RSD	9.25214	20.46455	7.09825	64.45417	2.41787	92.68088	1.41616	4.86858	202.24255

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00051	0.00064	0.00155
#2	0.00013	-0.00023	0.00077
Mean	**0.00032**	**0.00021**	**0.00116**
%RSD	82.57556	297.86977	47.78723

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:49
SampleId1 : IP111118-2LCS SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 19:24:55
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE41

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08950	2.16515	2.03191	0.50361	2.02787	0.04864	-0.00797	36.60771	0.04698
#2	0.08857	2.16573	2.02887	0.49994	2.03496	0.04849	-0.00277	36.38933	0.04667
Mean	**0.08903**	**2.16544**	**2.03039**	**0.50177**	**2.03142**	**0.04857**	**-0.00537**	**36.49852**	**0.04683**
%RSD	0.73864	0.01886	0.10572	0.51698	0.24655	0.21390	68.49203	0.42309	0.45985

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47497	0.18760	0.25336	0.95566	36.36646	0.49205	37.85982	0.48011	0.96880
#2	0.47346	0.18679	0.25464	0.95470	36.42215	0.49344	37.82501	0.47853	0.97061
Mean	**0.47421**	**0.18719**	**0.25400**	**0.95518**	**36.39431**	**0.49274**	**37.84242**	**0.47932**	**0.96971**
%RSD	0.22552	0.30579	0.35724	0.07095	0.10818	0.19954	0.06504	0.23214	0.13214

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	37.22513	0.48866	-0.01410	0.49238	0.49406	-0.04147	0.48871	2.17082	2.13955
#2	37.22138	0.48291	-0.00522	0.48849	0.49739	-0.03512	0.49381	2.18172	2.15418
Mean	**37.22325**	**0.48578**	**-0.00966**	**0.49043**	**0.49572**	**-0.03829**	**0.49126**	**2.17627**	**2.14686**
%RSD	0.00713	0.83613	64.94362	0.56183	0.47472	11.71577	0.73439	0.35419	0.48170

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.03859	0.51909	0.50177	-0.01830	0.47753	2.10540	-0.04733	0.48443	0.47267
#2	2.03634	0.51457	0.50293	-0.02035	0.47821	2.10398	-0.06038	0.48226	0.46862
Mean	**2.03747**	**0.51683**	**0.50235**	**-0.01933**	**0.47787**	**2.10469**	**-0.05386**	**0.48334**	**0.47065**
%RSD	0.07820	0.61810	0.16276	7.50244	0.10016	0.04763	17.12576	0.31844	0.60858

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00287	0.49350	2.14996
#2	0.00252	0.49442	2.16335
Mean	**0.00270**	**0.49396**	**2.15666**
%RSD	9.00859	0.13201	0.43885

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:49
SampleId1 : 1111071-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:26:47
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE42

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00030	0.08359	0.00074	0.01362	0.04632	0.00031	-0.00520	46.16468	-0.00073
#2	0.00022	0.09424	0.00063	0.01476	0.04661	0.00035	-0.00623	46.05064	-0.00029
Mean	**-0.00004**	**0.08891**	**0.00068**	**0.01419**	**0.04647**	**0.00033**	**-0.00572**	**46.10766**	**-0.00051**
%RSD	974.59645	8.47222	10.87236	5.70246	0.44386	10.02456	12.84175	0.17488	60.56103

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00110	-0.00051	0.00524	0.07713	1.49739	0.00423	12.84188	0.02590	0.01038
#2	-0.00048	-0.00045	0.00561	0.08046	1.50189	0.00433	12.84098	0.02617	0.01022
Mean	**-0.00079**	**-0.00048**	**0.00543**	**0.07879**	**1.49964**	**0.00428**	**12.84143**	**0.02604**	**0.01030**
%RSD	55.62614	8.97204	4.71099	2.99000	0.21223	1.62822	0.00497	0.74923	1.12411

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.47435	-0.00062	0.17048	-0.00246	-0.00136	10.45367	-0.00480	-0.00565	-0.00040
#2	8.47917	-0.00082	0.16115	0.00068	-0.00303	10.43446	-0.00272	-0.00211	-0.00235
Mean	**8.47676**	**-0.00072**	**0.16581**	**-0.00089**	**-0.00220**	**10.44407**	**-0.00376**	**-0.00388**	**-0.00137**
%RSD	0.04025	19.88749	3.98129	250.57665	53.97612	0.13006	39.11739	64.44930	100.76174

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.20127	-0.00162	0.13432	-0.00929	-0.00133	0.00207	-0.03232	-0.00049	0.01724

#2	3.19099	0.00084	0.13377	-0.01183	-0.00098	0.00138	-0.02957	-0.00008	0.01859
Mean	**3.19613**	**-0.00039**	**0.13405**	**-0.01056**	**-0.00116**	**0.00173**	**-0.03095**	**-0.00028**	**0.01792**
%RSD	0.22750	442.54713	0.28737	17.01454	21.29761	28.58635	6.26967	102.64373	5.30698

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00051	-0.00172	-0.00214
#2	-0.00040	-0.00180	-0.00227
Mean	**-0.00045**	**-0.00176**	**-0.00221**
%RSD	17.36842	2.92187	4.14513

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:49
SampleId1 : 1111071-1D **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:28:39
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE43

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00045	0.09186	-0.00337	0.01293	0.04553	0.00044	-0.00520	45.20002	-0.00032
#2	-0.00082	0.08763	-0.00432	0.01316	0.04532	0.00039	-0.00433	45.14679	-0.00062
Mean	**-0.00063**	**0.08974**	**-0.00384**	**0.01305**	**0.04543**	**0.00042**	**-0.00476**	**45.17341**	**-0.00047**
%RSD	40.54939	3.32654	17.43681	1.24053	0.32431	8.02560	12.86798	0.08331	44.69575

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00089	-0.00127	0.00461	0.07618	1.45813	0.00406	12.61407	0.02526	0.00923
#2	-0.00034	-0.00089	0.00497	0.07820	1.44688	0.00407	12.60595	0.02535	0.01046
Mean	**-0.00062**	**-0.00108**	**0.00479**	**0.07719**	**1.45251**	**0.00406**	**12.61001**	**0.02530**	**0.00985**
%RSD	63.17839	24.80827	5.39686	1.85311	0.54774	0.06125	0.04553	0.25700	8.81623

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.38217	-0.00099	0.15773	-0.00092	-0.00020	10.18156	-0.00554	-0.00766	-0.00048
#2	8.30494	-0.00055	0.16798	-0.00380	0.00019	10.21357	-0.00149	-0.00401	-0.00133
Mean	**8.34356**	**-0.00077**	**0.16285**	**-0.00236**	**0.00000**	**10.19756**	**-0.00351**	**-0.00584**	**-0.00091**
%RSD	0.65456	40.25885	4.44906	86.18478	8367.17568	0.22196	81.49062	44.30083	66.43167

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.14252	0.00084	0.13227	-0.00591	-0.00128	-0.00323	-0.03300	-0.00065	0.01825
#2	3.12921	-0.00285	0.13176	-0.00712	-0.00134	-0.00003	-0.03575	-0.00061	0.01724
Mean	**3.13586**	**-0.00101**	**0.13201**	**-0.00651**	**-0.00131**	**-0.00163**	**-0.03438**	**-0.00063**	**0.01775**
%RSD	0.30019	258.89424	0.27316	13.19519	3.22134	138.94018	5.65132	4.63337	4.01793

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00074	-0.00044	-0.00287
#2	-0.00061	-0.00114	-0.00222

Mean	**-0.00068**	**-0.00079**	**-0.00255UNDGREEN**
%RSD	13.92172	62.62354	18.02978

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:49
SampleId1 : 1111071-1L 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:30:30
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE44

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00030	0.02888	0.00084	-0.00317	0.00812	0.00040	-0.00071	8.94272	-0.00087
#2	-0.00014	0.03440	-0.00653	-0.00309	0.00812	0.00036	0.00034	8.95295	-0.00084
Mean	**-0.00022**	**0.03164**	**-0.00284**	**-0.00313**	**0.00812**	**0.00038**	**-0.00019**	**8.94783**	**-0.00085**
%RSD	50.55348	12.33292	183.35201	1.72487	0.00000	7.26101	396.17103	0.08085	2.60310

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00046	-0.00105	-0.00057	0.00278	0.00683	-0.00104	2.47734	0.00448	-0.00034
#2	-0.00053	-0.00114	-0.00012	0.00195	0.00733	-0.00105	2.47869	0.00448	0.00105
Mean	**-0.00049**	**-0.00109**	**-0.00035**	**0.00236**	**0.00708**	**-0.00104**	**2.47801**	**0.00448**	**0.00035**
%RSD	9.93424	6.08310	93.00655	24.90202	4.98486	0.71527	0.03837	0.00000	278.80628

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.34532	-0.00110	0.02185	-0.00106	-0.00189	2.00026	-0.00133	-0.00261	-0.00143
#2	1.33904	-0.00157	0.02094	-0.00202	-0.00184	2.00026	-0.00401	0.00206	0.00112
Mean	**1.34218**	**-0.00133**	**0.02139**	**-0.00154**	**-0.00186**	**2.00026**	**-0.00267**	**-0.00027**	**-0.00015**
%RSD	0.33052	25.16823	3.00794	44.39032	1.69391	0.00000	70.89975	1204.14197	1167.65672

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.61211	0.00207	0.02511	0.00014	-0.00288	-0.00446	-0.03227	-0.00062	0.00178
#2	0.60946	-0.00531	0.02514	0.00116	-0.00266	-0.00796	-0.03227	-0.00087	0.00346
Mean	**0.61078**	**-0.00162**	**0.02512**	**0.00065**	**-0.00277**	**-0.00621**	**-0.03227**	**-0.00075**	**0.00262**
%RSD	0.30658	321.92031	0.09765	110.87445	5.58165	39.84075	0.00124	23.24728	45.32359

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00039	-0.00161	-0.00182
#2	-0.00049	-0.00190	0.00144
Mean	**-0.00044**	**-0.00175**	**-0.00019**
%RSD	14.59883	11.75546	1184.78034

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:49
SampleId1 : 1111071-1MS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:32:21
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE45

Final concentrations**56:08** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09139	2.26837	2.05728	0.53135	2.09869	0.04901	-0.00274	83.67262	0.04744
#2	0.09153	2.25812	2.05837	0.53250	2.09382	0.04893	-0.00117	83.63309	0.04797
Mean	**0.09146**	**2.26324**	**2.05783**	**0.53192**	**2.09625**	**0.04897**	**-0.00195**	**83.65286**	**0.04770**
%RSD	0.11474	0.32033	0.03727	0.15242	0.16420	0.11758	56.69138	0.03341	0.78330

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47597	0.18772	0.26664	1.04158	40.84444	0.53417	51.41585	0.50418	0.98107
#2	0.47396	0.18819	0.26763	1.04146	40.83524	0.53392	51.42647	0.50473	0.97498
Mean	**0.47496**	**0.18795**	**0.26713**	**1.04152**	**40.83984**	**0.53405**	**51.42116**	**0.50446**	**0.97803**
%RSD	0.29950	0.17487	0.26239	0.00814	0.01593	0.03264	0.01460	0.07788	0.44072

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.06613	0.49222	0.16638	0.49340	0.49468	10.41845	0.49761	2.20432	2.16386
#2	48.14393	0.49226	0.17435	0.49863	0.49750	10.37363	0.49594	2.18276	2.16899
Mean	**48.10503**	**0.49224**	**0.17037**	**0.49601**	**0.49609**	**10.39604**	**0.49677**	**2.19354**	**2.16643**
%RSD	0.11436	0.00488	3.30790	0.74624	0.40260	0.30487	0.23728	0.69498	0.16767

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.21016	0.51950	0.64244	-0.01804	0.47669	2.14374	-0.04602	0.48486	0.48685
#2	5.21699	0.52074	0.64067	-0.01781	0.47673	2.12792	-0.03435	0.48490	0.48752
Mean	**5.21358**	**0.52012**	**0.64155**	**-0.01792**	**0.47671**	**2.13583**	**-0.04018**	**0.48488**	**0.48719**
%RSD	0.09265	0.16747	0.19495	0.92179	0.00591	0.52368	20.53781	0.00599	0.09800

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00042	0.49425	2.17733
#2	0.00047	0.49788	2.17358
Mean	**0.00044**	**0.49606**	**2.17546**
%RSD	7.97972	0.51702	0.12198

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:50
SampleId1 : 1111071-1MSD **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:34:14
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE46

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09138	2.28602	2.08017	0.53678	2.12171	0.04942	0.00058	84.54176	0.04829
#2	0.09133	2.28763	2.06455	0.53663	2.11910	0.04926	-0.00133	84.19548	0.04748
Mean	**0.09135**	**2.28682**	**2.07236**	**0.53670**	**2.12040**	**0.04934**	**-0.00038**	**84.36862**	**0.04789**
%RSD	0.03502	0.04985	0.53300	0.02014	0.08689	0.22912	359.09524	0.29022	1.19835

ted: 11/21/2011 12:56:08 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47778	0.19108	0.26972	1.04901	41.22852	0.53955	51.86972	0.51038	0.99714
#2	0.47751	0.18973	0.26937	1.04746	41.13176	0.53887	51.79306	0.50909	0.99005
Mean	**0.47765**	**0.19040**	**0.26954**	**1.04824**	**41.18014**	**0.53921**	**51.83139**	**0.50973**	**0.99360**
%RSD	0.04122	0.49958	0.09347	0.10513	0.16615	0.09015	0.10457	0.17985	0.50421

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.60118	0.49756	0.17139	0.49877	0.49688	10.50170	0.49548	2.21434	2.17318
#2	48.53307	0.49620	0.16342	0.49843	0.49254	10.43446	0.50324	2.21074	2.17727
Mean	**48.56713**	**0.49688**	**0.16741**	**0.49860**	**0.49471**	**10.46808**	**0.49936**	**2.21254**	**2.17522**
%RSD	0.09916	0.19349	3.36633	0.04877	0.62097	0.45418	1.09864	0.11514	0.13304

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.26418	0.52771	0.64937	-0.03273	0.48268	2.15675	-0.03641	0.49127	0.49326
#2	5.25589	0.52073	0.64835	-0.03565	0.48185	2.14415	-0.04602	0.49012	0.48955
Mean	**5.26004**	**0.52422**	**0.64886**	**-0.03419**	**0.48227**	**2.15045**	**-0.04122**	**0.49069**	**0.49141**
%RSD	0.11142	0.94153	0.11107	6.04872	0.12114	0.41450	16.48709	0.16575	0.53439

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00091	0.49751	2.18688
#2	0.00083	0.49450	2.18841
Mean	**0.00087**	**0.49600**	**2.18765**
%RSD	6.12175	0.42943	0.04945

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:50
SampleId1 : 1111104-1 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:36:05
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE47

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00017	0.00559	-0.00116	5.10701	0.29847	0.00022	-0.00036	28.18384	-0.00072
#2	-0.00060	0.00318	-0.00053	5.10313	0.29893	0.00019	0.00501	28.18203	-0.00050
Mean	**-0.00022**	**0.00438**	**-0.00084**	**5.10507**	**0.29870**	**0.00020**	**0.00233**	**28.18293**	**-0.00061**
%RSD	251.75523	38.76227	53.05754	0.05385	0.10884	10.29310	163.27484	0.00454	26.13731

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00040	-0.00080	-0.00094	2.30603	21.17425	2.02594	4.80727	0.07539	-0.00042
#2	-0.00101	-0.00123	-0.00129	2.30676	21.15270	2.02174	4.79470	0.07530	-0.00133
Mean	**-0.00071**	**-0.00101**	**-0.00111**	**2.30640**	**21.16347**	**2.02384**	**4.80099**	**0.07534**	**-0.00087**
%RSD	61.99198	29.88291	22.04709	0.02226	0.07199	0.14670	0.18512	0.08637	72.77138

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	426.34039	-0.00150	-0.57618	0.00130	-0.00036	1.83501	-0.00281	-0.00123	-0.00054
#2	425.82418	-0.00144	-0.73300	0.00132	-0.00094	1.84454	-0.00428	-0.00239	0.00159
Mean	**426.08228**	**-0.00147**	**-0.65459**	**0.00131**	**-0.00065**	**1.83978**	**-0.00354**	**-0.00181**	**0.00052**
%RSD	0.08567	3.26357	16.94112	1.07357	63.33913	0.36640	29.39471	45.00702	286.95204

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.99238	-0.00694	12.33488	-0.00307	-0.00271	0.00432	-0.02628	-0.00030	0.00178
#2	1.98937	-0.00121	12.33739	-0.00344	-0.00275	0.00130	-0.04688	-0.00116	0.00145
Mean	**1.99087**	**-0.00408**	**12.33614**	**-0.00326**	**-0.00273**	**0.00281**	**-0.03658**	**-0.00073**	**0.00161**
%RSD	0.10698	99.45211	0.01437	8.04319	1.02962	75.81310	39.81182	83.20324	14.72925

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00058	0.00019	-0.00077
#2	-0.00070	-0.00019	0.00027
Mean	**-0.00064**	**0.00000**	**-0.00025**
%RSD	13.40291	38411.36179	290.19384

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:50
SampleId1 : 1111170-1 SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 19:38:30
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE48

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00050	0.00848	-0.00179	0.05779	0.02545	0.00027	0.00154	16.14260	-0.00110
#2	-0.00050	0.00578	-0.00632	0.05657	0.02541	0.00026	-0.00140	16.05150	-0.00116
Mean	**-0.00050**	**0.00713**	**-0.00405**	**0.05718**	**0.02543**	**0.00027**	**0.00007**	**16.09705**	**-0.00113**
%RSD	0.33074	26.78132	78.98162	1.50965	0.11585	2.16363	2973.31597	0.40017	4.03285

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00071	-0.00111	-0.00157	0.18367	12.02878	-0.00133	7.54341	0.10236	-0.00083
#2	-0.00105	-0.00133	-0.00112	0.18439	11.99202	-0.00139	7.52723	0.10181	-0.00010
Mean	**-0.00088**	**-0.00122**	**-0.00134**	**0.18403**	**12.01040**	**-0.00136**	**7.53532**	**0.10208**	**-0.00047**
%RSD	27.60115	12.82269	23.86562	0.27456	0.21643	3.10156	0.15190	0.38261	111.87438

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.75440	-0.00066	0.02139	-0.00319	0.00099	12.68425	-0.00526	-0.00011	-0.00250
#2	3.73569	-0.00049	0.03459	-0.00029	0.00112	12.62971	-0.00268	-0.00478	0.00014
Mean	**3.74505**	**-0.00057**	**0.02799**	**-0.00174**	**0.00105**	**12.65698**	**-0.00397**	**-0.00244**	**-0.00118**
%RSD	0.35338	21.00334	33.33557	118.09920	8.53782	0.30466	46.00533	135.01210	157.88884

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.87676	-0.00203	0.04774	-0.00268	-0.00285	0.00103	-0.03788	-0.00051	0.02128
#2	5.85204	-0.00408	0.04746	-0.00477	-0.00286	-0.00397	-0.03582	-0.00075	0.02027
Mean	**5.86440**	**-0.00305**	**0.04760**	**-0.00373**	**-0.00285**	**-0.00147**	**-0.03685**	**-0.00063**	**0.02077**
%RSD	0.29807	47.43263	0.41246	39.61006	0.24620	240.11494	3.95085	27.53194	3.43285

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00155	-0.00040	-0.00171
#2	-0.00132	0.00065	-0.00150
Mean	**-0.00143**	**0.00012**	**-0.00160**
%RSD	11.37045	597.03666	9.15426

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:50
SampleId1 : 1111171-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:40:21
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE49

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00086	0.10728	-0.00632	0.05733	0.04682	0.00024	-0.00452	44.42897	-0.00053
#2	-0.00065	0.11030	-0.00211	0.05672	0.04695	0.00022	-0.00417	44.38446	-0.00077
Mean	**-0.00076**	**0.10879**	**-0.00421**	**0.05703**	**0.04688**	**0.00023**	**-0.00434**	**44.40672**	**-0.00065**
%RSD	19.99562	1.95803	70.71565	0.75685	0.18854	5.97353	5.59405	0.07087	25.90900

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00062	-0.00092	-0.00002	0.15212	2.38459	-0.00085	18.46764	0.03243	-0.00042
#2	-0.00089	-0.00141	-0.00020	0.15307	2.38884	-0.00087	18.52377	0.03243	0.00080
Mean	**-0.00076**	**-0.00117**	**-0.00011**	**0.15259**	**2.38672**	**-0.00086**	**18.49571**	**0.03243**	**0.00019**
%RSD	25.67623	30.20583	114.81669	0.44138	0.12609	1.73824	0.21460	0.00000	458.85656

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	55.04524	-0.00106	0.06599	-0.00215	0.00221	34.73662	-0.00452	-0.00781	-0.00328
#2	55.21191	-0.00103	0.05666	0.00040	-0.00015	34.81507	-0.00561	-0.00327	0.00064
Mean	**55.12858**	**-0.00105**	**0.06133**	**-0.00088**	**0.00103**	**34.77585**	**-0.00506**	**-0.00554**	**-0.00132**
%RSD	0.21378	2.29333	10.75785	205.19357	161.57729	0.15951	15.17500	57.91221	210.44921

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	6.50976	-0.00203	0.09880	-0.01615	0.00074	-0.00040	-0.04129	0.00030	0.01657
#2	6.53427	-0.00244	0.09916	-0.01811	0.00038	0.00360	-0.04885	-0.00031	0.01691
Mean	**6.52201**	**-0.00224**	**0.09898**	**-0.01713**	**0.00056**	**0.00160**	**-0.04507**	**0.00000**	**0.01674**
%RSD	0.26571	12.92938	0.25649	8.08595	45.21796	176.79369	11.84912	21162.24705	1.41998

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	-0.00071	0.00075	-0.00478**UNDGREEN**
#2	-0.00075	0.00003	-0.00066
Mean	**-0.00073**	**0.00039**	**-0.00272**
%RSD	3.64679	129.22323	107.12087

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:50
SampleId1 : 1111173-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:42:13
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE50

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00064	0.01531	-0.00084	0.01102	0.04749	0.00021	-0.00401	37.55356	-0.00097
#2	-0.00076	0.01233	-0.00706	0.01163	0.04728	0.00013	0.00033	37.50859	-0.00062
Mean	**-0.00070**	**0.01382**	**-0.00395**	**0.01133**	**0.04738**	**0.00017**	**-0.00184**	**37.53107**	**-0.00080**
%RSD	12.41511	15.24945	111.26134	3.80927	0.31092	31.58029	166.81933	0.08472	30.88091

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00123	-0.00135	-0.00128	-0.01292	1.76674	0.00311	9.47857	-0.00049	-0.00042
#2	-0.00068	-0.00127	-0.00166	-0.01232	1.75423	0.00310	9.44571	-0.00058	-0.00018
Mean	**-0.00095**	**-0.00131**	**-0.00147**	**-0.01262**	**1.76049**	**0.00310**	**9.46214**	**-0.00053**	**-0.00030**
%RSD	40.75586	4.35816	18.40825	3.33138	0.50234	0.24066	0.24559	12.16237	57.51192

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	17.14794	-0.00086	-0.02274	-0.00391	-0.00040	8.75160	-0.00194	-0.00338	0.00078
#2	16.99280	-0.00018	-0.02319	-0.00178	0.00000	8.79316	-0.00145	0.00913	0.00052
Mean	**17.07037**	**-0.00052**	**-0.02297**	**-0.00284**	**-0.00020**	**8.77238**	**-0.00170**	**0.00287**	**0.00065**
%RSD	0.64266	92.23222	1.40064	53.06871	143.30956	0.33501	20.45284	308.00708	27.75905

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	11.14099	-0.00162	0.13336	-0.00587	-0.00329	0.00092	-0.05697	-0.00083	0.00111
#2	11.07505	-0.00613	0.13258	-0.00718	-0.00297	-0.00247	-0.03157	0.00007	0.00145
Mean	**11.10802**	**-0.00387**	**0.13297**	**-0.00653**	**-0.00313**	**-0.00078**	**-0.04427**	**-0.00038**	**0.00128**
%RSD	0.41979	82.28943	0.41297	14.24960	7.19003	308.28566	40.57139	166.70263	18.60459

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00237	-0.00157	-0.00061
#2	-0.00218	-0.00059	0.00339
Mean	**-0.00228**	**-0.00108**	**0.00139**
%RSD	5.85152	64.24014	203.09744

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:50
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 19:44:55

Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19873	52.90390	0.50918	1.01672	1.03318	0.47756	0.53876	47.71474	0.49616
#2	0.19827	52.78439	0.51130	1.01748	1.02955	0.47736	0.53771	47.83868	0.49988
Mean	**0.19850**	**52.84415**	**0.51024**	**1.01710**	**1.03137**	**0.47746**	**0.53823**	**47.77671**	**0.49802**
%RSD	0.16373	0.15992	0.29407	0.05324	0.24863	0.03002	0.13799	0.18344	0.52830

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48109	0.96421	1.04718	19.78739	49.34904	0.52585	50.43833	0.96665	0.97951
#2	0.48040	0.96724	1.04455	19.79093	49.18789	0.52361	50.41296	0.96805	0.98124
Mean	**0.48074**	**0.96572**	**1.04586**	**19.78916**	**49.26846**	**0.52473**	**50.42565**	**0.96735**	**0.98037**
%RSD	0.10220	0.22207	0.17805	0.01263	0.23128	0.30143	0.03558	0.10220	0.12477

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.24196	0.98016	5.06047	0.99039	0.99597	5.24345	0.50269	1.05023	1.03822
#2	49.11716	0.98040	5.06913	0.99177	0.99040	5.26894	0.50119	1.04806	1.03882
Mean	**49.17956**	**0.98028**	**5.06480**	**0.99108**	**0.99319**	**5.25620**	**0.50194**	**1.04914**	**1.03852**
%RSD	0.17944	0.01721	0.12089	0.09808	0.39620	0.34302	0.21183	0.14637	0.04109

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.02360	1.05401	0.50676	0.31049	0.48661	0.52925	4.98947	0.48410	0.93848
#2	5.02540	1.04907	0.50562	0.30708	0.48584	0.52574	4.97915	0.48094	0.94865
Mean	**5.02450**	**1.05154**	**0.50619**	**0.30878**	**0.48622**	**0.52750**	**4.98431**	**0.48252**	**0.94357**
%RSD	0.02540	0.33215	0.15991	0.77931	0.11292	0.47053	0.14642	0.46328	0.76217

	Zr	Pb	Se
	ppm	calc	calc
#1	0.98716	0.99411	1.04222
#2	0.98604	0.99086	1.04190
Mean	**0.98660**	**0.99248**	**1.04206**
%RSD	0.08033	0.23184	0.02176

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:51
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 19:46:53
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00030	0.03253	0.00305	-0.00423	-0.00075	0.00030	-0.00210	-0.04821	-0.00043
#2	-0.00051	0.02619	0.00169	-0.00530	-0.00083	0.00030	-0.00210	-0.05425	-0.00063

Mean	**-0.00041**	**0.02936**	**0.00237**	**-0.00477**	**-0.00079**	**0.00030**	**-0.00210**	**-0.05123**	**-0.00053**
%RSD	36.61239	15.26155	40.84892	15.84041	7.42943	0.74290	0.03217	8.34493	27.01912

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00123	-0.00083	-0.00130	0.00421	-0.24218	-0.00182	-0.03140	-0.00030	-0.00034
#2	-0.00040	-0.00067	-0.00130	0.00183	-0.24817	-0.00185	-0.03766	-0.00040	-0.00173
Mean	**-0.00081**	**-0.00075**	**-0.00130**	**0.00302**	**-0.24517**	**-0.00183**	**-0.03453**	**-0.00035**	**-0.00104**
%RSD	71.62106	14.63363	0.14508	55.72857	1.72677	1.08772	12.83166	18.54036	94.73781

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.16039	-0.00299	-0.00545	-0.00169	0.00164	-0.03512	-0.00648	0.00496	0.00240
#2	-0.16481	-0.00157	-0.01137	-0.00361	0.00017	-0.04147	-0.00319	-0.00286	-0.00152
Mean	**-0.16260**	**-0.00228**	**-0.00841**	**-0.00265**	**0.00091**	**-0.03829**	**-0.00483**	**0.00105**	**0.00044**
%RSD	1.92171	44.10653	49.73820	51.04393	114.41815	11.71577	48.18133	526.15087	627.41200

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01851	0.00125	-0.00162	-0.00309	-0.00285	0.00024	-0.03364	-0.00103	0.00010
#2	-0.01877	-0.00367	-0.00168	0.00273	-0.00282	0.00364	-0.03021	-0.00124	0.00010
Mean	**-0.01864**	**-0.00121**	**-0.00165**	**-0.00018**	**-0.00283**	**0.00194**	**-0.03192**	**-0.00114**	**0.00010**
%RSD	0.99912	287.27450	2.47302	2283.96733	0.74379	124.11025	7.60681	12.76523	0.00000

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00055	0.00053	0.00325
#2	0.00027	-0.00109	-0.00196
Mean	**0.00041**	**-0.00028**	**0.00064**
%RSD	48.36987	409.76829	572.43510

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:51
SampleId1 : 1111174-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:48:49
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE51

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	0.03814	-0.00074	0.04078	0.04136	0.00035	-0.00123	78.16596	-0.00076
#2	-0.00045	0.04144	-0.00432	0.04001	0.04140	0.00034	-0.00002	78.24508	-0.00074
Mean	**-0.00073**	**0.03979**	**-0.00253**	**0.04040**	**0.04138**	**0.00035**	**-0.00063**	**78.20552**	**-0.00075**
%RSD	54.80166	5.87087	100.18815	1.33551	0.07119	1.55839	137.48620	0.07154	2.31300

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00076	-0.00126	-0.00111	-0.01256	0.37901	0.00069	25.72238	-0.00067	-0.00141
#2	-0.00096	-0.00129	-0.00084	-0.01256	0.38100	0.00066	25.74193	-0.00076	-0.00075
Mean	**-0.00086**	**-0.00128**	**-0.00097**	**-0.01256**	**0.38000**	**0.00067**	**25.73215**	**-0.00072**	**-0.00108**

%RSD	17.00601	1.84070	19.64453	0.00000	0.37168	2.58578	0.05373	9.04934	42.89224

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.40280	-0.00299	0.00160	-0.00156	0.00199	8.66848	-0.00563	0.00369	0.00155
#2	3.40440	-0.00160	-0.00750	-0.00101	-0.00102	8.61733	-0.00403	0.00609	-0.00212
Mean	**3.40360**	**-0.00230**	**-0.00295**	**-0.00129**	**0.00049**	**8.64291**	**-0.00483**	**0.00489**	**-0.00029**
%RSD	0.03319	42.73900	218.20657	30.15780	435.27256	0.41846	23.40388	34.70312	907.71162

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.89984	-0.00449	0.09769	-0.02014	-0.00315	-0.00128	-0.04667	-0.00046	0.00716
#2	5.90914	-0.00285	0.09775	-0.01990	-0.00309	0.00012	-0.04324	0.00035	0.00514
Mean	**5.90449**	**-0.00367**	**0.09772**	**-0.02002**	**-0.00312**	**-0.00058**	**-0.04496**	**-0.00005**	**0.00615**
%RSD	0.11138	31.59048	0.04190	0.84238	1.35243	171.70869	5.39897	1061.16576	23.18354

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00004	0.00081	0.00226
#2	0.00047	-0.00102	0.00062
Mean	**0.00022**	**-0.00010**	**0.00144**
%RSD	167.86248	1246.52165	80.83350

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:51
SampleId1 : 1111180-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:50:45
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE52

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00051	0.01921	0.00421	0.06855	0.12219	0.00041	-0.00071	152.43201	-0.00106
#2	-0.00092	0.01812	-0.00158	0.06893	0.12282	0.00041	-0.00782	152.19643	-0.00072
Mean	**-0.00072**	**0.01867**	**0.00132**	**0.06874**	**0.12251**	**0.00041**	**-0.00426**	**152.31422**	**-0.00089**
%RSD	41.04489	4.12774	311.02229	0.39245	0.36110	0.50610	117.98623	0.10937	27.41467

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00078	-0.00095	0.00006	0.38462	2.31224	0.00315	59.01447	0.37586	-0.00108
#2	-0.00009	-0.00142	0.00034	0.38509	2.30648	0.00315	58.99778	0.37623	-0.00051
Mean	**-0.00043**	**-0.00119**	**0.00020**	**0.38485**	**2.30936**	**0.00315**	**59.00613**	**0.37605**	**-0.00079**
%RSD	112.15828	27.85185	96.92040	0.08766	0.17628	0.07897	0.02000	0.06952	51.08886

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	19.56821	-0.00005	0.01298	-0.00001	-0.00074	46.56425	-0.00159	0.00757	-0.00076
#2	19.53262	0.00046	0.00888	-0.00388	-0.00082	46.71939	-0.00537	0.00024	0.00163
Mean	**19.55042**	**0.00021**	**0.01093**	**-0.00194**	**-0.00078**	**46.64182**	**-0.00348**	**0.00390**	**0.00043**
%RSD	0.12870	171.99438	26.49650	140.59775	7.28806	0.23519	76.96223	132.60673	388.75658

ted: 11/21/2011 12:56:08 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.27424	0.00453	0.41008	-0.02502	-0.00333	0.00026	-0.03253	-0.00043	0.02060
#2	8.26120	0.00002	0.41144	-0.03470	-0.00357	-0.00224	-0.03871	-0.00084	0.01926
Mean	**8.26772**	**0.00227**	**0.41076**	**-0.02986**	**-0.00345**	**-0.00099**	**-0.03562**	**-0.00063**	**0.01993**
%RSD	0.11148	140.18997	0.23480	22.91917	4.89480	178.85700	12.26752	45.75843	4.77007

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00000	-0.00049	0.00201
#2	0.00060	-0.00184	0.00117
Mean	**0.00030**	**-0.00117**	**0.00159**
%RSD	140.37043	81.35386	37.69632

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:51
SampleId1 : 1111181-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:52:38
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE53

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00076	0.02862	-0.00042	0.00248	0.05324	0.00044	-0.00104	56.95429	-0.00113
#2	-0.00097	0.02924	-0.00358	0.00179	0.05328	0.00043	-0.00486	57.03615	-0.00114
Mean	**-0.00086**	**0.02893**	**-0.00200**	**0.00214**	**0.05326**	**0.00044**	**-0.00295**	**56.99522**	**-0.00114**
%RSD	17.36574	1.50216	111.66981	22.72417	0.05533	1.67850	91.41645	0.10156	1.03170

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00095	-0.00158	0.00416	-0.00983	0.06747	0.00057	25.54734	0.00015	-0.00108
#2	-0.00074	-0.00195	0.00334	-0.01101	0.06922	0.00056	25.64554	-0.00003	-0.00206
Mean	**-0.00084**	**-0.00176**	**0.00375**	**-0.01042**	**0.06835**	**0.00056**	**25.59644**	**0.00006**	**-0.00157**
%RSD	17.36363	15.20070	15.50560	8.06956	1.80742	1.32234	0.27128	206.11378	44.22049

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	41.79968	-0.00225	0.01593	-0.00002	-0.00110	26.75544	-0.00476	0.00824	0.00129
#2	42.03301	-0.00184	0.01480	-0.00198	0.00095	26.87557	-0.00562	0.00307	0.00138
Mean	**41.91635**	**-0.00205**	**0.01536**	**-0.00100**	**-0.00008**	**26.81550**	**-0.00519**	**0.00565**	**0.00133**
%RSD	0.39362	14.06397	5.23514	138.06732	1909.20683	0.31679	11.72961	64.66395	4.49993

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.43864	0.00452	0.10687	-0.01584	-0.00291	0.00523	-0.04187	-0.00104	0.00750
#2	8.48980	-0.00039	0.10734	-0.01756	-0.00307	-0.00237	-0.03638	-0.00083	0.00783
Mean	**8.46422**	**0.00207**	**0.10710**	**-0.01670**	**-0.00299**	**0.00143**	**-0.03912**	**-0.00093**	**0.00766**
%RSD	0.42745	168.12954	0.31357	7.29651	3.76239	376.23405	9.92798	15.47387	3.10136

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	-0.00101	-0.00074	0.00360
#2	-0.00107	-0.00002	0.00194
Mean	**-0.00104**	**-0.00038**	**0.00277**
%RSD	3.92535	132.26020	42.46733

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:51
SampleId1 : 1111182-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:54:39
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE54

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00076	0.03841	-0.00242	0.00889	0.03861	0.00055	-0.00763	69.61706	-0.00073
#2	-0.00087	0.03891	-0.00632	0.00797	0.03857	0.00047	-0.00191	70.03799	-0.00103
Mean	**-0.00082**	**0.03866**	**-0.00437**	**0.00843**	**0.03859**	**0.00051**	**-0.00477**	**69.82752**	**-0.00088**
%RSD	9.10490	0.90927	63.04731	7.67874	0.07634	10.97896	84.84327	0.42625	23.93955

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00124	-0.00161	0.00488	-0.01030	1.06718	0.00305	24.10680	0.00245	-0.00100
#2	-0.00090	-0.00073	0.00470	-0.00959	1.06968	0.00304	24.12361	0.00255	-0.00214
Mean	**-0.00107**	**-0.00117**	**0.00479**	**-0.00994**	**1.06843**	**0.00304**	**24.11521**	**0.00250**	**-0.00157**
%RSD	22.75283	53.03251	2.69754	5.07334	0.16539	0.40899	0.04928	2.60103	51.59058

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	23.82392	-0.00167	0.03800	-0.00600	-0.00072	14.64596	-0.00060	-0.00047	0.00274
#2	23.70693	-0.00188	0.04506	0.00158	0.00009	14.66846	-0.00123	-0.00084	-0.00135
Mean	**23.76543**	**-0.00177**	**0.04153**	**-0.00221**	**-0.00031**	**14.65721**	**-0.00091**	**-0.00065**	**0.00069**
%RSD	0.34808	8.10694	12.01007	242.18316	183.20224	0.10852	48.82539	40.77962	416.18860

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.65367	-0.00080	0.18496	-0.01732	-0.00311	0.00133	-0.03706	-0.00071	0.00447
#2	7.65763	0.00084	0.18436	-0.01600	-0.00310	0.00093	-0.03569	-0.00030	0.00447
Mean	**7.65565**	**0.00002**	**0.18466**	**-0.01666**	**-0.00310**	**0.00113**	**-0.03638**	**-0.00050**	**0.00447**
%RSD	0.03653	6017.96528	0.23104	5.59194	0.22649	24.98136	2.66800	57.41285	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00073	-0.00248	0.00167
#2	-0.00082	0.00059	-0.00118
Mean	**-0.00077**	**-0.00095**	**0.00025**
%RSD	7.76657	229.12536	822.05413

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:52

SampleId1 : 1111183-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:56:30
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE55

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	0.02280	0.00232	0.08763	0.06362	0.00057	-0.00401	98.75867	-0.00082
#2	-0.00019	0.02465	-0.00432	0.08763	0.06362	0.00052	-0.00106	99.20993	-0.00028
Mean	**-0.00061**	**0.02373**	**-0.00100**	**0.08763**	**0.06362**	**0.00054**	**-0.00253**	**98.98430**	**-0.00055**
%RSD	96.09707	5.51386	469.14280	0.00000	0.00000	7.05847	82.41308	0.32236	69.68969

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00127	-0.00157	-0.00083	0.03894	0.78134	0.00302	45.39307	0.00061	0.00097
#2	-0.00072	-0.00095	-0.00103	0.04001	0.77859	0.00302	45.41745	0.00080	-0.00263
Mean	**-0.00100**	**-0.00126**	**-0.00093**	**0.03947**	**0.77997**	**0.00302**	**45.40526**	**0.00071**	**-0.00083**
%RSD	38.94782	34.69944	14.83029	1.91786	0.24912	0.08237	0.03797	18.39964	305.37427

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.55712	-0.00137	0.01070	-0.00373	0.00182	10.62338	-0.00266	0.00595	0.00156
#2	10.50444	-0.00160	-0.00409	-0.00007	-0.00081	10.61377	-0.00172	0.00508	0.00377
Mean	**10.53078**	**-0.00149**	**0.00331**	**-0.00190**	**0.00051**	**10.61857**	**-0.00219**	**0.00552**	**0.00266**
%RSD	0.35373	11.29220	316.14500	136.15787	368.50936	0.06397	30.40080	11.15221	58.78696

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.72365	0.00084	0.17518	-0.03767	-0.00369	0.00264	-0.05152	0.00057	0.11410
#2	8.72463	0.00002	0.17497	-0.03476	-0.00347	-0.00185	-0.03504	0.00081	0.11814
Mean	**8.72414**	**0.00043**	**0.17508**	**-0.03621**	**-0.00358**	**0.00040**	**-0.04328**	**0.00069**	**0.11612**
%RSD	0.00798	134.94275	0.08434	5.67762	4.51504	803.36358	26.92046	25.10510	2.45868

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00005	-0.00003	0.00302
#2	0.00022	-0.00057	0.00421
Mean	**0.00014**	**-0.00030**	**0.00361**
%RSD	86.50080	128.81299	23.23670

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:52
SampleId1 : 1111207-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 19:58:22
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE56

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	0.00001	0.02125	-0.00337	0.03193	0.05211	0.00042	0.00215	65.45597	-0.00115
#2	0.00001	0.01655	-0.00569	0.03200	0.05178	0.00038	0.00267	65.36103	-0.00079
Mean	**0.00001**	**0.01890**	**-0.00453**	**0.03196**	**0.05195**	**0.00040**	**0.00241**	**65.40850**	**-0.00097**
%RSD	11.86281	17.58520	36.17958	0.16877	0.45379	5.46355	15.21823	0.10265	26.35120

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00108	-0.00030	0.02860	-0.01042	1.37863	-0.00018	23.25580	-0.00067	-0.00141
#2	-0.00026	-0.00030	0.02796	-0.01113	1.37938	-0.00018	23.16318	-0.00076	-0.00165
Mean	**-0.00067**	**-0.00030**	**0.02828**	**-0.01078**	**1.37900**	**-0.00018**	**23.20949**	**-0.00072**	**-0.00153**
%RSD	86.80724	0.43612	1.58415	4.68145	0.03846	0.00000	0.28216	9.04934	11.35089

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.80511	-0.00164	0.02026	-0.00105	0.00060	7.18932	0.00024	0.00005	-0.00041
#2	4.76826	-0.00106	0.01798	0.00000	0.00017	7.13505	-0.00221	-0.00588	0.00061
Mean	**4.78668**	**-0.00135**	**0.01912**	**-0.00053**	**0.00038**	**7.16218**	**-0.00098**	**-0.00292**	**0.00010**
%RSD	0.54435	30.17780	8.41462	141.50589	78.48776	0.53584	176.16881	143.76318	737.04637

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.82823	-0.00080	0.15044	-0.01451	-0.00311	-0.00167	-0.02539	-0.00030	0.00750
#2	7.79104	-0.00326	0.14986	-0.01558	-0.00296	-0.00007	-0.02883	0.00015	0.00750
Mean	**7.80964**	**-0.00203**	**0.15015**	**-0.01504**	**-0.00303**	**-0.00087**	**-0.02711**	**-0.00007**	**0.00750**
%RSD	0.33673	85.66028	0.27301	5.00874	3.47523	130.43785	8.95246	426.24358	0.00000

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00082	0.00005	-0.00026
#2	-0.00078	0.00011	-0.00155
Mean	**-0.00080**	**0.00008**	**-0.00091**
%RSD	4.29684	58.25953	100.94385

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:52
SampleId1 : 1111209-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:00:16
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE57

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00091	0.02372	-0.00179	0.19249	0.08133	0.00041	-0.00245	85.51046	-0.00131
#2	-0.00025	0.02152	-0.00569	0.19372	0.08137	0.00038	-0.00261	85.49769	-0.00079
Mean	**-0.00058**	**0.02262**	**-0.00374**	**0.19310**	**0.08135**	**0.00040**	**-0.00253**	**85.50407**	**-0.00105**
%RSD	80.67277	6.89520	73.70474	0.44726	0.03623	4.90073	4.66548	0.01056	35.34290

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00097	-0.00141	-0.00056	0.00504	2.75143	0.00235	40.87148	0.03647	-0.00051

#2	-0.00036	-0.00092	-0.00012	0.00563	2.73991	0.00236	40.90956	0.03675	-0.00075
Mean	**-0.00067**	**-0.00117**	**-0.00034**	**0.00534**	**2.74567**	**0.00236**	**40.89052**	**0.03661**	**-0.00063**
%RSD	65.81088	29.76729	91.89889	7.87843	0.29672	0.31688	0.06585	0.53289	27.59082

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	17.95567	-0.00130	0.03505	-0.00424	-0.00092	33.17528	-0.00415	-0.00174	0.00002
#2	17.89771	-0.00103	0.03891	-0.00116	-0.00094	33.06104	-0.00036	0.00357	-0.00067
Mean	**17.92669**	**-0.00116**	**0.03698**	**-0.00270**	**-0.00093**	**33.11816**	**-0.00225**	**0.00092**	**-0.00032**
%RSD	0.22861	16.47630	7.39649	80.50124	1.40427	0.24392	118.91534	410.26623	148.59589

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	6.82453	0.00289	0.19376	-0.02200	-0.00296	-0.00307	-0.05218	-0.00058	0.02229
#2	6.82067	-0.00080	0.19337	-0.02707	-0.00293	0.00084	-0.03227	-0.00026	0.02464
Mean	**6.82260**	**0.00104**	**0.19357**	**-0.02453**	**-0.00294**	**-0.00111**	**-0.04222**	**-0.00042**	**0.02346**
%RSD	0.04000	249.90683	0.13990	14.60821	0.71617	248.90561	33.34096	55.21945	7.09202

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00075	-0.00203	-0.00057
#2	0.00034	-0.00102	0.00075
Mean	**-0.00021**	**-0.00152**	**0.00009**
%RSD	370.34682	47.03444	1048.58995

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:52
SampleId1 : 1111210-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:02:09
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE58

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00071	0.01467	-0.00263	0.04741	0.07016	0.00036	-0.00262	99.45900	-0.00083
#2	-0.00071	0.01196	-0.00474	0.04719	0.07058	0.00030	0.00379	99.38898	-0.00100
Mean	**-0.00071**	**0.01331**	**-0.00369**	**0.04730**	**0.07037**	**0.00033**	**0.00059**	**99.42399**	**-0.00091**
%RSD	0.09669	14.41100	40.40941	0.34218	0.41884	13.62632	773.00774	0.04980	13.66670

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00078	-0.00110	-0.00129	0.02145	7.42980	0.00282	47.81087	0.00126	0.00007
#2	-0.00147	-0.00129	-0.00120	0.02098	7.47088	0.00286	47.96290	0.00144	0.00031
Mean	**-0.00113**	**-0.00120**	**-0.00124**	**0.02121**	**7.45034**	**0.00284**	**47.88688**	**0.00135**	**0.00019**
%RSD	43.12970	11.16749	5.10677	1.58578	0.38989	0.87736	0.22449	9.62968	91.77189

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	31.19407	-0.00072	0.01138	-0.00204	-0.00033	42.39288	-0.00219	-0.00376	0.00351
#2	31.31334	-0.00099	0.00592	-0.00059	-0.00011	42.68895	-0.00390	0.00634	0.00360

Mean	**31.25370**	**-0.00086**	**0.00865**	**-0.00132**	**-0.00022**	**42.54091**	**-0.00304**	**0.00129**	**0.00355**
%RSD	0.26985	22.32978	44.61612	77.99755	68.25979	0.49213	39.75881	553.45161	1.69216

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	6.40850	0.00166	0.19138	-0.03533	-0.00345	-0.00487	-0.04670	-0.00009	0.09089
#2	6.42227	-0.00244	0.19259	-0.03583	-0.00353	-0.00686	-0.04532	-0.00083	0.09021
Mean	**6.41539**	**-0.00039**	**0.19198**	**-0.03558**	**-0.00349**	**-0.00587**	**-0.04601**	**-0.00046**	**0.09055**
%RSD	0.15181	742.82509	0.44453	0.98967	1.61299	24.10713	2.11067	113.93436	0.52536

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00060	-0.00090	0.00109
#2	0.00060	-0.00027	0.00451
Mean	**0.00060**	**-0.00059**	**0.00280**
%RSD	0.33920	75.54550	86.30548

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:52
SampleId1 : 1111232-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:04:01
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE59

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00028	0.01513	-0.00727	0.31833	-0.00050	0.00020	0.00433	-0.01107	-0.00056
#2	-0.00107	0.01770	-0.00232	0.32009	-0.00054	0.00018	-0.00157	-0.02258	-0.00085
Mean	**-0.00040**	**0.01641**	**-0.00479**	**0.31921**	**-0.00052**	**0.00019**	**0.00138**	**-0.01682**	**-0.00071**
%RSD	241.88166	11.07108	73.04592	0.38913	5.64096	6.10473	302.57699	48.40200	28.28509

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00033	-0.00073	0.00124	0.10926	0.00733	-0.00007	-0.03319	-0.00076	-0.00263
#2	-0.00150	-0.00073	0.00089	0.10890	-0.00240	-0.00008	-0.04169	-0.00076	-0.00223
Mean	**-0.00092**	**-0.00073**	**0.00106**	**0.10908**	**0.00246**	**-0.00008**	**-0.03744**	**-0.00076**	**-0.00243**
%RSD	90.07992	0.35363	23.78581	0.23146	279.39379	3.27670	16.06117	0.00000	11.90868

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	200.22587	-0.00113	-0.00795	0.00182	-0.00120	8.88588	-0.00295	0.00356	0.00396
#2	200.15401	-0.00086	-0.01068	-0.00055	-0.00090	8.93065	-0.00148	-0.00212	-0.00064
Mean	**200.18994**	**-0.00099**	**-0.00932**	**0.00063**	**-0.00105**	**8.90826**	**-0.00221**	**0.00072**	**0.00166**
%RSD	0.02538	19.28479	20.71431	265.47128	20.68811	0.35532	47.09217	557.39917	196.44208

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.16903	0.00043	-0.00170	0.00319	-0.00259	0.00688	-0.03097	-0.00073	0.00884
#2	7.17708	0.00125	-0.00179	0.00310	-0.00241	0.00268	-0.03783	-0.00097	0.01018
Mean	**7.17306**	**0.00084**	**-0.00174**	**0.00315**	**-0.00250**	**0.00478**	**-0.03440**	**-0.00085**	**0.00951**

%RSD	0.07942	69.12751	3.27875	2.03090	5.05668	62.18455	14.11180	20.44595	9.99462

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00182	-0.00020	0.00382
#2	-0.00183	-0.00078	-0.00114
Mean	**-0.00182**	**-0.00049**	**0.00134**
%RSD	0.34566	84.35481	260.89404

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:52
SampleId1 : 1111233-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:05:50
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE60

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00159	0.01135	-0.00463	0.20898	0.04353	0.00018	-0.00280	82.27347	-0.00054
#2	-0.00056	0.01134	0.00179	0.20822	0.04340	0.00018	-0.00192	82.20924	-0.00086
Mean	**-0.00107**	**0.01134**	**-0.00142**	**0.20860**	**0.04347**	**0.00018**	**-0.00236**	**82.24135**	**-0.00070**
%RSD	67.84524	0.08212	319.60984	0.25878	0.20335	2.44827	26.18976	0.05523	31.46022

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00089	-0.00182	-0.00183	0.23537	0.51559	-0.00098	28.36248	0.10264	-0.00296
#2	-0.00041	-0.00070	-0.00093	0.23513	0.52133	-0.00099	28.31148	0.10300	-0.00059
Mean	**-0.00065**	**-0.00126**	**-0.00138**	**0.23525**	**0.51846**	**-0.00099**	**28.33698**	**0.10282**	**-0.00178**
%RSD	52.39853	62.83857	45.82885	0.07162	0.78335	0.75606	0.12727	0.25325	94.54801

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.51813	-0.00042	0.02026	-0.00381	0.00190	7.50224	-0.00563	-0.00883	0.00245
#2	3.51225	-0.00032	0.02390	-0.00187	0.00064	7.46392	-0.00220	0.00140	0.00109
Mean	**3.51519**	**-0.00037**	**0.02208**	**-0.00284**	**0.00127**	**7.48308**	**-0.00392**	**-0.00372**	**0.00177**
%RSD	0.11835	19.58169	11.65982	48.24475	69.94010	0.36212	62.08187	194.69468	54.56562

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	6.17133	0.00002	0.12138	-0.02510	-0.00299	0.00064	-0.05096	-0.00099	0.02598
#2	6.17144	-0.00162	0.12102	-0.02373	-0.00293	0.00355	-0.03449	-0.00046	0.02565
Mean	**6.17138**	**-0.00080**	**0.12120**	**-0.02441**	**-0.00296**	**0.00210**	**-0.04272**	**-0.00072**	**0.02582**
%RSD	0.00129	144.80020	0.20957	3.99547	1.42511	98.14030	27.27054	52.05197	0.92081

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00038	0.00000	-0.00131
#2	0.00001	-0.00019	0.00119
Mean	**-0.00019**	**-0.00010**	**-0.00006**
%RSD	146.17260	140.50140	2985.13762

ted: 11/21/2011 12:56:08 User: MIKE LUNDGREEN
Method : Paragon File : 111118A Printed : 11/21/2011 12:55:53
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 20:08:20
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19915	52.53577	0.50822	1.01212	1.02049	0.47960	0.53801	48.43201	0.50334
#2	0.19859	52.81780	0.52064	1.01963	1.02825	0.47902	0.52851	48.24143	0.50192
Mean	**0.19887**	**52.67679**	**0.51443**	**1.01588**	**1.02437**	**0.47931**	**0.53326**	**48.33672**	**0.50263**
%RSD	0.19926	0.37859	1.70641	0.52237	0.53554	0.08579	1.25937	0.27880	0.19986

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48398	0.97323	1.03484	19.86234	48.68977	0.51804	50.34283	0.97066	0.97852
#2	0.48171	0.97233	1.04083	19.86262	49.01616	0.52179	50.42080	0.97131	0.98107
Mean	**0.48285**	**0.97278**	**1.03784**	**19.86248**	**48.85297**	**0.51991**	**50.38181**	**0.97099**	**0.97980**
%RSD	0.33296	0.06547	0.40785	0.00097	0.47241	0.51025	0.10944	0.04752	0.18429

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.79598	0.99737	5.07310	0.99472	0.99362	5.25301	0.49825	1.03389	1.02550
#2	49.03776	0.98470	5.08364	0.99129	0.99374	5.27213	0.50014	1.04536	1.03040
Mean	**48.91687**	**0.99103**	**5.07837**	**0.99301**	**0.99368**	**5.26257**	**0.49920**	**1.03962**	**1.02795**
%RSD	0.34949	0.90452	0.14665	0.24437	0.00890	0.25696	0.26766	0.78060	0.33750

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.01211	1.06224	0.50390	0.31380	0.48398	0.53075	4.92682	0.48502	0.96187
#2	5.02607	1.04783	0.50702	0.31442	0.48535	0.53478	4.95984	0.48473	0.95509
Mean	**5.01909**	**1.05504**	**0.50546**	**0.31411**	**0.48467**	**0.53277**	**4.94333**	**0.48487**	**0.95848**
%RSD	0.19664	0.96584	0.43629	0.13922	0.19896	0.53472	0.47230	0.04191	0.50027

	Zr	Pb	Se
	ppm	calc	calc
#1	0.98417	0.99399	1.02829
#2	0.98771	0.99293	1.03538
Mean	**0.98594**	**0.99346**	**1.03184**
%RSD	0.25381	0.07540	0.48616

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:53
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 20:10:15
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00025	0.03295	0.00463	-0.00423	-0.00083	0.00031	0.00033	-0.04648	-0.00086
#2	-0.00020	0.03410	-0.00063	-0.00530	-0.00083	0.00030	0.00207	-0.04936	-0.00042
Mean	**-0.00022**	**0.03352**	**0.00200**	**-0.00477**	**-0.00083**	**0.00031**	**0.00120**	**-0.04792**	**-0.00064**
%RSD	14.54261	2.42438	186.04209	15.84041	0.00000	0.44162	102.40268	4.24836	48.49833

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	-0.00067	-0.00139	0.00302	-0.24792	-0.00191	-0.03274	-0.00030	0.00023
#2	-0.00068	-0.00033	-0.00149	0.00254	-0.25191	-0.00192	-0.03229	-0.00049	-0.00010
Mean	**-0.00064**	**-0.00050**	**-0.00144**	**0.00278**	**-0.24991**	**-0.00191**	**-0.03251**	**-0.00040**	**0.00007**
%RSD	7.55336	48.30950	4.78647	12.09928	1.12934	0.39026	0.97332	32.78287	348.53621

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.16099	-0.00099	-0.00454	-0.00079	0.00112	-0.04147	-0.00207	-0.00097	-0.00331
#2	-0.16265	-0.00032	-0.01341	0.00017	0.00069	-0.03829	-0.00305	-0.00475	-0.00067
Mean	**-0.16182**	**-0.00066**	**-0.00898**	**-0.00031**	**0.00091**	**-0.03988**	**-0.00256**	**-0.00286**	**-0.00199**
%RSD	0.72409	73.14950	69.88093	221.69660	34.13409	5.62489	27.23077	93.42978	94.00578

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01875	-0.00203	-0.00166	0.00279	-0.00276	0.00094	-0.03501	-0.00079	-0.00057
#2	-0.01902	-0.00080	-0.00169	-0.00037	-0.00281	0.00254	-0.02677	-0.00058	0.00010
Mean	**-0.01889**	**-0.00141**	**-0.00168**	**0.00121**	**-0.00279**	**0.00174**	**-0.03089**	**-0.00069**	**-0.00024**
%RSD	0.99661	61.42070	1.46334	184.40735	1.26177	65.27680	18.85683	21.08547	202.24255

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00041	0.00049	-0.00253
#2	0.00051	0.00052	-0.00203
Mean	**0.00046**	**0.00050**	**-0.00228**
%RSD	14.82599	4.26523	15.62225

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:53
SampleId1 : 1111234-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:12:10
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE61

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00137	0.07912	0.00284	0.05352	0.03561	0.00024	-0.00261	51.41333	-0.00109
#2	-0.00025	0.09141	0.00348	0.05428	0.03574	0.00024	0.00052	51.48422	-0.00047
Mean	**-0.00081**	**0.08526**	**0.00316**	**0.05390**	**0.03568**	**0.00024**	**-0.00105**	**51.44877**	**-0.00078**
%RSD	98.47439	10.19906	14.14070	1.00095	0.24774	0.33888	210.97167	0.09744	56.81883

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00159	-0.00216	0.00072	0.01860	5.64761	-0.00056	8.15867	0.03510	-0.00116
#2	-0.00029	-0.00098	0.00170	0.01955	5.62020	-0.00053	8.14383	0.03500	-0.00223
Mean	**-0.00094**	**-0.00157**	**0.00121**	**0.01907**	**5.63391**	**-0.00055**	**8.15125**	**0.03505**	**-0.00169**
%RSD	98.39296	52.92456	57.05335	3.52748	0.34396	3.64773	0.12877	0.18555	44.43217

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	15.71302	0.00060	0.56715	-0.00876	0.00407	9.67911	-0.00549	-0.00364	0.00070
#2	15.63383	0.00118	0.56008	0.00185	-0.00162	9.65671	-0.00172	-0.00211	-0.00007
Mean	**15.67342**	**0.00089**	**0.56362**	**-0.00345**	**0.00122**	**9.66791**	**-0.00360**	**-0.00287**	**0.00032**
%RSD	0.35726	45.93923	0.88762	217.15077	328.83862	0.16381	74.04401	37.80993	170.86665

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.69753	-0.00080	0.14048	-0.00260	-0.00094	-0.00027	-0.06180	-0.00009	0.00010
#2	5.69277	0.00002	0.14038	-0.00631	-0.00106	-0.00305	-0.03297	0.00102	-0.00091
Mean	**5.69515**	**-0.00039**	**0.14043**	**-0.00445**	**-0.00100**	**-0.00166**	**-0.04738**	**0.00046**	**-0.00040**
%RSD	0.05911	147.49645	0.05253	58.98424	8.42594	118.65167	43.02991	168.72617	176.88495

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00116	-0.00020	-0.00075
#2	-0.00038	-0.00047	-0.00075
Mean	**-0.00077**	**-0.00033**	**-0.00075**
%RSD	71.17626	56.25909	0.03211

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:53
SampleId1 : 1111235-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:14:00
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE62

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00077	0.02507	-0.00305	0.73636	0.04078	0.00039	-0.00348	23.33653	-0.00099
#2	-0.00045	0.02368	-0.00316	0.74011	0.04099	0.00040	-0.00053	23.32994	-0.00067
Mean	**-0.00061**	**0.02437**	**-0.00311**	**0.73823**	**0.04088**	**0.00039**	**-0.00200**	**23.33323**	**-0.00083**
%RSD	36.18241	4.04868	2.39722	0.35903	0.36032	1.38168	103.99274	0.01995	27.67017

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00041	-0.00139	0.00070	0.24597	2.23915	0.01740	10.90272	0.04687	0.00457
#2	-0.00014	-0.00073	0.00116	0.24609	2.23940	0.01743	10.95725	0.04678	0.00645
Mean	**-0.00028**	**-0.00106**	**0.00093**	**0.24603**	**2.23928**	**0.01741**	**10.92999**	**0.04682**	**0.00551**
%RSD	71.15157	43.93320	34.54279	0.03424	0.00790	0.10004	0.35273	0.13892	24.16190

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	193.24788	-0.00201	0.01138	0.00086	-0.00124	20.69315	-0.00276	0.00392	-0.00130
#2	193.02546	-0.00123	0.00251	-0.00002	-0.00081	20.78036	-0.00116	-0.00226	-0.00292
Mean	**193.13667**	**-0.00162**	**0.00695**	**0.00042**	**-0.00102**	**20.73675**	**-0.00196**	**0.00083**	**-0.00211**
%RSD	0.08143	34.00024	90.30640	146.97333	29.72286	0.29740	57.84673	527.14949	54.31093

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.37721	0.00248	0.15473	-0.00829	-0.00251	0.00155	-0.03655	-0.00107	0.11814
#2	4.38802	0.00575	0.15534	-0.01042	-0.00311	0.00204	-0.03655	-0.00033	0.11948
Mean	**4.38262**	**0.00412**	**0.15503**	**-0.00935**	**-0.00281**	**0.00180**	**-0.03655**	**-0.00070**	**0.11881**
%RSD	0.17448	56.32100	0.27502	16.06965	15.00729	19.68016	0.00016	74.40251	0.80101

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00046	-0.00054	0.00044
#2	0.00052	-0.00055	-0.00270
Mean	**0.00049**	**-0.00054**	**-0.00113**
%RSD	7.90922	0.55511	196.49025

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:53
SampleId1 : 1111260-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:15:49
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE63

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00139	0.03067	0.00137	0.26304	0.01737	0.00048	0.00000	53.35830	-0.00078
#2	-0.00066	0.02675	-0.00221	0.26281	0.01732	0.00048	-0.00174	53.42502	-0.00090
Mean	**-0.00102**	**0.02871**	**-0.00042**	**0.26293**	**0.01735**	**0.00048**	**-0.00087**	**53.39166**	**-0.00084**
%RSD	50.81680	9.63651	601.63548	0.06161	0.16981	0.06393	141.55744	0.08835	10.79262

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00058	-0.00101	0.00506	0.09010	14.36684	0.01716	13.77282	0.01018	0.00694
#2	-0.00100	-0.00167	0.00489	0.08974	14.35005	0.01719	13.79043	0.00990	0.00588
Mean	**-0.00079**	**-0.00134**	**0.00498**	**0.08992**	**14.35845**	**0.01717**	**13.78163**	**0.01004**	**0.00641**
%RSD	36.99136	34.48074	2.49231	0.28074	0.08265	0.10144	0.09032	1.94299	11.73848

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	81.15314	0.00094	2.65569	-0.00289	-0.00252	50.24990	0.00032	0.00369	0.00250
#2	81.15974	0.00040	2.66308	-0.00173	-0.00080	50.22342	-0.00250	0.00217	-0.00210
Mean	**81.15644**	**0.00067**	**2.65939**	**-0.00231**	**-0.00166**	**50.23666**	**-0.00109**	**0.00293**	**0.00020**
%RSD	0.00575	57.52694	0.19650	35.61651	73.32703	0.03728	182.96846	36.71902	1595.79006

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.77690	-0.00121	0.41819	-0.00375	-0.00318	-0.00043	-0.03370	-0.00118	0.02766

#2	4.79077	-0.00080	0.41858	-0.01084	-0.00331	-0.00003	-0.04194	-0.00077	0.02733
Mean	**4.78383**	**-0.00100**	**0.41839**	**-0.00729**	**-0.00324**	**-0.00023**	**-0.03782**	**-0.00098**	**0.02750**
%RSD	0.20507	28.84131	0.06503	68.65549	2.81797	122.51663	15.40303	29.64657	0.86454

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00068	-0.00265	0.00290
#2	-0.00053	-0.00111	-0.00068
Mean	**-0.00061**	**-0.00188**	**0.00111**
%RSD	17.04087	57.88552	227.48679

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:54
SampleId1 : 1111261-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:17:43
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE64

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	0.02125	-0.00305	0.09892	0.10989	0.00052	0.00449	65.59205	-0.00101
#2	-0.00077	0.02561	-0.00010	0.09907	0.11002	0.00047	-0.00002	65.61850	-0.00035
Mean	**-0.00069**	**0.02343**	**-0.00158**	**0.09900**	**0.10995**	**0.00050**	**0.00223**	**65.60527**	**-0.00068**
%RSD	16.68782	13.16983	132.02601	0.10902	0.08045	6.34644	142.67231	0.02851	69.43052

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00066	-0.00095	-0.00211	4.39760	2.54257	-0.00052	28.44309	0.53243	-0.00034
#2	-0.00045	-0.00095	-0.00248	4.39858	2.53731	-0.00053	28.44947	0.53243	-0.00067
Mean	**-0.00056**	**-0.00095**	**-0.00230**	**4.39809**	**2.53994**	**-0.00053**	**28.44628**	**0.53243**	**-0.00051**
%RSD	26.37085	0.32708	11.39775	0.01581	0.14639	1.41820	0.01585	0.00000	45.70461

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.63001	-0.00167	0.49185	-0.00391	0.00162	0.12351	-0.00182	0.00444	0.00585
#2	9.64389	-0.00072	0.50486	-0.00121	-0.00122	0.11717	-0.00403	-0.00022	-0.00148
Mean	**9.63695**	**-0.00120**	**0.49836**	**-0.00256**	**0.00020**	**0.12034**	**-0.00293**	**0.00211**	**0.00218**
%RSD	0.10191	56.03499	1.84512	74.57733	991.21034	3.72876	53.30053	156.50848	237.21261

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	6.80346	0.00452	0.20849	-0.02231	-0.00292	0.00096	-0.04213	-0.00096	0.01153
#2	6.83191	0.00043	0.20850	-0.01868	-0.00331	0.00046	-0.03389	-0.00034	0.01018
Mean	**6.81769**	**0.00248**	**0.20849**	**-0.02049**	**-0.00311**	**0.00071**	**-0.03801**	**-0.00065**	**0.01086**
%RSD	0.29502	116.92203	0.00394	12.54350	8.80481	49.33506	15.32635	66.59418	8.75698

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00002	-0.00022	0.00538
#2	-0.00008	-0.00122	-0.00106

Mean	**-0.00005**	**-0.00072**	**0.00216UNDGREEN**
%RSD	94.16001	98.11799	210.98293

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:54
SampleId1 : 1111162-1A **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:19:33
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE65

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00234	81.01297	2.05056	0.51048	3.08161	0.05306	0.00263	170.07738	0.04798
#2	-0.00230	81.09525	2.05490	0.51530	3.08657	0.05304	0.00316	170.53589	0.04797
Mean	**-0.00232**	**81.05411**	**2.05273**	**0.51289**	**3.08409**	**0.05305**	**0.00289**	**170.30663**	**0.04798**
%RSD	1.48696	0.07178	0.14943	0.66386	0.11387	0.02250	12.84898	0.19037	0.01560

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.52604	0.25402	0.37300	168.90226	16.27413	0.10198	45.17181	2.37856	0.96551
#2	0.52625	0.25462	0.37236	169.45705	16.25271	0.10179	45.15847	2.38408	0.96921
Mean	**0.52615**	**0.25432**	**0.37268**	**169.17966**	**16.26342**	**0.10188**	**45.16514**	**2.38132**	**0.96736**
%RSD	0.02800	0.16489	0.12187	0.23188	0.09310	0.13163	0.02088	0.16372	0.27094

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.39120	0.58001	3.46975	0.59418	0.59700	9.60872	0.48762	2.01638	2.02047
#2	1.38162	0.58201	3.45885	0.59458	0.59014	9.65671	0.49198	2.01991	2.01372
Mean	**1.38641**	**0.58101**	**3.46430**	**0.59438**	**0.59357**	**9.63272**	**0.48980**	**2.01815**	**2.01710**
%RSD	0.48873	0.24418	0.22255	0.04657	0.81670	0.35229	0.62950	0.12372	0.23676

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.96852	0.52175	1.19418	0.09936	0.66545	2.05674	0.13217	0.62890	0.82768
#2	8.98018	0.52216	1.19509	0.10530	0.66836	2.05789	0.13934	0.63205	0.83209
Mean	**8.97435**	**0.52195**	**1.19463**	**0.10233**	**0.66690**	**2.05731**	**0.13575**	**0.63048**	**0.82989**
%RSD	0.09182	0.05517	0.05399	4.10076	0.30836	0.03925	3.73731	0.35322	0.37513

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.04030	0.59606	2.01911
#2	0.03987	0.59162	2.01578
Mean	**0.04009**	**0.59384**	**2.01745**
%RSD	0.74260	0.52897	0.11668

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:54
SampleId1 : IP111118-3MB **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:21:24
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE66

Final concentrations**56:08** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00025	0.03416	0.00169	-0.00690	-0.00104	0.00038	-0.00400	-0.07066	-0.00141
#2	-0.00081	0.02544	-0.00337	-0.00637	-0.00125	0.00034	-0.00488	-0.07584	-0.00097
Mean	**-0.00053**	**0.02980**	**-0.00084**	**-0.00664**	**-0.00115**	**0.00036**	**-0.00444**	**-0.07325**	**-0.00119**
%RSD	74.79831	20.69711	424.48371	5.68964	12.83997	6.62470	13.88285	5.00210	25.87065

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00095	-0.00140	-0.00267	0.00599	-0.28883	-0.00212	-0.06541	-0.00076	-0.00092
#2	-0.00075	-0.00101	-0.00275	0.00004	-0.28858	-0.00211	-0.06586	-0.00086	-0.00034
Mean	**-0.00085**	**-0.00120**	**-0.00271**	**0.00302**	**-0.28871**	**-0.00212**	**-0.06563**	**-0.00081**	**-0.00063**
%RSD	17.18751	22.61091	2.05284	139.32009	0.06110	0.35263	0.48217	8.02261	64.37861

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.18734	-0.00174	-0.01592	-0.00165	-0.00030	-0.02878	-0.00280	-0.00197	0.00095
#2	-0.18701	-0.00296	-0.01955	-0.00290	0.00297	-0.02878	-0.00195	0.00319	0.00155
Mean	**-0.18717**	**-0.00235**	**-0.01773**	**-0.00228**	**0.00134**	**-0.02878**	**-0.00238**	**0.00061**	**0.00125**
%RSD	0.12517	36.71504	14.51103	38.84875	173.52462	0.00000	25.54559	599.52856	33.65197

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01978	0.00043	-0.00188	0.00152	-0.00258	0.00284	-0.02472	-0.00083	-0.00124
#2	-0.01976	-0.00449	-0.00194	0.00607	-0.00283	0.00133	-0.04050	-0.00103	-0.00024
Mean	**-0.01977**	**-0.00203**	**-0.00191**	**0.00380**	**-0.00271**	**0.00209**	**-0.03261**	**-0.00093**	**-0.00074**
%RSD	0.09433	171.26712	2.14320	84.67457	6.49424	51.21120	34.22974	15.62222	96.45562

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00064	-0.00075	-0.00002
#2	-0.00104	0.00102	0.00209
Mean	**-0.00084**	**0.00013**	**0.00104**
%RSD	33.31378	939.45957	144.25031

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:54
SampleId1 : IP111118-3RVS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:23:16
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE67

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00881	1.06247	0.04909	0.04383	0.04853	0.01018	0.10506	4.69364	0.01870
#2	0.00903	1.06166	0.05331	0.04368	0.04870	0.01013	0.10020	4.66259	0.01886
Mean	**0.00892**	**1.06207**	**0.05120**	**0.04375**	**0.04861**	**0.01015**	**0.10263**	**4.67811**	**0.01878**
%RSD	1.70646	0.05369	5.82195	0.24661	0.24245	0.37470	3.34692	0.46939	0.61113

ted: 11/21/2011 12:56:08 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01773	0.04716	0.04866	0.96201	7.71237	0.03924	4.92534	0.04760	0.09545
#2	0.01856	0.04688	0.04867	0.95697	7.71035	0.03919	4.91457	0.04733	0.09668
Mean	**0.01815**	**0.04702**	**0.04867**	**0.95949**	**7.71136**	**0.03922**	**4.91995**	**0.04747**	**0.09607**
%RSD	3.22205	0.41481	0.01395	0.37083	0.01849	0.08246	0.15485	0.41110	0.90427

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.31208	0.04882	0.98852	0.04598	0.05047	1.01228	0.09817	0.05662	0.05269
#2	8.30208	0.04719	0.96930	0.04853	0.05173	1.01228	0.09708	0.04929	0.04800
Mean	**8.30708**	**0.04800**	**0.97891**	**0.04726**	**0.05110**	**1.01228**	**0.09762**	**0.05296**	**0.05035**
%RSD	0.08507	2.39784	1.38809	3.81763	1.74053	0.00000	0.79056	9.78759	6.58484

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.26769	0.10075	0.04809	-0.00232	0.04521	0.10798	0.47585	0.04796	0.04885
#2	0.26671	0.09788	0.04811	-0.00667	0.04484	0.10467	0.46350	0.04763	0.04649
Mean	**0.26720**	**0.09932**	**0.04810**	**-0.00449**	**0.04503**	**0.10632**	**0.46968**	**0.04779**	**0.04767**
%RSD	0.26103	2.04207	0.03402	68.49811	0.57761	2.20237	1.86032	0.48575	3.49140

	Zr	Pb	Se
	ppm	calc	calc
#1	0.04747	0.04897	0.05400
#2	0.04800	0.05066	0.04843
Mean	**0.04774**	**0.04982**	**0.05122**
%RSD	0.78323	2.39666	7.68762

Method : Paragon File : l111118A Printed : 11/21/2011 12:55:54
SampleId1 : IP111118-3LCS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:25:07
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE68

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08913	2.12985	2.00904	0.49696	1.98995	0.04798	-0.00765	36.63520	0.04647
#2	0.08945	2.15014	2.00839	0.49650	2.00659	0.04805	-0.00626	36.72014	0.04657
Mean	**0.08929**	**2.14000**	**2.00871**	**0.49673**	**1.99827**	**0.04801**	**-0.00695**	**36.67767**	**0.04652**
%RSD	0.25567	0.67022	0.02289	0.06528	0.58862	0.09663	14.17689	0.16374	0.15222

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47017	0.18656	0.25100	0.93182	36.10066	0.48693	37.55483	0.47354	0.95554
#2	0.47150	0.18723	0.25346	0.93589	36.28962	0.49045	37.76502	0.47557	0.95644
Mean	**0.47083**	**0.18689**	**0.25223**	**0.93385**	**36.19514**	**0.48869**	**37.65993**	**0.47455**	**0.95599**
%RSD	0.19999	0.25255	0.69162	0.30837	0.36914	0.50909	0.39466	0.30342	0.06701

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	37.04135	0.48757	-0.00636	0.48232	0.48638	-0.01609	0.48353	2.13053	2.09107
#2	37.22982	0.48638	-0.00977	0.48961	0.48454	-0.02878	0.48304	2.14566	2.08272
Mean	**37.13558**	**0.48697**	**-0.00807**	**0.48597**	**0.48546**	**-0.02243**	**0.48328**	**2.13809**	**2.08690**
%RSD	0.35885	0.17274	29.90885	1.06038	0.26705	40.00104	0.07236	0.50038	0.28297

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.00321	0.50391	0.49301	-0.02028	0.46708	2.07324	-0.04526	0.47802	0.47368
#2	2.01248	0.50966	0.49723	-0.03312	0.46950	2.09511	-0.06036	0.48012	0.46761
Mean	**2.00785**	**0.50678**	**0.49512**	**-0.02670**	**0.46829**	**2.08418**	**-0.05281**	**0.47907**	**0.47065**
%RSD	0.32644	0.80170	0.60208	33.99325	0.36523	0.74169	20.22669	0.30924	0.91287

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00228	0.48503	2.10421
#2	0.00258	0.48623	2.10368
Mean	**0.00243**	**0.48563**	**2.10394**
%RSD	8.84561	0.17529	0.01788

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:54
SampleId1 : 1111092-9 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:26:59
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE69

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00122	0.02753	0.00126	0.04642	0.11690	0.00026	-0.00140	34.81911	-0.00045
#2	-0.00065	0.02355	0.00053	0.04497	0.11677	0.00023	-0.00920	34.91051	-0.00058
Mean	**-0.00093**	**0.02554**	**0.00090**	**0.04570**	**0.11684**	**0.00024**	**-0.00530**	**34.86481**	**-0.00052**
%RSD	43.15643	11.00312	58.20702	2.24309	0.07572	6.50636	104.01305	0.18537	17.65696

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00106	0.00097	-0.00065	0.00885	1.72697	0.00971	4.95901	0.03721	0.00359
#2	-0.00120	0.00081	-0.00048	0.00992	1.72447	0.00969	4.97517	0.03730	0.00391
Mean	**-0.00113**	**0.00089**	**-0.00056**	**0.00938**	**1.72572**	**0.00970**	**4.96709**	**0.03726**	**0.00375**
%RSD	8.58328	12.75162	22.17057	8.06850	0.10249	0.10266	0.23008	0.17456	6.17413

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	20.93075	-0.00096	-0.00841	-0.00369	-0.00221	10.39284	-0.00132	-0.00363	0.00053
#2	20.88171	-0.00113	-0.00386	-0.00155	-0.00278	10.45047	-0.00560	0.00155	0.00462
Mean	**20.90623**	**-0.00105**	**-0.00613**	**-0.00262**	**-0.00250**	**10.42166**	**-0.00346**	**-0.00104**	**0.00257**
%RSD	0.16586	11.46663	52.45071	57.59180	15.98486	0.39102	87.45522	351.84809	112.38486

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	13.95691	-0.00203	0.23579	-0.00691	-0.00202	0.00304	-0.04600	0.00253	0.00817
#2	13.97587	0.00411	0.23549	-0.00768	-0.00211	-0.00156	-0.03982	0.00298	0.00850
Mean	**13.96639**	**0.00104**	**0.23564**	**-0.00730**	**-0.00207**	**0.00074**	**-0.04291**	**0.00275**	**0.00834**
%RSD	0.09600	416.91536	0.09063	7.47866	3.05659	440.17482	10.17999	11.56787	2.85126

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00300	-0.00270	-0.00086
#2	-0.00290	-0.00237	0.00360
Mean	**-0.00295**	**-0.00254**	**0.00137**
%RSD	2.36086	9.31421	229.83706

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:55
SampleId1 : 1111092-10 SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 20:28:50
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE70

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00096	0.01434	-0.00116	0.04535	0.11782	0.00025	-0.00539	35.14364	-0.00089
#2	-0.00075	0.00332	-0.00053	0.04490	0.11706	0.00018	-0.00036	35.07537	-0.00092
Mean	**-0.00086**	**0.00883**	**-0.00084**	**0.04513**	**0.11744**	**0.00022**	**-0.00288**	**35.10950**	**-0.00090**
%RSD	17.27481	88.27008	53.05754	0.71732	0.45199	21.72377	123.59479	0.13750	1.83164

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00072	0.00084	-0.00075	-0.01506	1.74298	0.00970	5.00435	0.03951	0.00244
#2	-0.00079	0.00059	-0.00057	-0.01458	1.73172	0.00964	4.97832	0.03951	0.00252
Mean	**-0.00075**	**0.00071**	**-0.00066**	**-0.01482**	**1.73735**	**0.00967**	**4.99134**	**0.03951**	**0.00248**
%RSD	6.59159	24.88884	19.49218	2.26946	0.45811	0.41182	0.36889	0.00000	2.33282

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	20.99712	-0.00038	-0.00136	-0.00320	0.00044	10.60737	-0.00513	-0.00753	0.00001
#2	20.82570	-0.00025	0.00297	-0.00197	0.00263	10.63298	-0.00194	0.00105	0.00291
Mean	**20.91141**	**-0.00032**	**0.00080**	**-0.00258**	**0.00154**	**10.62018**	**-0.00353**	**-0.00324**	**0.00146**
%RSD	0.57962	30.30508	379.76250	33.74129	100.71049	0.17057	63.80699	187.05305	140.23903

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	14.03046	-0.00162	0.23715	-0.00599	-0.00328	-0.00147	-0.04049	0.00244	0.00783
#2	13.95406	0.00330	0.23624	-0.00260	-0.00317	-0.00097	-0.03981	0.00269	0.00682
Mean	**13.99226**	**0.00084**	**0.23669**	**-0.00429**	**-0.00322**	**-0.00122**	**-0.04015**	**0.00256**	**0.00733**
%RSD	0.38609	414.43805	0.27067	55.92637	2.39915	29.00895	1.20851	6.77388	9.73083

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	-0.00311	-0.00077	-0.00250**UNDGREEN**
#2	-0.00330	0.00110	0.00229
Mean	**-0.00321**	**0.00016**	**-0.00011**
%RSD	4.17977	803.31915	3197.14388

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:55
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 20:31:20
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19818	52.42634	0.51119	1.01136	1.01749	0.47510	0.53263	47.83589	0.49690
#2	0.19739	52.33206	0.51544	1.00967	1.01581	0.47649	0.52621	48.09970	0.49981
Mean	**0.19779**	**52.37920**	**0.51332**	**1.01052**	**1.01665**	**0.47579**	**0.52942**	**47.96779**	**0.49835**
%RSD	0.28350	0.12728	0.58465	0.11789	0.11729	0.20673	0.85703	0.38889	0.41329

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47859	0.96220	1.03476	19.70078	48.65502	0.51766	50.09048	0.96311	0.97366
#2	0.48108	0.96973	1.03093	19.77515	48.49719	0.51518	50.05127	0.96656	0.98107
Mean	**0.47984**	**0.96597**	**1.03285**	**19.73797**	**48.57610**	**0.51642**	**50.07087**	**0.96484**	**0.97737**
%RSD	0.36634	0.55162	0.26205	0.26642	0.22975	0.33964	0.05537	0.25275	0.53637

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	48.78227	0.97945	5.01928	0.98602	0.99435	5.19883	0.49907	1.03746	1.01918
#2	48.66028	0.98330	5.01554	0.98790	0.99267	5.17333	0.49162	1.04699	1.02918
Mean	**48.72127**	**0.98137**	**5.01741**	**0.98696**	**0.99351**	**5.18608**	**0.49534**	**1.04222**	**1.02418**
%RSD	0.17706	0.27745	0.05276	0.13513	0.12018	0.34764	1.06334	0.64693	0.69043

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.99162	1.05072	0.50159	0.29603	0.48029	0.53599	4.91455	0.47944	0.95136
#2	4.98007	1.04372	0.50105	0.30672	0.48059	0.52780	4.91725	0.48040	0.95814
Mean	**4.98585**	**1.04722**	**0.50132**	**0.30138**	**0.48044**	**0.53190**	**4.91590**	**0.47992**	**0.95475**
%RSD	0.16386	0.47258	0.07578	2.50901	0.04395	1.08817	0.03885	0.14128	0.50221

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.97912	0.99158	1.02527
#2	0.98060	0.99108	1.03511
Mean	**0.97986**	**0.99133**	**1.03019**
%RSD	0.10704	0.03553	0.67578

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:55
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 20:33:18

Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00012	0.03375	-0.00084	-0.00584	-0.00079	0.00038	-0.00037	-0.04734	-0.00028
#2	-0.00091	0.03955	-0.00379	-0.00507	-0.00075	0.00045	-0.00106	-0.05224	-0.00044
Mean	**-0.00040**	**0.03665**	**-0.00232**	**-0.00545**	**-0.00077**	**0.00042**	**-0.00071**	**-0.04979**	**-0.00036**
%RSD	185.88645	11.17640	90.00981	9.89024	3.81492	11.54439	68.89587	6.95075	29.83854

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00088	-0.00073	-0.00220	0.00421	-0.23270	-0.00185	-0.03542	-0.00040	-0.00026
#2	-0.00123	-0.00164	-0.00193	0.00337	-0.26014	-0.00190	-0.03945	-0.00049	-0.00051
Mean	**-0.00106**	**-0.00118**	**-0.00206**	**0.00379**	**-0.24642**	**-0.00187**	**-0.03744**	**-0.00044**	**-0.00038**
%RSD	22.99780	54.17771	9.52213	15.52784	7.87430	1.86057	7.60792	14.68891	45.24528

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.16077	-0.00049	-0.01228	-0.00420	0.00121	-0.03512	-0.00415	-0.00085	-0.00254
#2	-0.16337	-0.00205	-0.00841	-0.00545	0.00616	-0.03829	-0.00464	-0.00275	0.00334
Mean	**-0.16207**	**-0.00127**	**-0.01034**	**-0.00483**	**0.00369**	**-0.03671**	**-0.00439**	**-0.00180**	**0.00040**
%RSD	1.13266	87.12586	26.44052	18.37952	94.86364	6.11102	7.76517	74.69733	1040.51212

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02228	-0.00572	-0.00164	0.01112	-0.00259	-0.00367	-0.03913	-0.00099	0.00077
#2	-0.02152	-0.00080	-0.00170	0.00455	-0.00283	-0.00037	-0.04600	-0.00132	-0.00057
Mean	**-0.02190**	**-0.00326**	**-0.00167**	**0.00783**	**-0.00271**	**-0.00202**	**-0.04257**	**-0.00116**	**0.00010**
%RSD	2.47641	106.68348	2.93681	59.36856	6.22304	115.47995	11.40374	20.03033	940.49171

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00037	-0.00059	-0.00198
#2	-0.00036	0.00229	0.00131
Mean	**-0.00037**	**0.00085**	**-0.00033**
%RSD	2.15809	239.18151	700.70032

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:55
SampleId1 : 1111106-22 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:35:17
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE71

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00082	0.02102	-0.00232	0.42566	0.02149	0.00044	-0.00053	40.06937	-0.00079
#2	-0.00041	0.02033	0.00053	0.42436	0.02162	0.00045	-0.00452	40.00949	-0.00068

Mean	**-0.00062**	**0.02068**	**-0.00089**	**0.42501**	**0.02155**	**0.00045**	**-0.00252**	**40.03943**	**-0.00073**
%RSD	47.12291	2.34707	224.71158	0.21610	0.41000	1.33266	111.75198	0.10575	11.03197

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00120	-0.00155	0.00051	-0.01660	0.81257	0.04390	16.37533	-0.00086	0.06245
#2	-0.00044	-0.00115	0.00032	-0.01589	0.81607	0.04392	16.35182	-0.00076	0.06155
Mean	**-0.00082**	**-0.00135**	**0.00042**	**-0.01625**	**0.81432**	**0.04391**	**16.36357**	**-0.00081**	**0.06200**
%RSD	65.49608	21.10671	31.87507	3.10517	0.30370	0.03965	0.10159	8.02261	1.02729

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	193.60423	-0.00140	-0.01546	-0.00026	0.00043	123.06102	-0.00373	0.00459	0.01339
#2	193.45920	0.00046	-0.01478	-0.00199	-0.00155	123.11003	-0.00326	0.01709	0.00879
Mean	**193.53172**	**-0.00047**	**-0.01512**	**-0.00113**	**-0.00056**	**123.08553**	**-0.00350**	**0.01084**	**0.01109**
%RSD	0.05299	281.14315	3.19163	109.13271	250.75276	0.02816	9.67018	81.51713	29.34272

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	15.09589	0.00166	0.61889	-0.01196	-0.00325	-0.00027	-0.02402	0.00440	0.00145
#2	15.12393	0.00207	0.61788	-0.01400	-0.00323	0.00154	-0.01578	0.00440	0.00010
Mean	**15.10991**	**0.00186**	**0.61838**	**-0.01298**	**-0.00324**	**0.00063**	**-0.01990**	**0.00440**	**0.00077**
%RSD	0.13120	15.54897	0.11513	11.10840	0.43420	201.63593	29.27686	0.00222	122.93601

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00054	0.00020	0.01046
#2	-0.00071	-0.00170	0.01155
Mean	**-0.00062**	**-0.00075**	**0.01101**
%RSD	18.71783	179.78559	7.02521

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:55
SampleId1 : 1111106-22D **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:37:12
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE72

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00077	0.01791	-0.00274	0.40717	0.02112	0.00047	0.00086	39.08771	-0.00071
#2	-0.00061	0.02046	0.00011	0.41084	0.02120	0.00043	-0.00313	39.08342	-0.00069
Mean	**-0.00069**	**0.01919**	**-0.00132**	**0.40900**	**0.02116**	**0.00045**	**-0.00114**	**39.08557**	**-0.00070**
%RSD	16.38754	9.42773	152.78105	0.63402	0.27844	6.06714	247.98268	0.00777	1.89008

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00092	-0.00065	0.00015	-0.01565	0.76510	0.04301	15.91831	-0.00012	0.06040
#2	-0.00154	-0.00086	0.00033	-0.01613	0.76336	0.04304	15.95266	-0.00030	0.05991
Mean	**-0.00123**	**-0.00075**	**0.00024**	**-0.01589**	**0.76423**	**0.04302**	**15.93549**	**-0.00021**	**0.06016**

%RSD	35.59670	20.23995	55.48533	2.11659	0.16179	0.05781	0.15242	61.11895	0.57749

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	186.90624	-0.00069	-0.00909	-0.00222	-0.00039	116.34917	-0.00278	0.00295	0.01185
#2	186.16059	0.00026	-0.01432	-0.00088	0.00142	116.25860	0.00101	0.01430	0.00887
Mean	**186.53341**	**-0.00021**	**-0.01171**	**-0.00155**	**0.00052**	**116.30389**	**-0.00088**	**0.00863**	**0.01036**
%RSD	0.28266	312.62431	31.60165	61.21874	247.85440	0.05506	303.45547	92.99991	20.34708

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	14.53599	0.00002	0.61367	-0.00807	-0.00363	-0.00447	-0.02058	0.00420	0.00279
#2	14.53161	0.00453	0.61485	-0.01399	-0.00363	-0.00587	-0.02814	0.00358	0.00245
Mean	**14.53380**	**0.00227**	**0.61426**	**-0.01103**	**-0.00363**	**-0.00517**	**-0.02436**	**0.00389**	**0.00262**
%RSD	0.02132	140.18577	0.13611	37.96901	0.19362	19.20909	21.92078	11.14892	9.06473

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00185	-0.00100	0.00889
#2	-0.00136	0.00066	0.01068
Mean	**-0.00160**	**-0.00017**	**0.00979**
%RSD	21.36438	686.19475	12.93927

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:56
SampleId1 : 1111106-22L 5X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 20:39:12
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE73

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00035	0.02175	-0.00326	0.07870	0.00333	0.00041	-0.00643	8.03257	-0.00063
#2	0.00002	0.02467	0.00042	0.07923	0.00333	0.00043	-0.00088	8.01156	-0.00071
Mean	**-0.00017**	**0.02321**	**-0.00142**	**0.07896**	**0.00333**	**0.00042**	**-0.00366**	**8.02206**	**-0.00067**
%RSD	156.63098	8.88885	183.37612	0.47831	0.00000	2.76510	107.25620	0.18523	8.69523

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00067	-0.00083	-0.00167	-0.01732	-0.11494	0.00511	3.27095	-0.00095	0.00932
#2	-0.00040	-0.00080	-0.00148	-0.01732	-0.11644	0.00512	3.27634	-0.00095	0.01161
Mean	**-0.00053**	**-0.00081**	**-0.00158**	**-0.01732**	**-0.11569**	**0.00511**	**3.27364**	**-0.00095**	**0.01046**
%RSD	36.50927	3.20210	8.51483	0.00000	0.91502	0.04868	0.11625	0.00000	15.49130

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	40.10920	-0.00082	-0.01478	0.00024	-0.00219	24.26781	-0.00052	0.00157	0.00129
#2	40.07388	-0.00127	-0.01319	-0.00004	0.00010	24.23541	-0.00430	-0.00071	0.00410
Mean	**40.09154**	**-0.00105**	**-0.01398**	**0.00010**	**-0.00104**	**24.25161**	**-0.00241**	**0.00043**	**0.00270**
%RSD	0.06229	29.81323	8.05298	203.54507	155.00262	0.09446	110.93761	378.60896	73.76491

ted: 11/21/2011 12:56:08 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.99040	-0.00285	0.12391	0.00263	-0.00290	0.00263	-0.02264	0.00015	0.00010
#2	2.98446	-0.00203	0.12386	0.00645	-0.00306	-0.00297	-0.03294	0.00068	0.00044
Mean	**2.98743**	**-0.00244**	**0.12389**	**0.00454**	**-0.00298**	**-0.00017**	**-0.02779**	**0.00041**	**0.00027**
%RSD	0.14052	23.76012	0.02646	59.51943	3.77494	2339.86671	26.20193	90.61239	88.30749

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00085	-0.00138	0.00138
#2	-0.00103	0.00005	0.00250
Mean	**-0.00094**	**-0.00066**	**0.00194**
%RSD	13.34860	152.61077	40.69749

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:56
SampleId1 : 1111106-22MS **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:41:06
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE74

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08977	2.20092	2.05772	0.94061	2.03150	0.04787	-0.00521	75.91250	0.04720
#2	0.08997	2.18810	2.03354	0.93249	2.02651	0.04773	-0.00313	75.56086	0.04676
Mean	**0.08987**	**2.19451**	**2.04563**	**0.93655**	**2.02901**	**0.04780**	**-0.00417**	**75.73668**	**0.04698**
%RSD	0.16440	0.41335	0.83588	0.61268	0.17397	0.21441	35.19692	0.32831	0.67235

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.46381	0.18121	0.26081	0.91816	49.66452	0.64580	53.30646	0.46354	1.01444
#2	0.46187	0.18021	0.25981	0.91625	49.43507	0.64320	53.11421	0.46160	1.00669
Mean	**0.46284**	**0.18071**	**0.26031**	**0.91720**	**49.54979**	**0.64450**	**53.21034**	**0.46257**	**1.01057**
%RSD	0.29638	0.39348	0.27202	0.14773	0.32744	0.28566	0.25548	0.29708	0.54192

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	220.97971	0.48179	-0.00454	0.48052	0.48655	121.88880	0.48805	2.25250	2.19692
#2	219.23463	0.48029	-0.01250	0.48256	0.48615	121.25936	0.48428	2.24351	2.21347
Mean	**220.10717**	**0.48104**	**-0.00852**	**0.48154**	**0.48635**	**121.57408**	**0.48616**	**2.24801**	**2.20520**
%RSD	0.56062	0.21983	66.06177	0.29920	0.05763	0.36610	0.54844	0.28276	0.53067

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	16.86951	0.53472	1.10956	-0.02453	0.45962	2.13885	-0.03495	0.47703	0.45478
#2	16.79638	0.51747	1.10717	-0.02130	0.45841	2.13603	-0.03358	0.47621	0.45208
Mean	**16.83295**	**0.52609**	**1.10836**	**-0.02291**	**0.45902**	**2.13744**	**-0.03426**	**0.47662**	**0.45343**
%RSD	0.30722	2.31798	0.15239	9.97378	0.18553	0.09337	2.83638	0.12190	0.42105

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	-0.00144	0.48454	2.21543
#2	-0.00167	0.48496	2.22348
Mean	**-0.00155**	**0.48475**	**2.21945**
%RSD	10.57454	0.06041	0.25631

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:56
SampleId1 : 1111106-22MSD **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:43:09
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE75

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09044	2.19550	2.05577	0.93916	2.02719	0.04806	-0.00504	76.01757	0.04628
#2	0.09040	2.19862	2.05230	0.95087	2.03167	0.04792	-0.00399	76.00690	0.04695
Mean	**0.09042**	**2.19706**	**2.05403**	**0.94501**	**2.02943**	**0.04799**	**-0.00452**	**76.01224**	**0.04662**
%RSD	0.03638	0.10028	0.11947	0.87645	0.15610	0.20531	16.35156	0.00993	1.02299

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.46547	0.18193	0.25971	0.92068	49.51712	0.64302	53.26856	0.46391	1.02070
#2	0.46485	0.18118	0.26117	0.91912	49.63584	0.64497	53.33743	0.46354	1.01798
Mean	**0.46516**	**0.18156**	**0.26044**	**0.91990**	**49.57648**	**0.64400**	**53.30299**	**0.46372**	**1.01934**
%RSD	0.09382	0.29266	0.39591	0.11968	0.16932	0.21479	0.09135	0.05645	0.18862

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	220.60185	0.48597	-0.00090	0.48373	0.48603	122.29459	0.49132	2.26972	2.21522
#2	220.90849	0.48536	-0.00841	0.48344	0.47923	122.15465	0.48672	2.25507	2.20241
Mean	**220.75517**	**0.48566**	**-0.00465**	**0.48359**	**0.48263**	**122.22462**	**0.48902**	**2.26239**	**2.20881**
%RSD	0.09822	0.08908	114.03609	0.04273	0.99600	0.08096	0.66485	0.45778	0.40993

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	16.83272	0.52856	1.10925	-0.02520	0.45905	2.15327	-0.03015	0.47761	0.45883
#2	16.90595	0.52527	1.11077	-0.02304	0.45967	2.15065	-0.03426	0.47790	0.45748
Mean	**16.86934**	**0.52692**	**1.11001**	**-0.02412**	**0.45936**	**2.15196**	**-0.03221**	**0.47775**	**0.45816**
%RSD	0.30696	0.44097	0.09718	6.31761	0.09500	0.08622	9.04192	0.04250	0.20836

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00155	0.48526	2.23337
#2	-0.00228	0.48063	2.21995
Mean	**-0.00191**	**0.48295**	**2.22666**
%RSD	27.05008	0.67814	0.42612

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:56

SampleId1 : 1111106-35 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:45:03
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE76

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00024	0.02999	-0.00042	-0.00530	-0.00075	0.00053	-0.00470	-0.04187	-0.00082
#2	-0.00082	0.02702	-0.00179	-0.00553	0.00004	0.00051	-0.00505	-0.01135	-0.00053
Mean	**-0.00053**	**0.02851**	**-0.00111**	**-0.00542**	**-0.00036**	**0.00052**	**-0.00487**	**-0.02661**	**-0.00067**
%RSD	77.97318	7.36096	87.57733	2.98797	157.40759	2.76522	4.99042	81.08599	31.06819

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00123	-0.00107	-0.00211	-0.01161	-0.31926	-0.00214	-0.06362	-0.00095	0.00007
#2	-0.00068	-0.00086	-0.00203	-0.01125	-0.31103	-0.00203	-0.03945	-0.00067	-0.00026
Mean	**-0.00095**	**-0.00097**	**-0.00207**	**-0.01143**	**-0.31515**	**-0.00208**	**-0.05154**	**-0.00081**	**-0.00010**
%RSD	40.95157	15.72992	2.87016	2.20678	1.84697	3.82825	33.16005	24.06785	237.98609

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.14812	-0.00167	-0.00204	-0.00299	0.00212	-0.01291	-0.00378	-0.00097	-0.00510
#2	-0.07573	-0.00110	-0.01091	-0.00112	-0.00034	0.02198	-0.00121	0.00105	0.00155
Mean	**-0.11193**	**-0.00138**	**-0.00647**	**-0.00205**	**0.00089**	**0.00453**	**-0.00250**	**0.00004**	**-0.00178**
%RSD	45.73549	29.43875	96.88917	64.30433	195.21371	544.22484	72.72307	3698.13705	264.55055

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00599	-0.00449	-0.00162	0.00689	-0.00295	-0.00108	-0.04187	-0.00055	0.00145
#2	-0.00197	-0.00408	-0.00115	0.00581	-0.00282	0.00013	-0.03294	-0.00067	0.00279
Mean	**-0.00398**	**-0.00428**	**-0.00139**	**0.00635**	**-0.00288**	**-0.00047**	**-0.03741**	**-0.00061**	**0.00212**
%RSD	71.48405	6.76167	24.16687	12.03918	3.16755	180.64277	16.87057	14.29870	44.89084

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00108	0.00042	-0.00372
#2	-0.00091	-0.00060	0.00138
Mean	**-0.00099**	**-0.00009**	**-0.00117**
%RSD	12.37501	793.46223	308.17656

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:56
SampleId1 : 1111106-48 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:46:55
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE77

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	-0.00066	0.02242	-0.00432	-0.00637	-0.00129	0.00037	0.00154	-0.06807	-0.00057
#2	-0.00020	0.01608	-0.00453	-0.00728	-0.00125	0.00031	-0.00487	-0.06606	-0.00098
Mean	**-0.00043**	**0.01925**	**-0.00442**	**-0.00683**	**-0.00127**	**0.00034**	**-0.00166**	**-0.06706**	**-0.00078**
%RSD	76.87401	23.30667	3.36737	9.48121	2.31569	13.64567	272.55166	2.12482	38.21504

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00143	-0.00117	-0.00194	-0.01446	-0.29631	-0.00211	-0.07033	-0.00095	-0.00034
#2	-0.00095	-0.00102	-0.00185	-0.01446	-0.29532	-0.00212	-0.06944	-0.00095	0.00064
Mean	**-0.00119**	**-0.00109**	**-0.00189**	**-0.01446**	**-0.29582**	**-0.00211**	**-0.06989**	**-0.00095**	**0.00015**
%RSD	28.55759	10.01506	3.29819	0.00000	0.23851	0.11774	0.90567	0.00000	468.40570

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.17480	-0.00137	-0.01023	-0.00369	0.00121	-0.03195	-0.00378	-0.00210	-0.00127
#2	-0.17486	-0.00069	-0.01523	-0.00017	0.00004	-0.05416	-0.00377	0.00118	-0.00195
Mean	**-0.17483**	**-0.00103**	**-0.01273**	**-0.00193**	**0.00063**	**-0.04305**	**-0.00378**	**-0.00046**	**-0.00161**
%RSD	0.02234	46.62256	27.79693	128.88832	131.33087	36.47281	0.12602	504.04458	30.00090

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01914	-0.00408	-0.00197	0.00753	-0.00296	-0.00257	-0.03294	-0.00055	0.00077
#2	-0.02040	-0.00326	-0.00196	0.00159	-0.00314	-0.00717	-0.02951	-0.00075	0.00077
Mean	**-0.01977**	**-0.00367**	**-0.00196**	**0.00456**	**-0.00305**	**-0.00487**	**-0.03123**	**-0.00065**	**0.00077**
%RSD	4.51893	15.79957	0.41603	92.23591	4.14988	66.76535	7.77329	22.31779	0.00000

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00091	-0.00042	-0.00154
#2	-0.00042	-0.00003	-0.00091
Mean	**-0.00067**	**-0.00023**	**-0.00122**
%RSD	51.64178	124.36461	36.87379

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:57
SampleId1 : 1111106-61 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:48:54
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE78

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00081	0.01713	-0.00074	0.05779	0.02616	0.00040	-0.00470	42.39136	-0.00076
#2	-0.00076	0.01825	-0.00253	0.05710	0.02616	0.00034	-0.00314	42.40584	-0.00107
Mean	**-0.00078**	**0.01769**	**-0.00163**	**0.05745**	**0.02616**	**0.00037**	**-0.00392**	**42.39860**	**-0.00092**
%RSD	4.26811	4.49040	77.57172	0.84523	0.00000	12.13287	28.18111	0.02416	24.06342

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00091	-0.00060	-0.00129	-0.01553	1.28263	0.03007	11.23394	-0.00076	0.00408

#2	-0.00085	-0.00073	-0.00157	-0.01553	1.27688	0.03007	11.25873	-0.00086	0.00440
Mean	**-0.00088**	**-0.00067**	**-0.00143**	**-0.01553**	**1.27975**	**0.03007**	**11.24634**	**-0.00081**	**0.00424**
%RSD	5.53004	13.70729	13.74677	0.00000	0.31768	0.00000	0.15585	8.02261	5.45915

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	111.63677	-0.00191	-0.00454	0.00052	-0.00046	68.73989	-0.00179	0.00912	0.01194
#2	111.88445	-0.00113	-0.00272	0.00166	-0.00034	68.84741	-0.00289	0.02048	0.01271
Mean	**111.76061**	**-0.00152**	**-0.00363**	**0.00109**	**-0.00040**	**68.79365**	**-0.00234**	**0.01480**	**0.01232**
%RSD	0.15671	36.27536	35.43848	74.35447	21.80008	0.11051	33.18822	54.27859	4.39944

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	11.26318	-0.00121	0.50075	-0.00739	-0.00316	-0.00188	-0.04049	0.00023	0.00044
#2	11.29492	0.00330	0.50099	-0.00472	-0.00316	0.00183	-0.03294	0.00080	0.00010
Mean	**11.27905**	**0.00104**	**0.50087**	**-0.00605**	**-0.00316**	**-0.00002**	**-0.03672**	**0.00052**	**0.00027**
%RSD	0.19893	305.36486	0.03463	31.26491	0.00000	10928.37696	14.54349	78.23722	88.30749

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00239	-0.00013	0.01100
#2	-0.00248	0.00033	0.01530
Mean	**-0.00243**	**0.00010**	**0.01315**
%RSD	2.45722	335.36845	23.09901

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:57
SampleId1 : 1111134-1 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:50:51
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE79

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00020	0.01488	-0.00158	0.13227	0.01920	0.00028	-0.00556	1.12501	-0.00066
#2	-0.00040	0.01416	-0.00569	0.13212	0.01912	0.00025	0.00189	1.12126	-0.00084
Mean	**-0.00030**	**0.01452**	**-0.00363**	**0.13219**	**0.01916**	**0.00026**	**-0.00184**	**1.12314**	**-0.00075**
%RSD	47.24285	3.51772	79.94103	0.08165	0.30750	5.90637	287.08433	0.23611	17.12008

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00031	0.00055	-0.00185	4.42415	-0.17707	0.00497	0.03305	0.06821	0.00097
#2	-0.00031	0.00058	-0.00148	4.41702	-0.16784	0.00494	0.03261	0.06812	-0.00149
Mean	**-0.00031**	**0.00057**	**-0.00167**	**4.42059**	**-0.17245**	**0.00495**	**0.03283**	**0.06817**	**-0.00026**
%RSD	0.04086	4.55717	15.73849	0.11406	3.78510	0.50256	0.96400	0.09545	665.31878

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.34625	0.00338	0.02594	0.00321	-0.00088	0.03150	-0.00134	-0.00287	-0.00045
#2	7.29532	0.00304	0.02776	-0.00088	-0.00165	0.02198	-0.00271	0.00053	0.00364

Mean	**7.32078**	**0.00321**	**0.02685**	**0.00116**	**-0.00127**	**0.02674**	**-0.00202**	**-0.00117**	**0.00159**
%RSD	0.49186	7.46949	4.79278	248.34812	42.73260	25.16667	47.82543	205.71483	181.57475

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.07364	0.00207	0.17616	-0.00003	-0.00292	-0.00320	-0.02292	-0.00087	0.00985
#2	0.07024	0.00125	0.17573	0.00405	-0.00306	-0.00211	-0.03253	-0.00075	0.01086
Mean	**0.07194**	**0.00166**	**0.17594**	**0.00201**	**-0.00299**	**-0.00266**	**-0.02772**	**-0.00081**	**0.01035**
%RSD	3.34600	34.94081	0.17251	143.22919	3.29209	29.05291	24.50247	10.57939	6.88757

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00022	0.00048	-0.00126
#2	-0.00037	-0.00139	0.00260
Mean	**-0.00030**	**-0.00046**	**0.00067**
%RSD	36.96597	289.46595	405.62234

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:57
SampleId1 : 1111134-2 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:52:58
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE80

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00024	0.00582	-0.00537	0.27289	0.04236	0.00017	-0.00591	0.77404	-0.00094
#2	-0.00045	0.01567	0.00211	0.27312	0.04282	0.00020	-0.00314	0.76942	-0.00065
Mean	**-0.00034**	**0.01074**	**-0.00163**	**0.27301**	**0.04259**	**0.00019**	**-0.00453**	**0.77173**	**-0.00079**
%RSD	41.56166	64.84629	323.99529	0.05934	0.76093	11.68113	43.29620	0.42266	26.05881

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00089	0.00137	-0.00230	2.66162	-0.19029	0.01215	-0.00186	0.03730	-0.00116
#2	-0.00082	0.00103	-0.00184	2.67024	-0.20052	0.01222	-0.00588	0.03739	-0.00051
Mean	**-0.00086**	**0.00120**	**-0.00207**	**2.66593**	**-0.19540**	**0.01219**	**-0.00387**	**0.03735**	**-0.00083**
%RSD	5.76416	20.03196	15.80390	0.22855	3.70151	0.44942	73.58743	0.17413	55.52191

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.56251	-0.00011	0.18164	-0.00069	-0.00070	0.04419	-0.00430	-0.00154	0.00038
#2	10.62903	-0.00116	0.18711	-0.00135	-0.00220	0.02833	-0.00405	-0.00470	-0.00132
Mean	**10.59577**	**-0.00064**	**0.18437**	**-0.00102**	**-0.00145**	**0.03626**	**-0.00418**	**-0.00312**	**-0.00047**
%RSD	0.44392	116.39197	2.09614	45.63741	72.74567	30.93474	4.29914	71.76126	257.64610

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.15471	0.00248	0.17468	0.00326	-0.00318	-0.00315	-0.03476	-0.00089	0.00346
#2	0.16054	0.00043	0.17596	-0.00474	-0.00336	0.00495	-0.04438	-0.00121	0.00212
Mean	**0.15763**	**0.00145**	**0.17532**	**-0.00074**	**-0.00327**	**0.00090**	**-0.03957**	**-0.00105**	**0.00279**

%RSD	2.61345	99.65383	0.51468	763.28224	3.87213	636.17551	17.18469	21.94968	34.07484

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00050	-0.00070	-0.00026
#2	-0.00030	-0.00192	-0.00244
Mean	**-0.00040**	**-0.00131**	**-0.00135**
%RSD	34.27796	65.68628	114.67698

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:57
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 20:55:17
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19897	52.78780	0.51141	1.01863	1.02707	0.47652	0.54427	48.00149	0.50385
#2	0.19877	52.75960	0.51183	1.01840	1.02462	0.47658	0.53492	48.12456	0.50380
Mean	**0.19887**	**52.77370**	**0.51162**	**1.01852**	**1.02584**	**0.47655**	**0.53960**	**48.06303**	**0.50382**
%RSD	0.06976	0.03778	0.05866	0.01595	0.16857	0.00836	1.22626	0.18106	0.00584

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48124	0.96653	1.04721	19.78141	49.09499	0.52326	50.33591	0.96386	0.97976
#2	0.48185	0.97013	1.04613	19.80004	49.05995	0.52258	50.30453	0.96637	0.98050
Mean	**0.48155**	**0.96833**	**1.04667**	**19.79072**	**49.07747**	**0.52292**	**50.32022**	**0.96512**	**0.98013**
%RSD	0.09076	0.26309	0.07309	0.06657	0.05048	0.09159	0.04409	0.18438	0.05349

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.13634	0.98943	4.99846	0.98763	0.99168	5.21157	0.50205	1.05236	1.02083
#2	49.11992	0.99444	4.99799	0.99234	0.98539	5.26576	0.50338	1.04077	1.02824
Mean	**49.12813**	**0.99194**	**4.99823**	**0.98999**	**0.98854**	**5.23867**	**0.50272**	**1.04656**	**1.02453**
%RSD	0.02364	0.35711	0.00662	0.33646	0.44975	0.73135	0.18737	0.78319	0.51120

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.00165	1.06184	0.50656	0.30487	0.47960	0.52632	4.94751	0.48237	0.94594
#2	5.00053	1.05237	0.50553	0.31293	0.47994	0.52923	4.93305	0.48312	0.94526
Mean	**5.00109**	**1.05710**	**0.50605**	**0.30890**	**0.47977**	**0.52777**	**4.94028**	**0.48274**	**0.94560**
%RSD	0.01585	0.63342	0.14363	1.84620	0.04988	0.38931	0.20694	0.10880	0.05070

	Zr	Pb	Se
	ppm	calc	calc
#1	0.98558	0.99033	1.03133
#2	0.98478	0.98771	1.03241
Mean	**0.98518**	**0.98902**	**1.03187**
%RSD	0.05768	0.18769	0.07403

ted: 11/21/2011 12:56:08 **User: MIKE LUNDGREEN**
Method : Paragon File : 111118A Printed : 11/21/2011 12:55:57
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 20:57:26
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00014	0.04939	0.00253	-0.00507	-0.00088	0.00056	0.00258	-0.05598	-0.00035
#2	-0.00030	0.04094	-0.00421	-0.00515	-0.00096	0.00052	-0.00366	-0.05742	-0.00041
Mean	**-0.00022**	**0.04517**	**-0.00084**	**-0.00511**	**-0.00092**	**0.00054**	**-0.00054**	**-0.05670**	**-0.00038**
%RSD	51.90018	13.22554	566.00288	1.05546	6.41794	5.50484	819.67766	1.79519	12.76411

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00054	-0.00076	-0.00202	0.00183	-0.28858	-0.00199	-0.03766	-0.00040	-0.00018
#2	-0.00061	-0.00089	-0.00212	0.00219	-0.28384	-0.00199	-0.04527	-0.00040	-0.00157
Mean	**-0.00057**	**-0.00083**	**-0.00207**	**0.00201**	**-0.28621**	**-0.00199**	**-0.04147**	**-0.00040**	**-0.00087**
%RSD	8.54104	11.20672	3.37623	12.56935	1.17096	0.25027	12.97453	0.00000	112.46498

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.16326	-0.00120	-0.01592	-0.00077	0.00100	-0.03195	-0.00231	0.00168	0.00249
#2	-0.16536	-0.00160	-0.00613	-0.00064	0.00086	-0.03829	-0.00245	-0.00097	0.00027
Mean	**-0.16431**	**-0.00140**	**-0.01102**	**-0.00071**	**0.00093**	**-0.03512**	**-0.00238**	**0.00036**	**0.00138**
%RSD	0.90328	20.52891	62.73911	13.13249	10.63816	12.77405	3.94695	525.58879	113.61183

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01938	0.00002	-0.00168	0.00189	-0.00307	0.00313	-0.03913	-0.00071	-0.00124
#2	-0.02079	-0.00408	-0.00169	0.00649	-0.00287	0.00354	-0.02883	-0.00067	0.00010
Mean	**-0.02008**	**-0.00203**	**-0.00169**	**0.00419**	**-0.00297**	**0.00334**	**-0.03398**	**-0.00069**	**-0.00057**
%RSD	4.96396	142.76029	0.48444	77.75696	4.73448	8.60964	21.42719	4.22521	166.45002

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00035	0.00041	0.00222
#2	-0.00017	0.00036	-0.00014
Mean	**0.00009**	**0.00038**	**0.00104**
%RSD	403.01496	9.10897	160.58392

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:57
SampleId1 : 1111134-3 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 20:59:13
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE81

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00024	0.02687	-0.00832	0.13189	0.01916	0.00046	0.00033	1.09472	-0.00071
#2	-0.00066	0.02687	-0.00432	0.13242	0.01916	0.00046	-0.00470	1.09587	-0.00051
Mean	**-0.00045**	**0.02687**	**-0.00632**	**0.13216**	**0.01916**	**0.00046**	**-0.00219**	**1.09530**	**-0.00061**
%RSD	65.86474	0.00295	44.78435	0.28585	0.00000	0.59803	162.56511	0.07449	23.42815

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00092	0.00027	-0.00220	4.42993	-0.20875	0.00489	0.02679	0.06775	-0.00165
#2	-0.00079	0.00002	-0.00184	4.44911	-0.21249	0.00493	0.02679	0.06785	-0.00026
Mean	**-0.00086**	**0.00015**	**-0.00202**	**4.43952**	**-0.21062**	**0.00491**	**0.02679**	**0.06780**	**-0.00096**
%RSD	11.40166	119.40613	12.71452	0.30552	1.25634	0.60826	0.00000	0.09597	102.84308

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.29007	0.00199	0.03391	-0.00161	0.00196	0.00929	-0.00062	-0.00440	-0.00105
#2	7.30866	0.00189	0.03049	0.00002	0.00007	0.01564	-0.00453	-0.00213	0.00126
Mean	**7.29936**	**0.00194**	**0.03220**	**-0.00080**	**0.00102**	**0.01247**	**-0.00258**	**-0.00326**	**0.00011**
%RSD	0.18003	3.71077	7.49453	144.70224	131.17831	35.99276	107.18625	49.18789	1550.20508

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06924	0.00084	0.17639	0.00959	-0.00306	0.00049	-0.03871	-0.00095	0.01086
#2	0.06748	-0.00244	0.17704	0.00533	-0.00320	-0.00440	-0.03873	-0.00144	0.00985
Mean	**0.06836**	**-0.00080**	**0.17671**	**0.00746**	**-0.00313**	**-0.00196**	**-0.03872**	**-0.00120**	**0.01035**
%RSD	1.82242	289.64674	0.25996	40.43156	3.14564	176.98026	0.02385	28.80361	6.88757

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00087	0.00077	-0.00216
#2	-0.00090	0.00006	0.00013
Mean	**-0.00089**	**0.00041**	**-0.00102**
%RSD	2.44465	122.52991	159.53612

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:58
SampleId1 : 1111161-1 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:01:05
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE82

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00070	0.03485	-0.00390	0.67930	0.12169	0.00059	-0.00176	3.20748	-0.00110
#2	-0.00055	0.03323	-0.00621	0.67945	0.12128	0.00052	-0.00366	3.21617	-0.00069
Mean	**-0.00063**	**0.03404**	**-0.00505**	**0.67938**	**0.12149**	**0.00056**	**-0.00271**	**3.21183**	**-0.00089**
%RSD	16.69185	3.36156	32.41044	0.01592	0.24276	8.67990	49.70351	0.19121	32.95516

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00126	-0.00044	-0.00247	1.78660	-0.00739	0.07165	0.17360	0.01946	-0.00165
#2	-0.00051	-0.00019	-0.00220	1.78394	-0.00290	0.07133	0.17449	0.01946	-0.00165
Mean	**-0.00088**	**-0.00032**	**-0.00233**	**1.78527**	**-0.00515**	**0.07149**	**0.17405**	**0.01946**	**-0.00165**
%RSD	60.51363	54.80175	8.06498	0.10505	61.69694	0.31985	0.36371	0.00000	0.00000

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	43.79439	-0.00120	0.09217	-0.00303	0.00079	0.07275	-0.00453	-0.00435	0.00370
#2	43.68550	0.00057	0.08033	-0.00193	0.00156	0.07592	0.00061	-0.00194	0.00200
Mean	**43.73995**	**-0.00032**	**0.08625**	**-0.00248**	**0.00118**	**0.07433**	**-0.00196**	**-0.00314**	**0.00285**
%RSD	0.17604	393.96853	9.70316	31.40274	46.05620	3.01816	185.04939	54.06520	42.32773

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.63437	0.00371	0.54169	0.00623	-0.00303	0.00138	-0.04996	-0.00171	0.00514
#2	0.63271	-0.00080	0.53986	0.00336	-0.00317	-0.00362	-0.04172	-0.00102	0.00615
Mean	**0.63354**	**0.00145**	**0.54078**	**0.00480**	**-0.00310**	**-0.00112**	**-0.04584**	**-0.00136**	**0.00565**
%RSD	0.18473	219.28102	0.23844	42.24600	3.17591	314.44577	12.71132	36.05712	12.62668

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00121	-0.00048	0.00102
#2	-0.00043	0.00040	0.00068
Mean	**-0.00082**	**-0.00004**	**0.00085**
%RSD	66.90568	1524.70507	27.90552

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:58
SampleId1 : 1111161-2 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:02:57
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE83

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00014	0.03933	0.00063	3.76165	0.25744	0.00063	-0.00054	9.35268	-0.00066
#2	-0.00013	0.04512	-0.00390	3.77968	0.25823	0.00062	-0.00158	9.38427	-0.00057
Mean	**-0.00013**	**0.04222**	**-0.00163**	**3.77067**	**0.25784**	**0.00063**	**-0.00106**	**9.36847**	**-0.00061**
%RSD	2.14399	9.68622	196.21466	0.33808	0.21769	1.14609	69.47841	0.23845	10.19523

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00087	0.00046	-0.00221	2.00053	1.05144	0.35107	0.57919	0.02388	-0.00190
#2	-0.00038	0.00078	-0.00220	2.00584	1.05169	0.35207	0.58233	0.02424	-0.00083
Mean	**-0.00062**	**0.00062**	**-0.00220**	**2.00318**	**1.05156**	**0.35157**	**0.58076**	**0.02406**	**-0.00137**
%RSD	54.68688	36.18891	0.17130	0.18756	0.01680	0.20141	0.38160	1.08104	55.08201

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	156.90418	-0.00021	-0.10256	-0.00077	0.00026	1.49187	-0.00369	0.00132	0.00289
#2	157.08918	-0.00130	-0.12166	-0.00222	0.00057	1.51093	-0.00430	0.00030	0.00690
Mean	**156.99668**	**-0.00076**	**-0.11211**	**-0.00149**	**0.00041**	**1.50140**	**-0.00399**	**0.00081**	**0.00489**
%RSD	0.08332	101.31743	12.04513	68.60310	52.57771	0.89769	10.74266	88.79795	57.87533

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.95511	0.00371	1.45685	0.00641	-0.00308	0.00137	-0.03706	-0.00044	0.00010
#2	2.96845	0.00289	1.46329	0.00702	-0.00313	-0.00433	-0.04393	-0.00040	0.00077
Mean	**2.96178**	**0.00330**	**1.46007**	**0.00672**	**-0.00310**	**-0.00148**	**-0.04049**	**-0.00042**	**0.00044**
%RSD	0.31831	17.57333	0.31201	6.46103	1.13244	272.51287	11.99436	7.05109	108.72443

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00115	-0.00008	0.00237
#2	-0.00095	-0.00036	0.00470
Mean	**-0.00105**	**-0.00022**	**0.00353**
%RSD	13.15165	88.60740	46.69627

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:58
SampleId1 : 1111161-3 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:04:50
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE84

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00009	0.03214	-0.00632	0.45913	0.01445	0.00051	-0.00262	0.60310	-0.00046
#2	-0.00019	0.03460	-0.00337	0.45859	0.01433	0.00053	-0.00418	0.59618	-0.00105
Mean	**-0.00014**	**0.03337**	**-0.00484**	**0.45886**	**0.01439**	**0.00052**	**-0.00340**	**0.59964**	**-0.00075**
%RSD	50.45825	5.21804	43.04339	0.08243	0.61410	2.83440	32.51767	0.81570	55.71453

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00038	-0.00080	-0.00248	2.80430	-0.19827	0.00285	-0.02782	0.02443	0.00236
#2	-0.00059	-0.00089	-0.00247	2.79215	-0.21748	0.00286	-0.03319	0.02424	0.00138
Mean	**-0.00048**	**-0.00084**	**-0.00248**	**2.79822**	**-0.20788**	**0.00286**	**-0.03050**	**0.02434**	**0.00187**
%RSD	30.09879	7.42165	0.24324	0.30698	6.53436	0.17439	12.45111	0.53439	37.19757

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.47410	0.00057	-0.01455	0.00025	-0.00221	0.01881	-0.00327	-0.00319	0.00297
#2	3.49146	-0.00072	-0.01705	-0.00024	0.00136	0.03150	-0.00426	-0.01064	0.00118
Mean	**3.48278**	**-0.00008**	**-0.01580**	**0.00001**	**-0.00042**	**0.02516**	**-0.00377**	**-0.00691**	**0.00207**
%RSD	0.35245	1151.66936	11.19719	6372.39852	597.38457	35.67148	18.53301	76.19875	61.10894

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.05498	0.00166	0.06121	0.01172	-0.00295	-0.00519	-0.03074	-0.00053	0.00716

#2	0.05284	0.00125	0.06126	0.00596	-0.00333	-0.00320	-0.04172	-0.00102	0.00615
Mean	**0.05391**	**0.00145**	**0.06124**	**0.00884**	**-0.00314**	**-0.00420**	**-0.03623**	**-0.00078**	**0.00666**
%RSD	2.79827	19.91350	0.05346	46.09903	8.51111	33.51989	21.42240	44.84188	10.71367

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00093	-0.00139	0.00092
#2	-0.00064	0.00083	-0.00276
Mean	**-0.00078**	**-0.00028**	**-0.00092**
%RSD	26.21451	560.41142	282.53305

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:58
SampleId1 : 1111161-4 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:06:42
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE85

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00008	0.02878	-0.00074	0.66783	0.11965	0.00047	0.00067	3.17361	-0.00057
#2	-0.00118	0.03074	-0.00442	0.67219	0.12065	0.00044	0.00172	3.17159	-0.00072
Mean	**-0.00063**	**0.02976**	**-0.00258**	**0.67001**	**0.12015**	**0.00045**	**0.00119**	**3.17260**	**-0.00064**
%RSD	122.70008	4.65547	101.02975	0.46006	0.58908	5.04134	61.65221	0.04516	16.09765

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00004	0.00024	-0.00248	1.76140	-0.00415	0.07067	0.17136	0.01909	-0.00092
#2	-0.00092	0.00008	-0.00221	1.76273	-0.00989	0.07116	0.17002	0.01928	-0.00231
Mean	**-0.00044**	**0.00016**	**-0.00234**	**1.76206**	**-0.00702**	**0.07091**	**0.17069**	**0.01919**	**-0.00161**
%RSD	154.94004	69.48178	8.13034	0.05321	57.81575	0.48718	0.55629	0.67777	61.05479

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	43.46104	-0.00096	0.08579	-0.00027	-0.00124	0.07275	-0.00270	-0.00799	-0.00005
#2	43.72314	-0.00076	0.07487	-0.00168	-0.00133	0.06957	-0.00222	-0.00622	0.00318
Mean	**43.59209**	**-0.00086**	**0.08033**	**-0.00098**	**-0.00128**	**0.07116**	**-0.00246**	**-0.00711**	**0.00156**
%RSD	0.42515	16.74734	9.61623	101.73092	5.00154	3.15272	13.79377	17.60667	146.30282

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.61944	0.00289	0.53379	0.00824	-0.00295	-0.00093	-0.03621	-0.00135	0.00413
#2	0.62360	0.00248	0.53550	-0.00100	-0.00323	0.00348	-0.03209	-0.00131	0.00447
Mean	**0.62152**	**0.00268**	**0.53465**	**0.00362**	**-0.00309**	**0.00127**	**-0.03415**	**-0.00133**	**0.00430**
%RSD	0.47311	10.79208	0.22723	180.56316	6.37227	244.48762	8.52689	2.19454	5.52406

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00102	-0.00092	-0.00270
#2	-0.00043	-0.00145	0.00005

Mean	**-0.00072**	**-0.00118**	**-0.00132UNDGREEN**
%RSD	57.60294	31.69010	146.92790

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:58
SampleId1 : 1111172-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:08:39
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE86

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00041	0.02015	-0.00147	0.09190	0.03740	0.00054	-0.00036	130.92062	-0.00118
#2	-0.00102	0.01874	-0.00126	0.09068	0.03736	0.00049	-0.00228	130.64196	-0.00091
Mean	**-0.00071**	**0.01945**	**-0.00137**	**0.09129**	**0.03738**	**0.00051**	**-0.00132**	**130.78129**	**-0.00104**
%RSD	60.45969	5.13074	10.88159	0.94573	0.07881	6.64049	102.39509	0.15067	18.01235

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00062	-0.00120	-0.00185	-0.01220	3.52828	0.02388	73.34586	0.00815	0.00702
#2	-0.00069	-0.00145	-0.00247	-0.01304	3.52978	0.02382	73.06442	0.00806	0.00686
Mean	**-0.00066**	**-0.00133**	**-0.00216**	**-0.01262**	**3.52903**	**0.02385**	**73.20514**	**0.00811**	**0.00694**
%RSD	7.45348	12.88290	20.39809	4.66394	0.03014	0.15650	0.27185	0.80188	1.66752

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	33.22984	-0.00069	-0.01887	-0.00508	-0.00038	110.79032	-0.00311	-0.00071	-0.00212
#2	33.16279	-0.00123	-0.01955	-0.00453	0.00101	110.43302	-0.00470	-0.00174	0.00052
Mean	**33.19632**	**-0.00096**	**-0.01921**	**-0.00481**	**0.00032**	**110.61167**	**-0.00390**	**-0.00122**	**-0.00080**
%RSD	0.14283	39.93087	2.51142	8.06590	310.41397	0.22841	28.83069	59.10094	234.42747

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.00226	0.00002	2.29566	-0.03817	-0.00362	-0.00107	-0.03088	-0.00038	0.05221
#2	7.97557	0.00125	2.29457	-0.03247	-0.00344	-0.00638	-0.04873	-0.00104	0.05322
Mean	**7.98892**	**0.00063**	**2.29511**	**-0.03532**	**-0.00353**	**-0.00372**	**-0.03981**	**-0.00071**	**0.05271**
%RSD	0.23628	136.99574	0.03356	11.40287	3.58830	100.87639	31.70503	65.28860	1.35321

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00116	-0.00194	-0.00165
#2	0.00053	-0.00083	-0.00023
Mean	**0.00085**	**-0.00139**	**-0.00094**
%RSD	52.10114	56.47432	106.95830

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:59
SampleId1 : 1111172-2 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:10:36
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE87

Final concentrations**56:09** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00014	0.02096	0.00664	0.13754	0.01691	0.00036	-0.00175	14.71232	-0.00072
#2	-0.00070	0.03310	-0.00295	0.13624	0.01712	0.00036	-0.00088	14.66865	-0.00088
Mean	**-0.00042**	**0.02703**	**0.00184**	**0.13689**	**0.01701**	**0.00036**	**-0.00131**	**14.69048**	**-0.00080**
%RSD	94.95180	31.74180	367.58818	0.67023	0.86566	0.33497	46.43576	0.21022	14.48170

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00010	0.00077	-0.00030	0.02835	1.14915	0.00356	6.66636	0.00144	0.00801
#2	-0.00127	0.00037	-0.00066	0.02859	1.14590	0.00355	6.68389	0.00153	0.00727
Mean	**-0.00069**	**0.00057**	**-0.00048**	**0.02847**	**1.14753**	**0.00355**	**6.67512**	**0.00149**	**0.00764**
%RSD	120.44301	49.84906	52.49990	0.59085	0.20021	0.21035	0.18567	4.36864	6.82030

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	78.98796	0.00399	-0.01068	0.00443	0.00022	57.70434	-0.00177	0.00799	0.00275
#2	78.83624	0.00396	-0.00613	-0.00120	0.00294	58.04409	-0.00226	0.00483	0.00454
Mean	**78.91210**	**0.00397**	**-0.00841**	**0.00162**	**0.00158**	**57.87422**	**-0.00202**	**0.00641**	**0.00364**
%RSD	0.13595	0.60351	38.26011	246.08663	121.47112	0.41511	17.24352	34.90633	34.74286

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.11519	0.00248	0.78393	-0.00402	-0.00298	0.00565	-0.03091	0.00793	0.01153
#2	7.11456	0.00698	0.78692	-0.00638	-0.00293	-0.00626	-0.04121	0.00793	0.01254
Mean	**7.11488**	**0.00473**	**0.78542**	**-0.00520**	**-0.00295**	**-0.00031**	**-0.03606**	**0.00793**	**0.01203**
%RSD	0.00622	67.36322	0.26864	32.12052	1.18959	2720.65400	20.19345	0.00041	5.92568

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00135	0.00162	0.00449
#2	-0.00146	0.00156	0.00463
Mean	**-0.00141**	**0.00159**	**0.00456**
%RSD	5.67970	2.81876	2.17298

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:59
SampleId1 : 1111172-3 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:12:29
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE88

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00165	0.01990	0.00221	0.33544	0.02270	0.00045	-0.00331	155.32019	-0.00057
#2	-0.00106	0.01488	-0.00632	0.34033	0.02253	0.00043	-0.00418	154.90957	-0.00082
Mean	**-0.00135**	**0.01739**	**-0.00205**	**0.33788**	**0.02262**	**0.00044**	**-0.00375**	**155.11488**	**-0.00070**
%RSD	30.66671	20.40997	293.79239	1.02302	0.52099	2.66296	16.41589	0.18719	25.12827

ted: 11/21/2011 12:56:09 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00092	-0.00107	-0.00111	0.01063	3.44354	0.03951	97.35429	0.00015	0.00367
#2	-0.00174	-0.00144	-0.00083	0.00980	3.45582	0.03970	97.38509	0.00015	0.00375
Mean	**-0.00133**	**-0.00126**	**-0.00097**	**0.01021**	**3.44968**	**0.03961**	**97.36969**	**0.00015**	**0.00371**
%RSD	43.87190	20.69948	20.73208	5.76399	0.25180	0.32659	0.02237	0.00000	1.56056

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	130.17222	-0.00035	-0.02433	-0.00087	0.00100	206.76689	-0.00216	0.01063	0.00513
#2	130.18321	0.00067	-0.02092	-0.00171	0.00411	207.30825	-0.00374	0.01302	0.00624
Mean	**130.17772**	**0.00016**	**-0.02263**	**-0.00129**	**0.00255**	**207.03757**	**-0.00295**	**0.01183**	**0.00568**
%RSD	0.00597	454.55112	10.66325	45.81595	85.99586	0.18489	38.04898	14.26313	13.78187

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	15.28185	0.00002	2.83081	-0.04023	-0.00343	-0.00427	-0.03982	0.00081	0.07642
#2	15.28886	0.00289	2.83504	-0.03431	-0.00331	0.00363	-0.05493	0.00048	0.07743
Mean	**15.28535**	**0.00145**	**2.83293**	**-0.03727**	**-0.00337**	**-0.00032**	**-0.04738**	**0.00065**	**0.07693**
%RSD	0.03241	139.51145	0.10561	11.22478	2.50521	1747.12272	22.54199	35.87694	0.92748

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00085	0.00038	0.00696
#2	-0.00154	0.00217	0.00849
Mean	**-0.00120**	**0.00127**	**0.00773**
%RSD	40.38568	99.51868	14.02710

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:59
SampleId1 : 1111172-4 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:14:24
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE89

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	0.01137	-0.00010	0.11334	0.02203	0.00036	-0.00383	108.17699	-0.00090
#2	-0.00076	0.00432	-0.00190	0.11128	0.02212	0.00031	0.00016	108.69406	-0.00087
Mean	**-0.00069**	**0.00785**	**-0.00100**	**0.11231**	**0.02207**	**0.00034**	**-0.00184**	**108.43553**	**-0.00088**
%RSD	15.79844	63.55132	126.58458	1.29728	0.26689	9.57526	153.39715	0.33718	2.50786

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00064	-0.00083	-0.00148	0.04512	3.39691	0.02462	57.31907	-0.00067	0.00604
#2	-0.00037	-0.00023	-0.00130	0.04453	3.39942	0.02459	57.39783	-0.00067	0.00621
Mean	**-0.00051**	**-0.00053**	**-0.00139**	**0.04483**	**3.39816**	**0.02461**	**57.35845**	**-0.00067**	**0.00612**
%RSD	38.47177	80.24301	9.47394	0.93828	0.05216	0.09101	0.09709	0.00000	1.89041

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	43.86575	-0.00089	-0.01705	-0.00003	0.00129	99.91978	-0.00691	-0.00034	0.00326
#2	43.79126	-0.00072	-0.02228	-0.00260	-0.00136	100.15037	-0.00325	-0.00426	0.00377
Mean	**43.82850**	**-0.00081**	**-0.01967**	**-0.00131**	**-0.00003**	**100.03508**	**-0.00508**	**-0.00230**	**0.00352**
%RSD	0.12019	14.83448	18.80883	138.15510	5520.14071	0.16300	51.06558	120.37495	10.27597

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.64857	0.00002	1.83754	-0.02976	-0.00322	0.00336	-0.03230	0.00008	0.04279
#2	10.66706	0.00084	1.84386	-0.03259	-0.00340	-0.00365	-0.03779	-0.00021	0.04078
Mean	**10.65782**	**0.00043**	**1.84070**	**-0.03117**	**-0.00331**	**-0.00015**	**-0.03504**	**-0.00006**	**0.04178**
%RSD	0.12272	135.03321	0.24290	6.41061	3.82558	3358.42180	11.08193	317.26106	3.41386

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00047	0.00085	0.00206
#2	-0.00024	-0.00177	0.00110
Mean	**-0.00035**	**-0.00046**	**0.00158**
%RSD	46.40545	403.51608	43.09875

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:59
SampleId1 : 1111172-5 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:16:23
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE90

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00071	0.00383	0.00590	0.64267	0.02536	0.00047	-0.00002	513.54012	-0.00086
#2	-0.00050	0.00703	-0.00074	0.64374	0.02520	0.00043	0.00172	515.43371	-0.00082
Mean	**-0.00061**	**0.00543**	**0.00258**	**0.64320**	**0.02528**	**0.00045**	**0.00085**	**514.48691**	**-0.00084**
%RSD	24.51561	41.64311	181.79743	0.11769	0.46607	5.36698	143.99831	0.26025	3.81638

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00029	0.10361	0.00052	1.20664	9.82873	0.05959	307.00959	0.00236	0.01144
#2	0.00040	0.10354	0.00007	1.20664	9.82848	0.05962	307.44580	0.00245	0.01161
Mean	**0.00005**	**0.10358**	**0.00030**	**1.20664**	**9.82861**	**0.05960**	**307.22770**	**0.00241**	**0.01153**
%RSD	947.38701	0.04261	108.67035	0.00000	0.00182	0.03754	0.10040	2.70036	1.00437

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	296.48492	0.25725	-0.01159	-0.00071	0.00012	724.60988	-0.00219	0.03434	0.03366
#2	296.62950	0.25912	-0.02592	-0.00368	0.00106	725.75527	-0.00513	0.03914	0.03383
Mean	**296.55721**	**0.25819**	**-0.01876**	**-0.00220**	**0.00059**	**725.18257**	**-0.00366**	**0.03674**	**0.03374**
%RSD	0.03447	0.51138	54.01944	95.49344	113.71247	0.11168	56.70037	9.22872	0.35717

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.83799	-0.00285	13.94381	-0.04633	-0.00479	0.01074	-0.03789	0.00047	0.00750
#2	10.87974	0.00084	13.96937	-0.03560	-0.00484	0.00354	-0.03858	0.00067	0.00817
Mean	**10.85886**	**-0.00100**	**13.95659**	**-0.04096**	**-0.00481**	**0.00714**	**-0.03824**	**0.00057**	**0.00783**
%RSD	0.27180	259.95540	0.12951	18.51378	0.73017	71.36223	1.26962	25.35410	6.06961

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00036	-0.00016	0.03389
#2	-0.00012	-0.00052	0.03560
Mean	**0.00012**	**-0.00034**	**0.03474**
%RSD	286.27179	74.42729	3.48142

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:59
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 21:18:47
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19807	53.01445	0.51735	1.02346	1.02997	0.47426	0.53876	47.83029	0.49993
#2	0.19918	52.89771	0.51522	1.01802	1.02559	0.47568	0.53527	48.09162	0.50068
Mean	**0.19862**	**52.95608**	**0.51629**	**1.02074**	**1.02778**	**0.47497**	**0.53702**	**47.96096**	**0.50031**
%RSD	0.39402	0.15588	0.29065	0.37665	0.30170	0.21081	0.45855	0.38528	0.10601

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48111	0.96081	1.05549	19.70418	49.44277	0.52771	50.49278	0.96069	0.98041
#2	0.48317	0.96536	1.04894	19.76128	49.20541	0.52468	50.47432	0.96376	0.97778
Mean	**0.48214**	**0.96309**	**1.05221**	**19.73273**	**49.32409**	**0.52619**	**50.48355**	**0.96223**	**0.97910**
%RSD	0.30301	0.33387	0.44013	0.20462	0.34027	0.40699	0.02585	0.22603	0.19037

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.38282	0.99233	5.02373	0.98607	0.99229	5.49527	0.49703	1.04882	1.03571
#2	49.21670	0.99519	5.04104	0.99414	0.98784	5.48889	0.49597	1.04970	1.04132
Mean	**49.29976**	**0.99376**	**5.03239**	**0.99010**	**0.99006**	**5.49208**	**0.49650**	**1.04926**	**1.03851**
%RSD	0.23826	0.20369	0.24329	0.57698	0.31750	0.08209	0.15105	0.05893	0.38182

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.00188	1.04455	0.51198	0.30413	0.47787	0.53472	4.96751	0.48088	0.93679
#2	5.01258	1.05278	0.50932	0.31370	0.47881	0.52952	4.95578	0.48270	0.94424
Mean	**5.00723**	**1.04867**	**0.51065**	**0.30891**	**0.47834**	**0.53212**	**4.96164**	**0.48179**	**0.94051**
%RSD	0.15104	0.55511	0.36882	2.18941	0.13832	0.69032	0.16721	0.26681	0.56072

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	0.98501	0.99021	1.04007**UNDGREEN**
#2	0.98524	0.98994	1.04411
Mean	**0.98512**	**0.99008**	**1.04209**
%RSD	0.01625	0.01963	0.27356

Method : Paragon File : 111118A Printed : 11/21/2011 12:55:59
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 21:20:42
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00093	0.04907	-0.00242	-0.00461	-0.00096	0.00060	-0.00106	-0.02143	-0.00062
#2	-0.00138	0.04489	-0.00084	-0.00538	-0.00100	0.00055	-0.00193	-0.03525	-0.00101
Mean	**-0.00115**	**0.04698**	**-0.00163**	**-0.00500**	**-0.00098**	**0.00058**	**-0.00149**	**-0.02834**	**-0.00081**
%RSD	27.94618	6.28792	68.44558	10.79630	3.00445	6.22870	41.17916	34.47982	34.16306

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00116	-0.00023	-0.00239	0.00183	-0.27486	-0.00199	-0.01931	-0.00040	-0.00002
#2	-0.00095	-0.00141	-0.00192	0.00147	-0.28035	-0.00200	-0.02782	-0.00049	-0.00051
Mean	**-0.00106**	**-0.00082**	**-0.00215**	**0.00165**	**-0.27761**	**-0.00199**	**-0.02356**	**-0.00044**	**-0.00026**
%RSD	13.82894	101.79425	15.36806	15.28662	1.39790	0.49966	25.51834	14.68891	133.06133

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.14359	-0.00086	-0.00955	-0.00297	0.00065	0.02516	-0.00256	-0.00690	0.00334
#2	-0.15177	-0.00191	-0.01728	-0.00521	0.00131	-0.00340	-0.00464	-0.00590	-0.00118
Mean	**-0.14768**	**-0.00138**	**-0.01341**	**-0.00409**	**0.00098**	**0.01088**	**-0.00360**	**-0.00640**	**0.00108**
%RSD	3.91476	53.68244	40.77313	38.74890	47.50542	185.58188	40.72387	10.98903	295.45633

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02040	-0.00367	-0.00058	0.00000	-0.00305	-0.00116	-0.03433	-0.00071	-0.00158
#2	-0.02226	0.00289	-0.00105	0.00369	-0.00309	0.00093	-0.05218	-0.00079	-0.00057
Mean	**-0.02133**	**-0.00039**	**-0.00081**	**0.00185**	**-0.00307**	**-0.00012**	**-0.04325**	**-0.00075**	**-0.00108**
%RSD	6.19427	1187.12489	40.14109	141.07117	0.91622	1234.17261	29.18210	7.74911	66.30619

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00030	-0.00055	-0.00007
#2	-0.00005	-0.00086	-0.00275
Mean	**0.00012**	**-0.00071**	**-0.00141**
%RSD	205.09895	30.64260	134.29155

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:00
SampleId1 : 1111172-6 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:22:39

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE91

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	0.02460	-0.00200	0.63166	0.02670	0.00072	0.00154	497.91926	-0.00093
#2	-0.00045	0.02382	0.00032	0.63456	0.02678	0.00070	0.00293	498.12071	-0.00102
Mean	**-0.00073**	**0.02421**	**-0.00084**	**0.63311**	**0.02674**	**0.00071**	**0.00223**	**498.01998**	**-0.00097**
%RSD	55.07407	2.27562	194.54644	0.32454	0.22033	1.93556	43.96447	0.02860	6.71725

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00036	0.10249	-0.00028	1.21336	9.76680	0.05926	299.54899	0.00402	0.00932
#2	0.00012	0.10327	-0.00047	1.21396	9.73141	0.05889	299.03255	0.00411	0.01054
Mean	**-0.00012**	**0.10288**	**-0.00038**	**1.21366**	**9.74910**	**0.05908**	**299.29077**	**0.00406**	**0.00993**
%RSD	285.57851	0.53735	34.84747	0.03497	0.25668	0.44608	0.12201	1.60034	8.74356

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	288.21122	0.25301	-0.01728	0.00005	0.00107	701.82782	-0.00538	0.03837	0.03494
#2	288.11870	0.25328	-0.00886	-0.00149	-0.00108	703.21012	-0.00281	0.03257	0.03656
Mean	**288.16496**	**0.25315**	**-0.01307**	**-0.00072**	**0.00000**	**702.51897**	**-0.00410**	**0.03547**	**0.03575**
%RSD	0.02270	0.07586	45.52910	150.55395	59495.63247	0.13913	44.41751	11.56476	3.20279

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	10.62448	0.00002	13.71850	-0.03140	-0.00474	-0.00337	-0.05231	0.00026	0.00178
#2	10.60843	-0.00080	13.71259	-0.02860	-0.00442	0.00483	-0.04682	0.00096	-0.00024
Mean	**10.61645**	**-0.00039**	**13.71554**	**-0.03000**	**-0.00458**	**0.00073**	**-0.04957**	**0.00061**	**0.00077**
%RSD	0.10691	149.11815	0.03046	6.59326	4.91145	792.91308	7.83423	80.27042	184.40340

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00091	0.00073	0.03608
#2	0.00056	-0.00121	0.03523
Mean	**0.00074**	**-0.00024**	**0.03566**
%RSD	33.33589	568.97469	1.68919

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:00
SampleId1 : 1111172-10 SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 21:24:32
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE92

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00091	0.04062	-0.00347	0.12311	0.04849	0.00074	-0.00175	65.70711	-0.00088
#2	-0.00024	0.03887	-0.00400	0.12288	0.04849	0.00072	0.00033	65.54966	-0.00030

Mean	**-0.00058**	**0.03975**	**-0.00374**	**0.12300**	**0.04849**	**0.00073**	**-0.00071**	**65.62838**	**-0.00059**
%RSD	82.58125	3.11799	9.96003	0.13163	0.00000	1.51471	206.49464	0.16964	69.27845

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00081	0.00354	-0.00248	0.05892	2.52329	0.01987	48.79103	-0.00021	0.00694
#2	-0.00081	0.00379	-0.00193	0.05940	2.51628	0.01986	48.72281	-0.00021	0.00784
Mean	**-0.00081**	**0.00366**	**-0.00221**	**0.05916**	**2.51979**	**0.01987**	**48.75692**	**-0.00021**	**0.00739**
%RSD	0.03453	4.81187	17.40059	0.56880	0.19674	0.02506	0.09894	0.00000	8.61281

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	50.72658	0.03142	-0.01364	-0.00149	0.00199	60.48503	-0.00279	-0.00817	0.00071
#2	50.63875	0.03390	-0.02024	-0.00080	-0.00067	60.51173	-0.00462	0.00243	0.00326
Mean	**50.68266**	**0.03266**	**-0.01694**	**-0.00114**	**0.00066**	**60.49838**	**-0.00370**	**-0.00287**	**0.00199**
%RSD	0.12254	5.35973	27.53760	42.23655	286.44242	0.03121	34.96430	261.10556	90.97127

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	14.42990	-0.00039	1.58426	-0.01578	-0.00313	-0.00665	-0.03848	0.00110	-0.00192
#2	14.43597	0.00289	1.58232	-0.02407	-0.00332	-0.00404	-0.03505	0.00155	-0.00024
Mean	**14.43293**	**0.00125**	**1.58329**	**-0.01993**	**-0.00322**	**-0.00535**	**-0.03677**	**0.00133**	**-0.00108**
%RSD	0.02973	185.64492	0.08637	29.39377	4.14398	34.43158	6.60091	23.93262	110.51054

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00209	0.00083	-0.00225
#2	-0.00140	-0.00072	0.00299
Mean	**-0.00174**	**0.00006**	**0.00037**
%RSD	27.84108	1893.85982	1003.02823

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:00
SampleId1 : 1111104-1 500X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 21:26:24
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE93

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00159	0.03452	0.00053	0.09732	0.00491	0.00067	-0.00280	0.64547	-0.00094
#2	-0.00101	0.04162	-0.00390	0.09709	0.00495	0.00070	-0.00280	0.62126	-0.00084
Mean	**-0.00130**	**0.03807**	**-0.00168**	**0.09720**	**0.00493**	**0.00068**	**-0.00280**	**0.63336**	**-0.00089**
%RSD	31.49546	13.18842	185.66062	0.16654	0.59691	3.08951	0.07969	2.70309	8.48523

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00156	-0.00189	-0.00247	0.03204	-0.11569	0.02393	0.12750	0.00052	-0.00288
#2	-0.00184	-0.00223	-0.00256	0.03204	-0.12617	0.02402	0.10735	0.00052	-0.00182
Mean	**-0.00170**	**-0.00206**	**-0.00251**	**0.03204**	**-0.12093**	**0.02397**	**0.11742**	**0.00052**	**-0.00235**

%RSD	11.41273	11.69793	2.36216	0.00000	6.12758	0.26989	12.12912	0.00000	32.04185

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	16.61785	-0.00194	-0.02001	-0.00456	0.00293	0.17111	-0.00416	-0.00515	-0.00381
#2	16.65905	-0.00269	-0.02934	-0.00513	0.00277	0.15842	-0.00354	-0.01133	-0.00177
Mean	**16.63845**	**-0.00232**	**-0.02467**	**-0.00484**	**0.00285**	**0.16476**	**-0.00385**	**-0.00824**	**-0.00279**
%RSD	0.17510	22.76531	26.72762	8.34170	4.02502	5.44710	11.47449	53.11000	51.83227

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.02720	-0.00121	0.27374	0.01243	-0.00298	0.00024	-0.04533	-0.00168	0.00010
#2	0.02823	-0.00326	0.27319	0.00468	-0.00329	-0.00116	-0.05426	-0.00115	-0.00192
Mean	**0.02772**	**-0.00223**	**0.27347**	**0.00856**	**-0.00313**	**-0.00046**	**-0.04979**	**-0.00142**	**-0.00091**
%RSD	2.62284	64.82582	0.14127	64.06390	6.95429	215.93979	12.67397	26.55104	157.17767

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00178	0.00044	-0.00426
#2	-0.00133	0.00014	-0.00495
Mean	**-0.00156**	**0.00029**	**-0.00460**
%RSD	20.70026	72.64250	10.70769

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:00
SampleId1 : 1111232-1 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:28:15
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE94

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00034	0.04140	-0.00569	0.05680	-0.00125	0.00068	-0.00141	-0.05310	-0.00090
#2	-0.00070	0.03808	-0.00516	0.05733	-0.00133	0.00067	-0.00054	-0.05022	-0.00062
Mean	**-0.00052**	**0.03974**	**-0.00542**	**0.05707**	**-0.00129**	**0.00067**	**-0.00098**	**-0.05166**	**-0.00076**
%RSD	49.37681	5.91970	6.86534	0.66180	4.55677	1.02763	62.74898	3.94056	26.37466

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	-0.00120	-0.00193	0.00789	-0.30080	-0.00191	-0.04885	-0.00104	-0.00124
#2	-0.00102	-0.00132	-0.00201	0.00718	-0.30504	-0.00192	-0.04840	-0.00095	-0.00247
Mean	**-0.00082**	**-0.00126**	**-0.00197**	**0.00754**	**-0.30292**	**-0.00191**	**-0.04863**	**-0.00099**	**-0.00186**
%RSD	35.78384	6.92726	3.14788	6.69448	0.98988	0.65043	0.65081	6.53884	46.74858

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	41.53473	-0.00082	-0.01955	0.00188	0.00169	1.74286	-0.00318	-0.00224	-0.00177
#2	41.55098	-0.00127	-0.01455	-0.00352	0.00071	1.73015	-0.00233	0.00015	0.00104
Mean	**41.54285**	**-0.00105**	**-0.01705**	**-0.00082**	**0.00120**	**1.73650**	**-0.00275**	**-0.00104**	**-0.00037**
%RSD	0.02765	29.81323	20.75123	466.68802	58.13443	0.51754	21.78674	162.14680	542.44271

ted: 11/21/2011 12:56:09 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.40227	0.00166	-0.00098	0.00806	-0.00295	0.00263	-0.04532	-0.00075	0.00178
#2	1.39481	0.00084	-0.00113	0.00776	-0.00313	-0.00117	-0.04943	-0.00111	0.00178
Mean	**1.39854**	**0.00125**	**-0.00105**	**0.00791**	**-0.00304**	**0.00073**	**-0.04737**	**-0.00093**	**0.00178**
%RSD	0.37736	46.40451	10.10568	2.64498	4.16346	368.13675	6.14756	27.99927	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00127	0.00176	-0.00193
#2	-0.00133	-0.00070	0.00074
Mean	**-0.00130**	**0.00053**	**-0.00059**
%RSD	3.20009	330.05056	319.14156

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:00
SampleId1 : 1111235-1 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:30:06
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE95

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00096	0.03263	-0.00369	0.13967	0.00720	0.00058	-0.00314	4.61673	-0.00103
#2	-0.00087	0.03080	-0.00495	0.14181	0.00725	0.00055	-0.00192	4.63995	-0.00092
Mean	**-0.00092**	**0.03171**	**-0.00432**	**0.14074**	**0.00722**	**0.00056**	**-0.00253**	**4.62834**	**-0.00098**
%RSD	7.06911	4.06249	20.69705	1.07369	0.40766	3.85663	34.04253	0.35469	7.54500

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00142	-0.00167	-0.00211	0.03537	0.06099	0.00091	2.19989	0.00852	0.00048
#2	-0.00115	-0.00124	-0.00185	0.03620	0.06473	0.00093	2.19496	0.00870	0.00048
Mean	**-0.00128**	**-0.00145**	**-0.00198**	**0.03579**	**0.06286**	**0.00092**	**2.19743**	**0.00861**	**0.00048**
%RSD	15.10983	20.94784	9.27579	1.64534	4.21131	1.61980	0.15864	1.50962	0.00000

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	40.50412	-0.00113	-0.00932	-0.00323	0.00006	4.03930	-0.00267	0.00053	0.00053
#2	40.70418	-0.00028	-0.00841	-0.00363	0.00077	4.03612	-0.00047	-0.00551	0.00036
Mean	**40.60415**	**-0.00071**	**-0.00886**	**-0.00343**	**0.00042**	**4.03771**	**-0.00157**	**-0.00249**	**0.00045**
%RSD	0.34839	84.85337	7.25921	8.13446	121.00033	0.05576	99.25109	171.53666	26.88117

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.85505	-0.00449	0.03067	0.00364	-0.00324	-0.00466	-0.04671	-0.00144	0.02464
#2	0.86526	-0.00572	0.03065	0.00569	-0.00290	0.00005	-0.02954	-0.00123	0.02498
Mean	**0.86016**	**-0.00510**	**0.03066**	**0.00466**	**-0.00307**	**-0.00230**	**-0.03813**	**-0.00133**	**0.02481**
%RSD	0.83960	17.03971	0.05335	31.01799	7.78789	144.77887	31.83164	10.85249	0.95824

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	-0.00102	-0.00104	0.00053
#2	-0.00086	-0.00069	-0.00159
Mean	**-0.00094**	**-0.00086**	**-0.00053**
%RSD	11.84869	28.27517	283.43901

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:01
SampleId1 : 1111238-1 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:31:59
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE96

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00066	0.02360	-0.00200	-0.00652	0.00262	0.00057	0.00033	60.82785	-0.00081
#2	-0.00004	0.02476	-0.00253	-0.00553	0.00266	0.00048	-0.00036	61.11409	-0.00050
Mean	**-0.00035**	**0.02418**	**-0.00226**	**-0.00603**	**0.00264**	**0.00053**	**-0.00002**	**60.97097**	**-0.00066**
%RSD	124.64425	3.39862	16.44694	11.63659	1.11419	12.37358	2579.10807	0.33196	33.33335

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00012	-0.00148	-0.00211	-0.01755	62.98825	-0.00194	22.44879	-0.00058	-0.00116
#2	-0.00040	-0.00042	-0.00157	-0.01720	62.37073	-0.00191	22.40976	-0.00049	-0.00149
Mean	**-0.00026**	**-0.00095**	**-0.00184**	**-0.01738**	**62.67949**	**-0.00193**	**22.42928**	**-0.00053**	**-0.00133**
%RSD	75.24708	78.96923	20.66534	1.45164	0.69664	1.29254	0.12303	12.16237	17.47177

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	296.12141	-0.00164	-0.00659	-0.00244	0.00186	264.43721	-0.00538	0.00836	-0.00178
#2	296.39484	-0.00103	-0.00977	0.00132	-0.00322	264.19127	-0.00086	0.00156	0.00061
Mean	**296.25812**	**-0.00133**	**-0.00818**	**-0.00056**	**-0.00068**	**264.31424**	**-0.00312**	**0.00496**	**-0.00058**
%RSD	0.06526	32.35915	27.52680	473.53835	527.47111	0.06580	102.42644	97.00584	288.48514

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01129	0.00330	0.02336	-0.01527	-0.00343	0.00202	-0.04049	-0.00120	-0.00024
#2	0.01254	0.00043	0.02305	-0.01545	-0.00352	-0.00757	-0.03157	-0.00051	0.00145
Mean	**0.01192**	**0.00186**	**0.02320**	**-0.01536**	**-0.00347**	**-0.00277**	**-0.03603**	**-0.00085**	**0.00061**
%RSD	7.40240	108.82879	0.95148	0.80697	1.82241	244.63074	17.51540	57.64405	196.33808

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00040	0.00043	0.00160
#2	0.00067	-0.00171	0.00092
Mean	**0.00054**	**-0.00064**	**0.00126**
%RSD	36.26662	235.58188	37.84805

SampleId1 : 1111238-3 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:33:51
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE97

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00097	0.02168	-0.00263	-0.00721	0.00166	0.00050	-0.00089	47.76040	-0.00081
#2	-0.00066	0.01726	-0.00158	-0.00606	0.00175	0.00044	-0.00210	47.83651	-0.00064
Mean	**-0.00082**	**0.01947**	**-0.00211**	**-0.00664**	**0.00171**	**0.00047**	**-0.00149**	**47.79845**	**-0.00072**
%RSD	26.65931	16.05897	35.36144	12.19209	3.45230	8.34145	57.35206	0.11259	16.08768

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00074	-0.00142	-0.00202	-0.01732	48.60568	-0.00197	18.50612	-0.00076	-0.00198
#2	-0.00129	-0.00183	-0.00166	-0.01803	48.67041	-0.00198	18.49208	-0.00076	-0.00263
Mean	**-0.00102**	**-0.00162**	**-0.00184**	**-0.01767**	**48.63804**	**-0.00197**	**18.49910**	**-0.00076**	**-0.00231**
%RSD	38.25014	17.91055	13.79401	2.85444	0.09410	0.12614	0.05364	0.00000	20.06781

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	225.92814	-0.00222	-0.00932	-0.00525	-0.00042	195.69613	-0.00379	0.00395	-0.00041
#2	226.69689	-0.00184	-0.01273	-0.00242	0.00168	195.58939	-0.00514	-0.00867	-0.00152
Mean	**226.31251**	**-0.00203**	**-0.01102**	**-0.00384**	**0.00063**	**195.64276**	**-0.00447**	**-0.00236**	**-0.00097**
%RSD	0.24019	12.99970	21.88561	52.25006	234.68634	0.03858	21.34341	377.90588	80.91499

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00902	-0.00285	0.01760	-0.01625	-0.00325	0.00112	-0.04324	-0.00091	0.00010
#2	0.00952	0.00084	0.01758	-0.01713	-0.00336	-0.00298	-0.03706	-0.00112	0.00077
Mean	**0.00927**	**-0.00100**	**0.01759**	**-0.01669**	**-0.00330**	**-0.00093**	**-0.04015**	**-0.00102**	**0.00044**
%RSD	3.76134	259.50551	0.09296	3.71051	2.34137	312.85347	10.88312	14.23308	108.72443

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00028	-0.00203	0.00104
#2	0.00045	0.00032	-0.00390
Mean	**0.00036**	**-0.00086**	**-0.00143**
%RSD	33.91466	193.59456	243.95150

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:01
SampleId1 : 1111238-3L 25X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:35:43
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE98

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	-0.00061	0.01953	-0.00010	-0.00622	-0.00088	0.00034	-0.00418	9.57093	-0.00098
#2	-0.00101	0.01412	-0.00021	-0.00698	-0.00092	0.00029	-0.00072	9.53757	-0.00100
Mean	**-0.00081**	**0.01682**	**-0.00016**	**-0.00660**	**-0.00090**	**0.00031**	**-0.00245**	**9.55425**	**-0.00099**
%RSD	35.64663	22.76064	47.25830	8.17505	3.28348	11.88002	100.00017	0.24688	1.31869

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00116	-0.00161	-0.00230	-0.01886	7.46408	-0.00212	3.74865	-0.00104	-0.00165
#2	-0.00171	-0.00176	-0.00247	-0.01922	7.40889	-0.00211	3.72533	-0.00104	-0.00034
Mean	**-0.00143**	**-0.00168**	**-0.00238**	**-0.01904**	**7.43648**	**-0.00212**	**3.73699**	**-0.00104**	**-0.00100**
%RSD	27.16505	6.29555	5.09714	1.32471	0.52480	0.35263	0.44140	0.00000	92.82275

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.40433	-0.00106	-0.01046	-0.00376	0.00100	39.18676	-0.00342	-0.00072	-0.00152
#2	49.05770	-0.00110	-0.00727	-0.00323	0.00212	39.06538	-0.00378	-0.00022	-0.00425
Mean	**49.23102**	**-0.00108**	**-0.00886**	**-0.00349**	**0.00156**	**39.12607**	**-0.00360**	**-0.00047**	**-0.00288**
%RSD	0.49787	2.22128	25.40725	10.73437	51.17959	0.21936	6.97090	74.25500	66.81177

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01888	0.00207	0.00204	0.00046	-0.00327	-0.00088	-0.03775	-0.00055	-0.00124
#2	-0.01848	-0.00285	0.00206	-0.00109	-0.00315	-0.00208	-0.05079	-0.00169	-0.00091
Mean	**-0.01868**	**-0.00039**	**0.00205**	**-0.00032**	**-0.00321**	**-0.00148**	**-0.04427**	**-0.00112**	**-0.00108**
%RSD	1.52772	890.70603	0.79658	345.97602	2.62942	57.71153	20.83595	72.35979	22.10204

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00083	-0.00059	-0.00125
#2	-0.00088	0.00034	-0.00291
Mean	**-0.00086**	**-0.00012**	**-0.00208**
%RSD	4.90944	536.48587	56.18843

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:01
SampleId1 : 1111238-3A 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:37:35
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE99

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00113	0.01881	-0.00179	-0.00660	0.00171	0.00041	-0.00280	84.01734	-0.00100
#2	-0.00103	0.01904	-0.00232	-0.00599	0.00175	0.00038	0.00154	83.58769	-0.00106
Mean	**-0.00108**	**0.01892**	**-0.00205**	**-0.00629**	**0.00173**	**0.00039**	**-0.00063**	**83.80252**	**-0.00103**
%RSD	6.34404	0.85558	18.13415	6.85716	1.70534	6.39760	489.52055	0.36253	3.68678

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00060	-0.00116	-0.00238	-0.01625	92.27209	0.59473	55.06083	0.00052	-0.00165

#2	-0.00060	-0.00092	-0.00139	-0.01589	91.64952	0.59016	54.80778	0.00061	-0.00190
Mean	**-0.00060**	**-0.00104**	**-0.00188**	**-0.01607**	**91.96081**	**0.59245**	**54.93430**	**0.00057**	**-0.00178**
%RSD	0.00192	16.74754	37.32144	1.56982	0.47870	0.54499	0.32572	11.43056	9.78080

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	253.47380	-0.00110	-0.01455	-0.00229	0.00173	195.85440	-0.00208	-0.00804	-0.00169
#2	251.14317	-0.00093	-0.00795	0.00015	-0.00128	195.75134	-0.00429	-0.00577	0.00146
Mean	**252.30849**	**-0.00101**	**-0.01125**	**-0.00107**	**0.00023**	**195.80287**	**-0.00318**	**-0.00690**	**-0.00012**
%RSD	0.65317	11.85099	41.45680	161.68408	937.13003	0.03722	49.07629	23.32462	1925.92745

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00651	-0.00326	0.01760	-0.03031	-0.00298	-0.00038	-0.04736	-0.00087	0.00010
#2	0.01015	-0.00367	0.01753	-0.03268	-0.00296	-0.00097	-0.03912	-0.00067	0.00145
Mean	**0.00833**	**-0.00346**	**0.01757**	**-0.03149**	**-0.00297**	**-0.00068**	**-0.04324**	**-0.00077**	**0.00077**
%RSD	30.96555	8.36518	0.27926	5.32385	0.47345	62.17451	13.47220	18.76309	122.93601

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00102	0.00040	-0.00381
#2	0.00147	-0.00080	-0.00095
Mean	**0.00124**	**-0.00020**	**-0.00238**
%RSD	25.82236	416.28181	85.12165

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:01
SampleId1 : 1111106-22 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:39:27
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE100

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00128	0.01168	0.00284	0.07717	0.00308	0.00026	-0.00505	7.90212	-0.00037
#2	-0.00056	0.01018	-0.00053	0.07732	0.00325	0.00025	-0.00175	7.93247	-0.00084
Mean	**-0.00092**	**0.01093**	**0.00116**	**0.07725**	**0.00316**	**0.00025**	**-0.00340**	**7.91729**	**-0.00060**
%RSD	55.14083	9.70798	205.63188	0.13970	3.72341	3.96298	68.66219	0.27105	55.53071

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	-0.00133	-0.00193	-0.01815	-0.11469	0.00501	3.24270	-0.00104	0.01112
#2	-0.00053	-0.00143	-0.00149	-0.01803	-0.10521	0.00497	3.24360	-0.00104	0.01063
Mean	**-0.00077**	**-0.00138**	**-0.00171**	**-0.01809**	**-0.10995**	**0.00499**	**3.24315**	**-0.00104**	**0.01087**
%RSD	43.95953	5.17100	18.39586	0.46479	6.09766	0.59839	0.01956	0.00000	3.19460

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	39.54036	-0.00157	-0.01592	-0.00375	0.00109	24.04428	-0.00478	-0.00185	-0.00033
#2	39.43082	-0.00096	-0.01341	-0.00184	-0.00163	24.03132	-0.00320	-0.00676	0.00325

Mean	**39.48559**	**-0.00127**	**-0.01466**	**-0.00280**	**-0.00027**	**24.03780**	**-0.00399**	**-0.00431**	**0.00146**
%RSD	0.19617	34.09269	12.06573	48.29055	715.79540	0.03812	28.15494	80.60024	173.31797

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.93830	-0.00203	0.12158	-0.00125	-0.00325	0.00343	-0.03706	-0.00022	-0.00024
#2	2.94754	-0.00080	0.12145	-0.00087	-0.00304	-0.00077	-0.02470	0.00048	0.00010
Mean	**2.94292**	**-0.00141**	**0.12152**	**-0.00106**	**-0.00314**	**0.00133**	**-0.03088**	**0.00013**	**-0.00007**
%RSD	0.22197	61.42374	0.07417	25.08879	4.69607	223.17235	28.29697	382.70776	354.85472

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00104	-0.00052	-0.00084
#2	-0.00058	-0.00170	-0.00009
Mean	**-0.00081**	**-0.00111**	**-0.00046**
%RSD	40.38059	74.82546	115.23080

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:01
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 21:41:59
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19819	53.09308	0.52212	1.02767	1.03563	0.47510	0.54449	47.66473	0.50269
#2	0.19720	52.84056	0.51851	1.01718	1.03411	0.47551	0.54345	47.59920	0.49822
Mean	**0.19769**	**52.96682**	**0.52032**	**1.02242**	**1.03487**	**0.47531**	**0.54397**	**47.63196**	**0.50045**
%RSD	0.35303	0.33711	0.49031	0.72559	0.10373	0.06103	0.13614	0.09728	0.63098

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48097	0.96162	1.06076	19.72892	49.69985	0.53037	50.51908	0.96125	0.97424
#2	0.48076	0.96109	1.05802	19.72185	49.50252	0.52787	50.35851	0.96069	0.98157
Mean	**0.48087**	**0.96136**	**1.05939**	**19.72539**	**49.60118**	**0.52912**	**50.43880**	**0.96097**	**0.97790**
%RSD	0.03072	0.03938	0.18233	0.02534	0.28131	0.33323	0.22510	0.04115	0.53012

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.46412	0.99458	4.95987	0.99134	0.98899	5.26257	0.50267	1.06309	1.03451
#2	49.17594	0.99611	4.98021	0.98666	0.98665	5.29126	0.50287	1.05927	1.03890
Mean	**49.32003**	**0.99535**	**4.97004**	**0.98900**	**0.98782**	**5.27691**	**0.50277**	**1.06118**	**1.03670**
%RSD	0.41317	0.10895	0.28952	0.33484	0.16773	0.38439	0.02696	0.25438	0.29938

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.99521	1.04949	0.50914	0.30971	0.47910	0.52612	4.98675	0.48232	0.93306
#2	4.98443	1.05649	0.50849	0.31107	0.47881	0.53904	4.98538	0.48405	0.93882
Mean	**4.98982**	**1.05299**	**0.50882**	**0.31039**	**0.47895**	**0.53258**	**4.98607**	**0.48318**	**0.93594**

%RSD	0.15282	0.47000	0.09091	0.30992	0.04262	1.71585	0.01944	0.25220	0.43538

	Zr	Pb	Se
	ppm	calc	calc
#1	0.99153	0.98977	1.04402
#2	0.98979	0.98665	1.04568
Mean	**0.99066**	**0.98821**	**1.04485**
%RSD	0.12403	0.22342	0.11209

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:02
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 21:43:56
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00045	0.03734	-0.00379	-0.00584	-0.00133	0.00055	-0.00696	-0.08390	-0.00084
#2	-0.00029	0.03332	-0.00274	-0.00637	-0.00133	0.00052	0.00033	-0.08362	-0.00079
Mean	**-0.00037**	**0.03533**	**-0.00326**	**-0.00610**	**-0.00133**	**0.00054**	**-0.00332**	**-0.08376**	**-0.00081**
%RSD	29.17248	8.04285	22.81212	6.18753	0.00000	3.11385	155.32831	0.24303	4.36486

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00137	-0.00148	-0.00238	-0.01304	-0.31552	-0.00214	-0.06138	-0.00095	-0.00026
#2	-0.00130	-0.00133	-0.00239	-0.01339	-0.32425	-0.00217	-0.06272	-0.00095	-0.00190
Mean	**-0.00133**	**-0.00140**	**-0.00238**	**-0.01321**	**-0.31989**	**-0.00216**	**-0.06205**	**-0.00095**	**-0.00108**
%RSD	3.68091	7.79300	0.09490	1.90889	1.92987	0.69317	1.52997	0.00000	107.23077

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.17894	-0.00167	-0.01410	0.00006	-0.00145	-0.04781	-0.00121	-0.00299	0.00265
#2	-0.17961	-0.00266	-0.01478	-0.00332	0.00031	-0.04464	-0.00404	-0.00741	0.00248
Mean	**-0.17928**	**-0.00216**	**-0.01444**	**-0.00163**	**-0.00057**	**-0.04623**	**-0.00262**	**-0.00520**	**0.00257**
%RSD	0.26140	32.12434	3.34251	146.97052	218.55447	4.85280	76.37884	60.00667	4.69471

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02607	0.00289	-0.00190	0.00663	-0.00310	-0.00118	-0.04255	-0.00128	-0.00124
#2	-0.02052	-0.00612	-0.00191	0.00266	-0.00333	-0.00227	-0.03844	-0.00132	0.00010
Mean	**-0.02329**	**-0.00162**	**-0.00191**	**0.00464**	**-0.00321**	**-0.00172**	**-0.04050**	**-0.00130**	**-0.00057**
%RSD	16.82184	393.56193	0.42864	60.36392	5.03192	45.02381	7.19322	2.22485	166.45002

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00053	-0.00094	0.00077
#2	-0.00031	-0.00090	-0.00081
Mean	**-0.00042**	**-0.00092**	**-0.00002**
%RSD	38.10804	3.32299	6081.61934

ted: 11/21/2011 12:56:09 **User: MIKE LUNDGREEN**
Method : Paragon File : 111118A Printed : 11/21/2011 12:56:02
SampleId1 : 1111106-22D 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:45:54
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE101

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00030	0.05638	0.00147	0.07702	0.00371	0.00082	-0.00054	7.95581	-0.00070
#2	0.00017	0.04727	-0.00548	0.07755	0.00341	0.00067	-0.00192	7.95552	-0.00052
Mean	**-0.00007**	**0.05183**	**-0.00200**	**0.07729**	**0.00356**	**0.00075**	**-0.00123**	**7.95567**	**-0.00061**
%RSD	495.43751	12.42871	245.68226	0.48869	5.79169	13.52888	79.65204	0.00259	21.01684

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00053	-0.00086	-0.00166	-0.00721	-0.11968	0.00528	3.28037	-0.00040	0.01103
#2	-0.00053	-0.00120	-0.00157	-0.01208	-0.12392	0.00515	3.26692	-0.00058	0.01095
Mean	**-0.00053**	**-0.00103**	**-0.00162**	**-0.00965**	**-0.12180**	**0.00522**	**3.27364**	**-0.00049**	**0.01099**
%RSD	0.07908	23.79146	3.85618	35.73633	2.46243	1.71765	0.29061	26.61355	0.52649

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	39.83265	-0.00011	-0.00773	-0.00016	0.00010	23.94063	-0.00540	0.00219	0.00044
#2	39.62928	-0.00015	-0.00773	0.00118	0.00122	23.98921	-0.00258	-0.00261	-0.00041
Mean	**39.73097**	**-0.00013**	**-0.00773**	**0.00051**	**0.00066**	**23.96492**	**-0.00399**	**-0.00021**	**0.00001**
%RSD	0.36193	18.44704	0.00000	186.02825	119.26492	0.14336	49.93036	1613.91860	4573.29370

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.95110	-0.00572	0.12385	0.00348	-0.00304	-0.00297	-0.03432	-0.00018	0.00111
#2	2.94361	0.00166	0.12343	-0.00003	-0.00295	-0.00627	-0.03088	0.00027	0.00077
Mean	**2.94736**	**-0.00203**	**0.12364**	**0.00173**	**-0.00299**	**-0.00462**	**-0.03260**	**0.00005**	**0.00094**
%RSD	0.17967	256.95692	0.23858	143.53922	2.11283	50.52621	7.45232	657.17297	25.24731

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00041	0.00002	0.00102
#2	0.00069	0.00120	-0.00114
Mean	**0.00055**	**0.00061**	**-0.00006**
%RSD	35.88061	137.86247	2504.56830

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:02
SampleId1 : 1111106-22L 25X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:47:46
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE102

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00050	0.03754	-0.00200	0.01057	-0.00033	0.00064	0.00050	1.57261	-0.00070
#2	-0.00093	0.04371	-0.00137	0.01072	-0.00029	0.00068	-0.00088	1.57146	-0.00082
Mean	**-0.00072**	**0.04062**	**-0.00168**	**0.01064**	**-0.00031**	**0.00066**	**-0.00019**	**1.57203**	**-0.00076**
%RSD	41.75344	10.74623	26.52239	1.01375	9.38404	4.69618	510.28791	0.05194	11.13251

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00047	-0.00111	-0.00239	-0.01530	-0.25116	-0.00093	0.61859	-0.00086	0.00211
#2	-0.00095	-0.00089	-0.00248	-0.01553	-0.25939	-0.00095	0.61546	-0.00086	0.00064
Mean	**-0.00071**	**-0.00100**	**-0.00244**	**-0.01541**	**-0.25528**	**-0.00094**	**0.61703**	**-0.00086**	**0.00138**
%RSD	47.93638	15.26524	2.79248	1.09096	2.28031	1.58855	0.35918	0.00000	75.70979

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.43989	0.00006	-0.00750	-0.00020	0.00070	4.85785	-0.00168	0.00484	-0.00144
#2	7.50286	-0.00018	-0.00386	-0.00281	0.00224	4.91521	-0.00182	-0.00323	-0.00220
Mean	**7.47138**	**-0.00006**	**-0.00568**	**-0.00150**	**0.00147**	**4.88653**	**-0.00175**	**0.00080**	**-0.00182**
%RSD	0.59605	270.01020	45.32251	123.08409	74.22084	0.82992	5.55015	712.34180	29.80071

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.57952	-0.00285	0.02352	0.00276	-0.00311	-0.00707	-0.03500	-0.00059	0.00010
#2	0.58304	-0.00408	0.02363	0.00670	-0.00303	0.00233	-0.02814	-0.00030	-0.00259
Mean	**0.58128**	**-0.00346**	**0.02357**	**0.00473**	**-0.00307**	**-0.00237**	**-0.03157**	**-0.00044**	**-0.00124**
%RSD	0.42839	25.09685	0.31218	58.90724	1.83244	280.53487	15.37821	45.62819	152.91840

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00053	0.00040	0.00065
#2	-0.00048	0.00055	-0.00255
Mean	**-0.00050**	**0.00048**	**-0.00095**
%RSD	7.15500	22.92232	238.86112

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:02
SampleId1 : 1111106-22MS 5X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 21:49:40
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE103

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01667	0.46019	0.40327	0.17952	0.41291	0.01052	-0.00595	15.29661	0.00839
#2	0.01786	0.45938	0.40740	0.17845	0.41408	0.01046	-0.00178	15.31877	0.00892
Mean	**0.01727**	**0.45978**	**0.40533**	**0.17898**	**0.41350**	**0.01049**	**-0.00386**	**15.30769**	**0.00866**
%RSD	4.85010	0.12413	0.72076	0.42221	0.20041	0.36177	76.33644	0.10234	4.29588

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09511	0.03665	0.04971	0.17879	7.61531	0.10142	10.78242	0.09546	0.20491
#2	0.09621	0.03736	0.05106	0.17855	7.63296	0.10162	10.83739	0.09564	0.20737
Mean	**0.09566**	**0.03700**	**0.05038**	**0.17867**	**7.62413**	**0.10152**	**10.80990**	**0.09555**	**0.20614**
%RSD	0.81501	1.35747	1.89039	0.09426	0.16366	0.13944	0.35957	0.13625	0.84343

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	47.82292	0.09990	-0.01773	0.09525	0.10164	24.03132	0.09687	0.42061	0.41392
#2	47.97531	0.10146	-0.01455	0.09611	0.09818	24.19654	0.09357	0.42556	0.41589
Mean	**47.89911**	**0.10068**	**-0.01614**	**0.09568**	**0.09991**	**24.11393**	**0.09522**	**0.42309**	**0.41491**
%RSD	0.22497	1.09596	13.94972	0.63774	2.44473	0.48447	2.45077	0.82807	0.33528

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.36166	0.10234	0.22524	-0.00296	0.09163	0.42344	-0.05573	0.09765	0.09290
#2	3.38334	0.10029	0.22567	-0.00214	0.09209	0.42636	-0.03445	0.09880	0.09358
Mean	**3.37250**	**0.10131**	**0.22546**	**-0.00255**	**0.09186**	**0.42490**	**-0.04509**	**0.09822**	**0.09324**
%RSD	0.45459	1.43050	0.13476	22.88232	0.35206	0.48546	33.37724	0.82507	0.51021

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00001	0.09951	0.41615
#2	0.00026	0.09749	0.41911
Mean	**0.00013**	**0.09850**	**0.41763**
%RSD	152.26920	1.44770	0.50153

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:02
SampleId1 : 1111106-22MSD 5X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:51:34
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE104

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01822	0.45267	0.40549	0.18112	0.41053	0.01042	0.00082	15.49308	0.00867
#2	0.01754	0.45341	0.40348	0.18143	0.41065	0.01037	0.00325	15.38642	0.00933
Mean	**0.01788**	**0.45304**	**0.40449**	**0.18127**	**0.41059**	**0.01039**	**0.00203**	**15.43975**	**0.00900**
%RSD	2.67307	0.11501	0.35187	0.11911	0.02162	0.31479	84.29379	0.48848	5.21528

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09683	0.03785	0.04978	0.17927	7.57044	0.10048	10.80900	0.09610	0.20680
#2	0.09531	0.03751	0.04997	0.17891	7.59338	0.10077	10.80270	0.09573	0.20819
Mean	**0.09607**	**0.03768**	**0.04987**	**0.17909**	**7.58191**	**0.10063**	**10.80585**	**0.09592**	**0.20749**
%RSD	1.11444	0.64079	0.26532	0.14106	0.21393	0.20485	0.04128	0.27145	0.47483

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	47.81476	0.10274	-0.01137	0.10235	0.09706	24.15442	0.09725	0.42494	0.41307
#2	47.89063	0.10241	-0.01137	0.09884	0.09926	24.10907	0.09702	0.41771	0.41692
Mean	**47.85269**	**0.10258**	**-0.01137**	**0.10060**	**0.09816**	**24.13174**	**0.09713**	**0.42132**	**0.41499**
%RSD	0.11212	0.23384	0.00000	2.47097	1.58360	0.13289	0.16753	1.21200	0.65598

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.38193	0.10316	0.22459	-0.00026	0.09251	0.43398	-0.02690	0.10023	0.09694
#2	3.37407	0.10726	0.22480	-0.00837	0.09210	0.42886	-0.03376	0.09916	0.09459
Mean	**3.37800**	**0.10521**	**0.22470**	**-0.00432**	**0.09230**	**0.43142**	**-0.03033**	**0.09970**	**0.09576**
%RSD	0.16438	2.75480	0.06578	132.86659	0.31229	0.83807	16.00636	0.75490	1.73874

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00048	0.09882	0.41702
#2	0.00015	0.09912	0.41718
Mean	**-0.00016**	**0.09897**	**0.41710**
%RSD	270.03608	0.21126	0.02764

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:03
SampleId1 : 1111134-1 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:53:28
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE105

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00107	0.44069	-0.00632	2.01858	2.63369	0.00073	0.00294	12.57448	-0.00084
#2	-0.00007	0.43970	-0.00537	2.02042	2.63902	0.00071	-0.00555	12.60007	-0.00086
Mean	**-0.00057**	**0.44020**	**-0.00584**	**2.01950**	**2.63635**	**0.00072**	**-0.00130**	**12.58728**	**-0.00085**
%RSD	122.86368	0.15890	11.46688	0.06460	0.14291	2.38615	461.00757	0.14373	2.12620

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00308	0.01598	0.00041	47.42752	4.60490	0.10096	0.99116	0.68683	0.00375
#2	0.00240	0.01639	0.00051	47.49996	4.62173	0.10136	0.99877	0.68813	0.00432
Mean	**0.00274**	**0.01618**	**0.00046**	**47.46374**	**4.61331**	**0.10116**	**0.99496**	**0.68748**	**0.00404**
%RSD	17.59909	1.78693	14.20655	0.10792	0.25785	0.28233	0.54107	0.13369	10.03784

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	94.18462	0.03105	0.49870	0.00167	0.00227	0.45672	-0.00233	0.00255	0.00442
#2	94.54715	0.03074	0.45308	0.00283	0.00163	0.45989	-0.00098	-0.00074	0.01040
Mean	**94.36589**	**0.03089**	**0.47589**	**0.00225**	**0.00195**	**0.45831**	**-0.00166**	**0.00091**	**0.00741**
%RSD	0.27165	0.69850	6.77891	36.60001	23.36747	0.48969	57.46493	256.51268	57.02080

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.02190	0.01190	1.82782	0.01151	-0.00088	-0.00086	-0.01581	-0.00337	1.31541

#2	1.03759	0.00821	1.83102	0.01184	-0.00077	-0.00223	-0.01792	-0.00275	1.31303
Mean	**1.02975**	**0.01005**	**1.82942**	**0.01168**	**-0.00083**	**-0.00154**	**-0.01687**	**-0.00306**	**1.31422**
%RSD	1.07706	25.93395	0.12379	1.99326	9.34830	62.90147	8.84042	14.49446	0.12811

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00668	0.00207	0.00380
#2	0.00677	0.00203	0.00669
Mean	**0.00673**	**0.00205**	**0.00525**
%RSD	0.99647	1.44414	38.96814

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:03
SampleId1 : 1111134-2 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:55:53
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE106

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00163	0.43825	0.00000	3.47939	2.60435	0.00066	-0.00019	8.99300	-0.00065
#2	-0.00065	0.44246	0.00032	3.49153	2.60675	0.00062	-0.00140	9.02457	-0.00041
Mean	**-0.00114**	**0.44035**	**0.00016**	**3.48546**	**2.60555**	**0.00064**	**-0.00079**	**9.00878**	**-0.00053**
%RSD	60.39957	0.67648	141.06942	0.24618	0.06528	4.65390	107.68520	0.24782	32.88450

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00083	0.02415	-0.00230	28.08637	3.96391	0.21049	0.63382	0.38095	0.00219
#2	0.00104	0.02514	-0.00177	28.14454	3.96441	0.21056	0.63919	0.38280	0.00350
Mean	**0.00094**	**0.02465**	**-0.00203**	**28.11546**	**3.96416**	**0.21053**	**0.63650**	**0.38187**	**0.00285**
%RSD	15.81760	2.85024	18.45356	0.14630	0.00895	0.02470	0.59689	0.34232	32.50019

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	128.00992	0.00307	2.08480	-0.00052	0.00396	0.67256	-0.00170	0.00241	-0.00034
#2	128.31263	0.00396	2.02841	0.00045	0.00003	0.66939	0.00002	0.00394	-0.00110
Mean	**128.16128**	**0.00351**	**2.05660**	**-0.00003**	**0.00200**	**0.67097**	**-0.00084**	**0.00317**	**-0.00072**
%RSD	0.16702	17.73464	1.93884	2021.18743	139.06412	0.33454	144.82115	33.94004	73.93742

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.86008	0.00166	1.83528	0.00934	-0.00086	-0.00269	-0.03766	-0.00352	1.03480
#2	1.88183	0.00739	1.83725	0.00730	-0.00087	0.00535	-0.01779	-0.00188	1.03785
Mean	**1.87095**	**0.00452**	**1.83627**	**0.00832**	**-0.00087**	**0.00133**	**-0.02772**	**-0.00270**	**1.03632**
%RSD	0.82216	89.66487	0.07576	17.32775	0.81086	426.98598	50.67991	43.12305	0.20836

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00780	0.00247	0.00057
#2	0.00820	0.00017	0.00058

Mean	**0.00800**	**0.00132**	**0.00058UNDGREEN**
%RSD	3.56558	122.99628	0.44011

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:03
SampleId1 : 1111134-3 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:57:49
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE107

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00169	0.40936	0.00590	1.93703	2.48343	0.00059	-0.00400	12.46892	-0.00109
#2	-0.00034	0.41162	-0.00495	1.93419	2.48601	0.00061	-0.00105	12.43775	-0.00085
Mean	**-0.00102**	**0.41049**	**0.00047**	**1.93561**	**2.48472**	**0.00060**	**-0.00252**	**12.45334**	**-0.00097**
%RSD	94.44293	0.38927	1616.41129	0.10387	0.07324	1.74713	82.68636	0.17696	17.93289

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00280	0.01523	-0.00095	47.72903	4.24720	0.10069	0.97772	0.68832	0.00465
#2	0.00308	0.01557	-0.00058	47.68697	4.25874	0.10119	0.98399	0.68711	0.00416
Mean	**0.00294**	**0.01540**	**-0.00077**	**47.70800**	**4.25297**	**0.10094**	**0.98086**	**0.68772**	**0.00440**
%RSD	6.72149	1.58788	33.67726	0.06235	0.19194	0.35183	0.45199	0.12410	7.88438

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	93.11071	0.03271	0.52859	-0.00284	0.00376	0.47259	-0.00134	0.00252	0.00372
#2	93.36482	0.03291	0.45923	0.00505	0.00282	0.46307	-0.00232	-0.00051	0.00669
Mean	**93.23776**	**0.03281**	**0.49391**	**0.00110**	**0.00329**	**0.46783**	**-0.00183**	**0.00100**	**0.00520**
%RSD	0.19271	0.43848	9.92896	504.92844	20.24457	1.43917	38.13734	213.08144	40.38831

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.03923	0.00903	1.82692	0.00966	-0.00103	0.00277	-0.01739	-0.00364	1.17705
#2	1.06655	0.00534	1.82374	0.00917	-0.00118	-0.00265	-0.01874	-0.00324	1.18079
Mean	**1.05289**	**0.00719**	**1.82533**	**0.00942**	**-0.00111**	**0.00006**	**-0.01806**	**-0.00344**	**1.17892**
%RSD	1.83438	36.27871	0.12313	3.70270	9.53794	6387.01137	5.26255	8.23107	0.22415

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.00708	0.00157	0.00332
#2	0.00732	0.00356	0.00429
Mean	**0.00720**	**0.00256**	**0.00381**
%RSD	2.33177	55.09131	18.13013

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:03
SampleIdl : 1111161-3 **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 21:59:44
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE108

Final concentrations**56:09** **User: MIKE LUNDGREEN**

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00052	0.03381	-0.00253	4.70119	0.16091	0.00049	-0.00453	6.80507	-0.00086
#2	-0.00015	0.03189	-0.01169	4.70181	0.16037	0.00046	-0.00591	6.79983	-0.00030
Mean	**-0.00033**	**0.03285**	**-0.00711**	**4.70150**	**0.16064**	**0.00048**	**-0.00522**	**6.80245**	**-0.00058**
%RSD	77.79197	4.14949	91.14047	0.00934	0.23878	4.81004	18.77576	0.05450	67.66105

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00045	-0.00021	-0.00331	29.52113	1.19364	0.06644	0.28014	0.25286	0.02945
#2	0.00031	-0.00017	-0.00267	29.51122	1.18189	0.06610	0.28819	0.25231	0.03166
Mean	**-0.00007**	**-0.00019**	**-0.00299**	**29.51618**	**1.18777**	**0.06627**	**0.28416**	**0.25258**	**0.03056**
%RSD	740.08377	12.14979	15.08993	0.02375	0.69935	0.36386	2.00504	0.15497	5.11471

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	41.16468	0.00429	0.08534	-0.00113	-0.00023	0.60590	0.00038	0.01412	0.01409
#2	40.91828	0.00396	0.08898	0.00134	-0.00160	0.60590	-0.00205	0.00970	0.02013
Mean	**41.04148**	**0.00413**	**0.08716**	**0.00010**	**-0.00091**	**0.60590**	**-0.00084**	**0.01191**	**0.01711**
%RSD	0.42452	5.81189	2.95442	1694.51464	106.02222	0.00000	205.82777	26.22406	24.99000

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.76867	0.02050	0.63991	0.00738	-0.00329	-0.00590	-0.01804	-0.00316	0.07575
#2	0.76868	0.02214	0.63806	0.00739	-0.00308	-0.01351	-0.02078	-0.00288	0.07743
Mean	**0.76867**	**0.02132**	**0.63898**	**0.00738**	**-0.00318**	**-0.00971**	**-0.01941**	**-0.00302**	**0.07659**
%RSD	0.00119	5.43382	0.20479	0.05600	4.63741	55.42449	9.98025	6.65258	1.55258

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00040	-0.00053	0.01410
#2	-0.00025	-0.00062	0.01666
Mean	**-0.00033**	**-0.00058**	**0.01538**
%RSD	31.43166	11.38793	11.78115

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:03
SampleId1 : 1111172-5 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 22:01:38
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE109

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00052	0.01423	0.00400	0.06168	0.00137	0.00036	-0.00262	43.85583	-0.00078
#2	-0.00072	0.01743	-0.00621	0.06992	0.00166	0.00035	-0.00401	48.48239	-0.00061
Mean	**-0.00062**	**0.01583**	**-0.00111**	**0.06580**	**0.00152**	**0.00035**	**-0.00331**	**46.16911**	**-0.00069**
%RSD	23.31080	14.29002	653.57317	8.85526	13.57416	2.40826	29.58517	7.08585	16.89453

ted: 11/21/2011 12:56:09 User: MIKE LUNDGREEN

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00067	0.01009	-0.00257	0.11700	0.24269	0.00192	27.67908	-0.00067	0.00015
#2	-0.00170	0.01100	-0.00221	0.13212	0.34954	0.00255	30.39114	-0.00058	-0.00042
Mean	**-0.00119**	**0.01054**	**-0.00239**	**0.12456**	**0.29612**	**0.00223**	**29.03511**	**-0.00063**	**-0.00014**
%RSD	61.36826	6.10407	10.76178	8.58227	25.51477	19.98177	6.60482	10.37742	293.14771

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	31.33035	0.02562	-0.02115	-0.00077	0.00030	73.40849	-0.00438	0.00066	0.00592
#2	36.46753	0.02708	-0.02160	-0.00376	-0.00241	83.83685	-0.00464	-0.00174	0.00243
Mean	**33.89894**	**0.02635**	**-0.02137**	**-0.00226**	**-0.00105**	**78.62267**	**-0.00451**	**-0.00054**	**0.00417**
%RSD	10.71576	3.91263	1.50499	93.39912	181.46355	9.37893	4.06091	314.79997	59.14721

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.99725	-0.00449	1.40646	-0.03395	-0.00350	-0.00291	-0.02960	-0.00056	0.00077
#2	1.12421	-0.00367	1.56635	-0.02123	-0.00345	-0.00271	-0.03030	-0.00035	0.00010
Mean	**1.06073**	**-0.00408**	**1.48641**	**-0.02759**	**-0.00347**	**-0.00281**	**-0.02995**	**-0.00046**	**0.00044**
%RSD	8.46335	14.20926	7.60641	32.60639	1.01245	5.17665	1.64533	32.06826	108.72443

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00167	-0.00006	0.00417
#2	0.00056	-0.00286	0.00104
Mean	**0.00112**	**-0.00146**	**0.00260**
%RSD	70.55986	135.89687	84.92934

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:04
SampleId1 : 1111238-1 25X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 22:03:30
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE110

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00044	0.01752	-0.00421	-0.00141	-0.00046	0.00040	-0.00436	12.44305	-0.00085
#2	-0.00051	0.01925	-0.00400	-0.00187	-0.00046	0.00035	-0.00245	12.44716	-0.00051
Mean	**-0.00048**	**0.01839**	**-0.00411**	**-0.00164**	**-0.00046**	**0.00037**	**-0.00340**	**12.44510**	**-0.00068**
%RSD	9.37258	6.66192	3.62643	19.73807	0.00000	7.97447	39.70162	0.02339	35.52191

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00116	-0.00135	-0.00238	-0.01434	9.86463	-0.00200	4.63715	-0.00086	-0.00067
#2	-0.00095	-0.00142	-0.00239	-0.01541	9.89750	-0.00203	4.65376	-0.00104	-0.00255
Mean	**-0.00105**	**-0.00139**	**-0.00239**	**-0.01488**	**9.88107**	**-0.00201**	**4.64545**	**-0.00095**	**-0.00161**
%RSD	13.89010	3.52934	0.28444	5.08587	0.23520	0.74164	0.25280	13.71167	82.60361

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	73.45460	-0.00147	-0.00295	-0.00017	0.00031	54.04623	-0.00207	-0.00501	0.00129
#2	73.38222	-0.00174	-0.01023	-0.00044	-0.00047	54.13921	-0.00282	-0.00715	-0.00195
Mean	**73.41841**	**-0.00160**	**-0.00659**	**-0.00031**	**-0.00008**	**54.09272**	**-0.00244**	**-0.00608**	**-0.00033**
%RSD	0.06972	11.95109	78.12610	61.27692	709.17304	0.12155	21.70980	24.82543	696.81943

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01710	-0.00244	0.00335	0.00119	-0.00316	-0.00078	-0.04393	-0.00104	-0.00024
#2	-0.01776	0.00125	0.00327	-0.00563	-0.00349	-0.00637	-0.03157	-0.00104	-0.00057
Mean	**-0.01743**	**-0.00059**	**0.00331**	**-0.00222**	**-0.00332**	**-0.00357**	**-0.03775**	**-0.00104**	**-0.00040**
%RSD	2.66597	438.22432	1.73051	217.33840	6.98208	110.68248	23.15027	0.01415	58.96150

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00099	0.00015	-0.00081
#2	-0.00042	-0.00046	-0.00368
Mean	**-0.00071**	**-0.00015**	**-0.00224**
%RSD	56.76858	280.03700	90.45137

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:04
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 22:06:03
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.19785	53.10576	0.51459	1.02215	1.02997	0.47282	0.54136	47.62218	0.50189
#2	0.19723	52.84076	0.51650	1.02093	1.03040	0.47214	0.54672	47.40605	0.49889
Mean	**0.19754**	**52.97326**	**0.51554**	**1.02154**	**1.03019**	**0.47248**	**0.54404**	**47.51412**	**0.50039**
%RSD	0.22259	0.35373	0.26196	0.08481	0.02894	0.10176	0.69667	0.32164	0.42306

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48000	0.95873	1.05894	19.67346	49.68046	0.53021	50.27778	0.95752	0.97597
#2	0.47904	0.95703	1.05658	19.61585	49.49402	0.52805	50.16290	0.95463	0.97135
Mean	**0.47952**	**0.95788**	**1.05776**	**19.64466**	**49.58724**	**0.52913**	**50.22034**	**0.95608**	**0.97366**
%RSD	0.14257	0.12549	0.15804	0.20738	0.26586	0.28775	0.16174	0.21367	0.33500

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.56814	0.99635	5.06795	0.98699	0.98357	5.26257	0.50631	1.06130	1.02072
#2	49.28404	0.99243	5.05976	0.99066	0.98644	5.26257	0.50629	1.04324	1.03793
Mean	**49.42609**	**0.99439**	**5.06386**	**0.98883**	**0.98500**	**5.26257**	**0.50630**	**1.05227**	**1.02933**
%RSD	0.40645	0.27868	0.11438	0.26246	0.20614	0.00000	0.00301	1.21394	1.18194

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn

	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.98149	1.05649	0.50711	0.31368	0.47608	0.52840	4.97785	0.48170	0.93272
#2	4.96659	1.05031	0.50653	0.30285	0.47585	0.53067	4.97239	0.47967	0.92052
Mean	**4.97404**	**1.05340**	**0.50682**	**0.30826**	**0.47597**	**0.52953**	**4.97512**	**0.48068**	**0.92662**
%RSD	0.21179	0.41451	0.08149	2.48404	0.03401	0.30427	0.07766	0.29764	0.93119

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.98600	0.98471	1.03424
#2	0.98534	0.98784	1.03970
Mean	**0.98567**	**0.98627**	**1.03697**
%RSD	0.04803	0.22494	0.37233

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:04
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 22:08:00
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00031	0.04545	-0.00474	-0.00278	-0.00096	0.00066	-0.00071	-0.07671	-0.00054
#2	-0.00086	0.04650	-0.00674	-0.00385	-0.00100	0.00068	0.00067	-0.07412	-0.00053
Mean	**-0.00028**	**0.04597**	**-0.00574**	**-0.00332**	**-0.00098**	**0.00067**	**-0.00002**	**-0.07541**	**-0.00054**
%RSD	301.65769	1.60301	24.65211	22.76012	3.00445	2.61762	5887.73668	2.42943	1.80552

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00006	-0.00052	-0.00159	-0.01006	-0.29606	-0.00206	-0.04527	-0.00067	-0.00042
#2	-0.00040	-0.00076	-0.00220	-0.00876	-0.29357	-0.00203	-0.05109	-0.00067	0.00039
Mean	**-0.00023**	**-0.00064**	**-0.00189**	**-0.00941**	**-0.29482**	**-0.00204**	**-0.04818**	**-0.00067**	**-0.00002**
%RSD	105.74030	26.00605	22.93165	9.83014	0.59830	0.85257	8.53916	0.00000	3751.66404

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.17536	-0.00018	0.00115	0.00448	-0.00254	-0.02243	0.00197	-0.00133	-0.00229
#2	-0.17193	-0.00171	-0.01933	-0.00108	0.00096	-0.03512	-0.00378	-0.00438	0.00172
Mean	**-0.17364**	**-0.00094**	**-0.00909**	**0.00170**	**-0.00079**	**-0.02878**	**-0.00091**	**-0.00286**	**-0.00028**
%RSD	1.39443	114.32322	159.25021	231.22423	313.40077	31.18123	448.38723	75.52365	993.73175

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01954	0.00084	-0.00179	0.00301	-0.00300	0.00464	-0.01510	0.00027	-0.00192
#2	-0.02480	0.00125	-0.00180	0.00551	-0.00310	-0.00328	-0.04393	-0.00071	-0.00057
Mean	**-0.02217**	**0.00104**	**-0.00179**	**0.00426**	**-0.00305**	**0.00068**	**-0.02951**	**-0.00022**	**-0.00124**
%RSD	16.75997	27.77198	0.45630	41.41404	2.30549	819.12073	69.08759	319.04732	76.45882

	Zr	**Pb**	**Se**
	ppm	calc	calc

#1	0.00054	-0.00020	-0.00197	**UNDGREEN**
#2	-0.00021	0.00028	-0.00031	
Mean	**0.00017**	**0.00004**	**-0.00114**	
%RSD	320.47811	891.80120	102.51704	

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:04
SampleId1 : 1111238-3 25X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 22:09:56
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE111

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00149	0.04043	-0.00284	-0.00500	-0.00063	0.00073	0.00275	9.64965	-0.00061
#2	-0.00072	0.05283	-0.00074	-0.00515	-0.00025	0.00076	0.00120	9.64731	-0.00103
Mean	**-0.00110**	**0.04663**	**-0.00179**	**-0.00507**	**-0.00044**	**0.00074**	**0.00197**	**9.64848**	**-0.00082**
%RSD	49.42842	18.80337	83.20663	2.12679	60.40657	3.19137	55.70142	0.01716	35.76527

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00102	-0.00145	-0.00247	-0.01446	7.52860	-0.00200	3.76794	-0.00086	-0.00051
#2	-0.00109	-0.00133	-0.00212	-0.01042	7.48348	-0.00192	3.77692	-0.00067	-0.00051
Mean	**-0.00105**	**-0.00139**	**-0.00229**	**-0.01244**	**7.50604**	**-0.00196**	**3.77243**	**-0.00076**	**-0.00051**
%RSD	4.61874	5.96303	10.82820	22.97823	0.42501	3.05190	0.16818	17.01020	0.00000

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.69229	-0.00045	-0.00295	-0.00211	0.00114	39.36721	-0.00427	-0.00098	-0.00092
#2	49.46581	-0.00096	-0.01319	-0.00130	0.00065	39.31143	-0.00292	0.00547	0.00112
Mean	**49.57905**	**-0.00071**	**-0.00807**	**-0.00171**	**0.00089**	**39.33932**	**-0.00360**	**0.00225**	**0.00010**
%RSD	0.32301	50.91200	89.72728	33.59175	38.47058	0.10026	26.45724	203.04265	1476.85287

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01710	-0.00080	0.00208	0.00199	-0.00316	0.00242	-0.04736	-0.00120	-0.00024
#2	-0.01561	-0.00039	0.00220	0.00241	-0.00286	0.00203	-0.03157	-0.00091	-0.00024
Mean	**-0.01635**	**-0.00060**	**0.00214**	**0.00220**	**-0.00301**	**0.00223**	**-0.03947**	**-0.00106**	**-0.00024**
%RSD	6.44682	48.61490	4.20364	13.58723	7.00787	12.35927	28.28658	19.21355	0.00000

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00047	0.00005	-0.00094
#2	-0.00013	0.00000	0.00257
Mean	**-0.00030**	**0.00003**	**0.00081**
%RSD	79.64707	141.26674	305.37549

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:04
SampleId1 : 1111238-3L 125X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 22:11:48

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE112

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00003	0.04484	-0.00516	-0.00500	-0.00125	0.00069	0.00067	1.84088	-0.00109
#2	-0.00061	0.04532	-0.00706	-0.00538	-0.00117	0.00066	-0.00297	1.84954	-0.00110
Mean	**-0.00032**	**0.04508**	**-0.00611**	**-0.00519**	**-0.00121**	**0.00067**	**-0.00115**	**1.84521**	**-0.00110**
%RSD	127.37931	0.74793	21.94515	5.19967	4.87065	2.85284	224.22987	0.33205	0.39421

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00116	-0.00180	-0.00275	-0.01601	0.93074	-0.00216	0.70456	-0.00086	-0.00157
#2	-0.00123	-0.00114	-0.00257	-0.01482	0.92874	-0.00212	0.70411	-0.00095	-0.00100
Mean	**-0.00119**	**-0.00147**	**-0.00266**	**-0.01541**	**0.92974**	**-0.00214**	**0.70434**	**-0.00090**	**-0.00128**
%RSD	4.07908	31.72156	4.81951	5.45478	0.15202	1.04746	0.04495	7.20513	31.55007

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.26158	-0.00171	-0.01068	-0.00280	-0.00278	7.76414	0.00001	0.00521	0.00052
#2	9.21381	-0.00072	-0.01341	-0.00585	0.00083	7.74498	-0.00354	-0.00324	0.00325
Mean	**9.23769**	**-0.00121**	**-0.01205**	**-0.00432**	**-0.00098**	**7.75456**	**-0.00177**	**0.00099**	**0.00189**
%RSD	0.36564	57.22642	16.02081	49.94432	260.81298	0.17476	142.29823	606.48177	102.20171

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02267	-0.00490	-0.00115	0.00663	-0.00323	0.00023	-0.03775	-0.00112	-0.00124
#2	-0.02532	-0.00572	-0.00108	0.00038	-0.00316	0.00343	-0.03706	-0.00108	-0.00091
Mean	**-0.02399**	**-0.00531**	**-0.00111**	**0.00351**	**-0.00319**	**0.00183**	**-0.03740**	**-0.00110**	**-0.00108**
%RSD	7.80862	10.91919	4.39822	125.96840	1.54099	123.90559	1.29633	2.64874	22.10204

	Zr	Pb	Se
	ppm	calc	calc
#1	-0.00076	-0.00279	0.00208
#2	-0.00032	-0.00140	0.00109
Mean	**-0.00054**	**-0.00209**	**0.00159**
%RSD	57.75142	46.96241	44.41623

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:04
SampleId1 : 1111238-3A 25X SampleId2 : [SAMPLE]
Analysis commenced : 11/18/2011 22:13:41
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE113

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00189	0.03956	-0.00516	-0.00675	-0.00079	0.00076	-0.00263	45.80436	-0.00081
#2	-0.00102	0.03938	-0.00084	-0.00675	-0.00067	0.00072	-0.00262	45.35384	-0.00065

Mean	**-0.00146**	**0.03947**	**-0.00300**	**-0.00675**	**-0.00073**	**0.00074**	**-0.00263**	**45.57910**	**-0.00073**
%RSD	42.62431	0.32367	101.73641	0.00000	12.09745	3.46823	0.10690	0.69893	15.69536

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00192	-0.00238	-0.00291	-0.01648	48.28794	0.52886	40.83065	0.00025	-0.00247
#2	-0.00123	-0.00201	-0.00247	-0.01577	47.47901	0.51729	40.23891	0.00025	-0.00239
Mean	**-0.00157**	**-0.00219**	**-0.00269**	**-0.01613**	**47.88348**	**0.52308**	**40.53478**	**0.00025**	**-0.00243**
%RSD	30.96115	11.95405	11.73914	3.12807	1.19456	1.56455	1.03226	0.00000	2.38174

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	89.85902	-0.00225	-0.01319	-0.00858	0.00338	40.37493	-0.00746	-0.01764	0.00555
#2	88.94705	-0.00255	-0.01933	-0.00414	0.00019	40.46359	-0.00330	-0.00401	-0.00110
Mean	**89.40303**	**-0.00240**	**-0.01626**	**-0.00636**	**0.00179**	**40.41926**	**-0.00538**	**-0.01083**	**0.00223**
%RSD	0.72129	8.98438	26.71481	49.37579	126.08681	0.15512	54.67464	89.04119	210.96289

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02390	-0.00858	0.00226	-0.01322	-0.00290	-0.00299	-0.06246	-0.00185	-0.00057
#2	-0.01861	-0.00367	0.00231	-0.01253	-0.00287	-0.00088	-0.05216	-0.00116	0.00145
Mean	**-0.02126**	**-0.00613**	**0.00228**	**-0.01288**	**-0.00288**	**-0.00194**	**-0.05731**	**-0.00151**	**0.00044**
%RSD	17.58743	56.74287	1.43187	3.78799	0.73097	76.96752	12.70464	32.62756	326.17019

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00025	-0.00060	-0.00217
#2	0.00029	-0.00125	-0.00207
Mean	**0.00002**	**-0.00092**	**-0.00212**
%RSD	1896.95456	49.52761	3.59740

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:05
SampleId1 : 1111172-6 10X **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 22:15:32
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE114

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00055	0.03584	-0.00242	0.05848	0.00158	0.00066	0.00102	48.66060	-0.00048
#2	-0.00067	0.03111	-0.00390	0.06016	0.00162	0.00059	-0.00401	48.68579	-0.00101
Mean	**-0.00061**	**0.03348**	**-0.00316**	**0.05932**	**0.00160**	**0.00063**	**-0.00150**	**48.67319**	**-0.00075**
%RSD	13.34355	9.99296	33.00171	2.00103	1.83834	8.36467	237.65574	0.03660	49.78175

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00033	0.01082	-0.00238	0.12045	0.35728	0.00256	30.15588	-0.00040	-0.00059
#2	-0.00095	0.01110	-0.00221	0.11962	0.35878	0.00256	30.17093	-0.00040	-0.00010
Mean	**-0.00064**	**0.01096**	**-0.00229**	**0.12003**	**0.35803**	**0.00256**	**30.16341**	**-0.00040**	**-0.00034**

%RSD	68.58098	1.78194	5.32629	0.49085	0.29585	0.19454	0.03527	0.00000	101.29291

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	36.32156	0.02803	-0.02046	0.00024	-0.00140	83.35760	-0.00330	-0.00011	0.00047
#2	36.18904	0.02878	-0.02092	-0.00288	0.00018	83.19789	-0.00354	-0.00565	0.00481
Mean	**36.25530**	**0.02840**	**-0.02069**	**-0.00132**	**-0.00061**	**83.27775**	**-0.00342**	**-0.00288**	**0.00264**
%RSD	0.25845	1.85724	1.55463	166.55232	181.97596	0.13561	5.04091	135.99763	116.45482

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.11526	-0.00244	1.53218	-0.01441	-0.00338	-0.00392	-0.04676	-0.00097	0.00010
#2	1.11651	-0.00203	1.53293	-0.01956	-0.00332	-0.00172	-0.03509	-0.00130	-0.00057
Mean	**1.11588**	**-0.00223**	**1.53255**	**-0.01699**	**-0.00335**	**-0.00282**	**-0.04093**	**-0.00113**	**-0.00024**
%RSD	0.07915	12.96667	0.03466	21.42425	1.26004	55.35434	20.16448	20.42859	202.24255

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00015	-0.00086	0.00027
#2	0.00073	-0.00084	0.00133
Mean	**0.00044**	**-0.00085**	**0.00080**
%RSD	92.77946	1.21179	93.01358

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:05
SampleId1 : 1111106-22A **SampleId2 :** **[SAMPLE]**
Analysis commenced : 11/18/2011 22:17:27
Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE115

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00045	2.18038	2.00199	0.91267	1.99085	0.04694	0.00273	77.59320	0.04628
#2	-0.00087	2.18312	2.01240	0.91519	2.00053	0.04709	0.00067	77.01214	0.04707
Mean	**-0.00066**	**2.18175**	**2.00720**	**0.91393**	**1.99569**	**0.04702**	**0.00170**	**77.30267**	**0.04668**
%RSD	45.75993	0.08896	0.36653	0.19544	0.34304	0.22997	85.68704	0.53151	1.19649

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.46060	0.17997	0.25600	0.90738	52.17343	0.67474	55.23664	0.45938	1.00109
#2	0.46267	0.18175	0.25862	0.91122	51.61552	0.66726	54.84664	0.46104	1.00785
Mean	**0.46164**	**0.18086**	**0.25731**	**0.90930**	**51.89447**	**0.67100**	**55.04164**	**0.46021**	**1.00447**
%RSD	0.31857	0.69609	0.72092	0.29801	0.76020	0.78826	0.50103	0.25593	0.47559

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	218.54548	0.48308	-0.03525	0.47718	0.46158	117.02515	0.48646	2.16993	2.05357
#2	218.13944	0.48471	-0.08824	0.47997	0.47211	117.19943	0.48588	2.18483	2.10029
Mean	**218.34246**	**0.48390**	**-0.06174**	**0.47857**	**0.46685**	**117.11229**	**0.48617**	**2.17738**	**2.07693**
%RSD	0.13150	0.23840	60.68319	0.41182	1.59570	0.10523	0.08440	0.48403	1.59049

ted: 11/21/2011 12:56:09 User: MIKE LUNDGREEN

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	16.18144	0.51748	1.07458	-0.02517	0.45016	2.12997	-0.04799	0.47288	0.45343
#2	16.19645	0.52446	1.07687	-0.02197	0.45372	2.11617	-0.03014	0.47580	0.45343
Mean	**16.18895**	**0.52097**	**1.07572**	**-0.02357**	**0.45194**	**2.12307**	**-0.03906**	**0.47434**	**0.45343**
%RSD	0.06559	0.94695	0.15070	9.59280	0.55751	0.45952	32.30629	0.43473	0.00000

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00042	0.46677	2.09232
#2	-0.00025	0.47473	2.12844
Mean	**0.00008**	**0.47075**	**2.11038**
%RSD	559.20422	1.19492	1.21034

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:05
SampleId1 : CRI **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/18/2011 22:19:19
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD3

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01920	0.48752	0.01317	0.41512	0.42275	0.01197	0.04998	4.92907	0.01063
#2	0.01940	0.49202	0.01201	0.41237	0.42007	0.01205	0.05848	4.97320	0.01094
Mean	**0.01930**	**0.48977**	**0.01259**	**0.41374**	**0.42141**	**0.01201**	**0.05423**	**4.95114**	**0.01078**
%RSD	0.71992	0.64944	6.50933	0.47008	0.44953	0.43647	11.08246	0.63032	2.05712

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09948	0.02034	0.05154	0.18998	3.76299	0.01530	5.18844	0.03068	0.02061
#2	0.09982	0.02087	0.05180	0.19201	3.74493	0.01517	5.18081	0.03096	0.02200
Mean	**0.09965**	**0.02060**	**0.05167**	**0.19100**	**3.75396**	**0.01523**	**5.18462**	**0.03082**	**0.02131**
%RSD	0.24187	1.80661	0.35930	0.74957	0.34014	0.58820	0.10411	0.63302	4.61818

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.24205	0.08280	0.18551	0.00497	0.00891	0.19649	0.12323	0.02289	0.01266
#2	4.19153	0.08361	0.18369	0.00715	0.00658	0.19649	0.12422	0.01066	0.01462
Mean	**4.21679**	**0.08321**	**0.18460**	**0.00606**	**0.00774**	**0.19649**	**0.12372**	**0.01677**	**0.01364**
%RSD	0.84714	0.69179	0.69785	25.39765	21.27474	0.00000	0.56522	51.55869	10.16035

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09375	0.10201	0.02054	0.01388	0.01838	0.02148	0.16053	0.10138	0.04582
#2	0.09563	0.10078	0.02049	0.01816	0.01826	0.02079	0.17357	0.10171	0.04952
Mean	**0.09469**	**0.10140**	**0.02051**	**0.01602**	**0.01832**	**0.02114**	**0.16705**	**0.10154**	**0.04767**
%RSD	1.40382	0.85726	0.15942	18.85311	0.46034	2.31532	5.52129	0.22832	5.48649

	Zr	Pb	SeUNDGREEN
	ppm	calc	calc
#1	0.04936	0.00760	0.01607
#2	0.05017	0.00677	0.01330
Mean	**0.04976**	**0.00718**	**0.01468**
%RSD	1.14853	8.15754	13.31771

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:05
SampleId1 : ICSA **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/18/2011 22:21:16
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD4

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00042	276.55416	-0.00211	-0.00660	-0.00108	0.00117	0.01109	256.33172	-0.00018
#2	-0.00051	275.93082	-0.00853	-0.00599	-0.00104	0.00115	0.00796	255.69589	-0.00027
Mean	**-0.00046**	**276.24249**	**-0.00532**	**-0.00629**	**-0.00106**	**0.00116**	**0.00953**	**256.01380**	**-0.00022**
%RSD	13.68632	0.15956	85.41710	6.85716	2.76913	0.93357	23.20193	0.17562	28.27373

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00056	-0.00165	-0.00617	105.17005	-0.30380	-0.00182	270.38058	0.00061	-0.00149
#2	0.00063	-0.00195	-0.00615	104.93940	-0.30355	-0.00180	270.00499	0.00043	-0.00108
Mean	**0.00059**	**-0.00180**	**-0.00616**	**105.05472**	**-0.30367**	**-0.00181**	**270.19279**	**0.00052**	**-0.00128**
%RSD	8.18308	11.91424	0.17606	0.15525	0.05808	0.68709	0.09829	24.87137	22.53576

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.14934	-0.00001	0.00297	-0.01671	0.00540	0.02516	0.00675	-0.01227	0.00769
#2	-0.14851	-0.00018	0.00046	-0.01176	0.00585	0.03467	0.00038	-0.01756	-0.00011
Mean	**-0.14892**	**-0.00010**	**0.00171**	**-0.01424**	**0.00563**	**0.02992**	**0.00357**	**-0.01492**	**0.00379**
%RSD	0.39345	124.79068	103.19061	24.57786	5.60041	22.49769	126.18473	25.06841	145.60806

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02960	0.00534	-0.00032	-0.03880	-0.00134	0.00894	0.03550	-0.00531	-0.00292
#2	-0.02982	0.00207	-0.00035	-0.03399	-0.00116	0.00223	0.01574	-0.00519	-0.00225
Mean	**-0.02971**	**0.00370**	**-0.00033**	**-0.03639**	**-0.00125**	**0.00558**	**0.02562**	**-0.00525**	**-0.00259**
%RSD	0.52639	62.56826	7.32457	9.35183	10.12529	85.00790	54.52283	1.60059	18.36794

	Zr	Pb	Se
	ppm	calc	calc
#1	0.00482	-0.00196	0.00104
#2	0.00456	-0.00002	-0.00592
Mean	**0.00469**	**-0.00099**	**-0.00244**
%RSD	4.03849	139.15285	201.63539

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:05

SampleId1 : ICSAB **SampleId2 :** **[FLEXQC]**
Analysis commenced : 11/18/2011 22:23:14
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD5

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.18765	217.60244	0.09453	1.00676	0.50806	0.46067	0.53463	257.08170	0.98785
#2	0.18816	217.53211	0.10107	1.00546	0.50764	0.46106	0.54572	256.99716	0.99022
Mean	**0.18791**	**217.56728**	**0.09780**	**1.00611**	**0.50785**	**0.46087**	**0.54017**	**257.03943**	**0.98904**
%RSD	0.19486	0.02286	4.72758	0.09149	0.05834	0.05921	1.45197	0.02326	0.16909

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.46057	0.45552	0.53319	105.47699	-0.26738	1.07012	268.77832	0.47048	0.95406
#2	0.46126	0.45501	0.53591	105.46481	-0.26513	1.06850	269.23022	0.47085	0.96238
Mean	**0.46091**	**0.45527**	**0.53455**	**105.47090**	**-0.26625**	**1.06931**	**269.00427**	**0.47067**	**0.95822**
%RSD	0.10602	0.07867	0.36046	0.00816	0.59626	0.10661	0.11879	0.05562	0.61388

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.15702	0.95815	0.98692	0.03628	0.05398	1.07896	0.58203	0.03742	0.05309
#2	-0.15707	0.96026	0.98166	0.03702	0.05320	1.07261	0.58372	0.04727	0.05539
Mean	**-0.15704**	**0.95921**	**0.98429**	**0.03665**	**0.05359**	**1.07579**	**0.58288**	**0.04234**	**0.05424**
%RSD	0.02487	0.15573	0.37801	1.41569	1.02625	0.41746	0.20497	16.45135	2.99608

	Si	Sn	Sr	Th	Ti	Tl	U	V	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.93173	1.05268	0.99195	0.03612	0.92186	0.10094	9.88316	0.46564	0.89001
#2	0.93390	1.04362	0.99215	0.03887	0.92166	0.10574	9.88937	0.46720	0.88663
Mean	**0.93281**	**1.04815**	**0.99205**	**0.03750**	**0.92176**	**0.10334**	**9.88626**	**0.46642**	**0.88832**
%RSD	0.16479	0.61099	0.01429	5.17396	0.01529	3.28449	0.04442	0.23615	0.26972

	Zr	Pb	Se
	ppm	calc	calc
#1	0.48169	0.04809	0.04787
#2	0.48203	0.04781	0.05269
Mean	**0.48186**	**0.04795**	**0.05028**
%RSD	0.04952	0.40469	6.76942

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:06
SampleId1 : CCV **SampleId2 :** **[CV]**
Analysis commenced : 11/18/2011 22:25:11
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	0.19705	52.91161	0.51851	1.01633	1.02272	0.47230	0.54012	47.89927	0.50138
#2	0.19947	52.70922	0.51947	1.01503	1.02137	0.47246	0.53699	47.76785	0.49988
Mean	**0.19826**	**52.81041**	**0.51899**	**1.01568**	**1.02205**	**0.47238**	**0.53855**	**47.83356**	**0.50063**
%RSD	0.86306	0.27099	0.13012	0.09063	0.09335	0.02296	0.41015	0.19426	0.21143

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47903	0.95957	1.04995	19.71818	49.24337	0.52445	50.37282	0.95743	0.97654
#2	0.47965	0.96096	1.04832	19.68311	49.14754	0.52340	50.26624	0.95640	0.97004
Mean	**0.47934**	**0.96026**	**1.04914**	**19.70065**	**49.19546**	**0.52392**	**50.31953**	**0.95691**	**0.97329**
%RSD	0.09143	0.10258	0.10997	0.12587	0.13774	0.14157	0.14976	0.07575	0.47277

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.30063	0.99124	5.00875	0.98696	0.98031	5.26257	0.50073	1.04078	1.01169
#2	49.18162	0.99458	5.02794	0.98001	0.97827	5.23707	0.49719	1.05554	1.01926
Mean	**49.24112**	**0.99291**	**5.01835**	**0.98349**	**0.97929**	**5.24982**	**0.49896**	**1.04816**	**1.01548**
%RSD	0.17089	0.23784	0.27033	0.49963	0.14722	0.34344	0.50154	0.99538	0.52694

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.96145	1.04908	0.50392	0.30796	0.47587	0.53010	4.93723	0.47969	0.93340
#2	4.95813	1.04702	0.50390	0.31543	0.47613	0.52907	4.92694	0.48034	0.93475
Mean	**4.95979**	**1.04805**	**0.50391**	**0.31170**	**0.47600**	**0.52958**	**4.93209**	**0.48002**	**0.93407**
%RSD	0.04733	0.13890	0.00328	1.69415	0.03845	0.13664	0.14759	0.09578	0.10265

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	0.98379	0.98252	1.02138
#2	0.98268	0.97885	1.03134
Mean	**0.98324**	**0.98069**	**1.02636**
%RSD	0.07955	0.26491	0.68624

Method : Paragon File : 111118A Printed : 11/21/2011 12:56:06
SampleId1 : CCB **SampleId2 :** **[CB]**
Analysis commenced : 11/18/2011 22:27:18
Dilution ratio : 1.00000 to 1.00000 Tray : Position : STD2

Final concentrations

	Ag	**Al**	**As**	**B**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00122	0.06052	0.00032	-0.00568	-0.00117	0.00064	-0.00367	-0.05051	-0.00088
#2	-0.00045	0.12674	-0.00779	-0.00469	-0.00058	0.00081	-0.00314	0.02982	-0.00010
Mean	**-0.00084**	**0.09363**	**-0.00374**	**-0.00519**	**-0.00088**	**0.00073**	**-0.00340**	**-0.01035**	**-0.00049**
%RSD	64.85019	50.01331	153.38937	13.51915	47.06137	16.29728	10.97655	549.06132	112.06010

	Co	**Cr**	**Cu**	**Fe**	**K**	**Li**	**Mg**	**Mn**	**Mo**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00130	-0.00129	-0.00274	-0.00067	-0.28758	-0.00199	-0.02916	-0.00076	-0.00083

#2	-0.00061	-0.00073	-0.00166	0.03085	-0.26912	-0.00177	0.06259	-0.00030	-0.00018
Mean	**-0.00095**	**-0.00101**	**-0.00220**	**0.01509**	**-0.27835**	**-0.00188**	**0.01672**	**-0.00053**	**-0.00051**
%RSD	51.06410	38.99186	34.67970	147.68808	4.68938	8.33342	388.07178	60.81189	91.40927

	Na	**Ni**	**P**	**Pb I**	**Pb II**	**S**	**Sb**	**Se I**	**Se II**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.17110	-0.00211	-0.00727	-0.00897	0.00071	-0.02878	-0.00280	-0.01612	0.00257
#2	-0.15757	-0.00038	-0.01137	-0.00439	-0.00080	-0.02878	-0.00183	0.00016	0.00087
Mean	**-0.16434**	**-0.00125**	**-0.00932**	**-0.00668**	**-0.00004**	**-0.02878**	**-0.00231**	**-0.00798**	**0.00172**
%RSD	5.82283	97.90736	31.07149	48.44802	2440.04351	0.00000	29.91811	144.25951	69.70401

	Si	**Sn**	**Sr**	**Th**	**Ti**	**Tl**	**U**	**V**	**Zn**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02618	-0.00367	-0.00174	0.00355	-0.00321	-0.00298	-0.05286	-0.00116	-0.00091
#2	-0.02279	-0.00039	-0.00132	0.00254	-0.00271	-0.00295	-0.03709	-0.00082	0.00044
Mean	**-0.02448**	**-0.00203**	**-0.00153**	**0.00304**	**-0.00296**	**-0.00297**	**-0.04498**	**-0.00099**	**-0.00024**
%RSD	9.78073	114.18078	19.21722	23.48121	11.87595	0.53200	24.79115	23.81007	404.48779

	Zr	**Pb**	**Se**
	ppm	calc	calc
#1	-0.00049	-0.00251	-0.00365
#2	0.00030	-0.00200	0.00064
Mean	**-0.00010**	**-0.00225**	**-0.00151**
%RSD	564.11390	16.19471	201.00295

Header Information for Analytical Sequence 11K18p00

Instrument: Agilent ICPMS Model 7700X; Serial No. JP09400112
Software Revision: B.01.01
Date of Analysis: 11/18/2011
Analyst: Ross Miller

Calibration Standards

High Calibration Standard: ST100324-6 (expires 2/28/2015)
This standard contains the following elements at the listed concentrations (ng/ml).

100000	50000	10000	5000	2000	1000	500	200	100	50	30	10	2
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

1/10,1/100, and 1/1000 dilutions of the High Calibration Standard are prepared daily to provide additional calibration standards.

ICV

The ICV is prepared by diluting 1ml of the 2nd Source intermediate (ST110707-8, expires 06/20/2012) to 5ml giving the following concentrations (ng/ml).

20000	10000	2000	1000	400	200	100	40	20	10	6	2	0.4
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

CRI1

The RL1 is prepared by diluting 0.05ml of the Reporting Limit Verification Spike Solution (ST100324-9 expires 2/28/2015) to 50ml giving the following concentrations (ng/ml).

100	50	10	5	2	1	0.5	0.2	0.1	0.05	0.03	0.02	0.01
Na	Ca	Mg	Al	Zn	B	Cr	Mn	V	Pb	Sb	Th	U
	K		Fe	Ti	Cu	Ni		Co	Be	Cd	Tl	Ag
					Li	Sn		As		Y		
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

CRI2

The RL2 is prepared by diluting 0.1ml of the Reporting Limit Verification Spike Solution (ST100324-9 expires 2/28/2015) to 50ml giving the following concentrations (ng/ml).

200	100	20	10	4	2	1	0.4	0.2	0.1	0.06	0.04	0.02
Na	Ca	Mg	Al	Zn	B	Cr	Mn	V	Pb	Sb	Th	U
	K		Fe	Ti	Cu	Ni		Co	Be	Cd	Tl	Ag
					Li	Sn		As		Y		
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

ICSA

The ICSA is prepared by diluting 0.5ml of ICSA intermediate (ST111103-1, expires 12/01/12) to a final volume of 50ml giving the following concentrations (ng/ml).

42.5×10^6	30000	25000	20000	10000	200
Cl	Ca	Fe	C	Al	Mo
		Na		K	Ti
				Mg	
				P	
				S	

ICSAB

The ICSAB is prepared by diluting 0.5ml of ICSA intermediate (ST111103-1, expires 12/01/12) and 5ml of High Calibration Standard: ST100324-6 (expires 2/28/2015) to a final volume of 50ml. The ICSAB contains the following elements at the listed concentrations (ng/ml).

$42.5X10^6$	35000	25500	20000	15000	11000	10500	10000	400	210
Cl	Ca	Fe	C	K	Mg	Al	P	Ti	Mo
	Na						S		

200	100	50	20	10	5	3	1	0.2
Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	Cu	Ni		Co	Be	Cd	U	
	Li	Sn		As		Y	Ag	
				Se		La		
				Ba		Ce		
				Sr		Pr		
						Nd		

CCV

The CCV is prepared by diluting 5ml of the High Calibration Standard: ST100324-6 (expires 2/28/2015) to a final volume of 50ml. The CCV contains the following elements at the listed concentrations (ng/ml).

10000	5000	1000	500	200	100	50	20	10	5	3	1	0.2
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

Linear Dynamic Range Standards

LDR-Ca,Na,K

The LDR-Ca,Na,K standard is prepared by diluting 1ml of the High Calibration Standard Intermediate Mix (ST100324-5, expires 2/28/2015) to a final volume of 10ml. The LDR-Ca,Na,K standard contains the following elements at the listed concentrations (ng/ml).

100000	50000	20000	10000	5000	2000	1000	500	300	100	20
Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	Al	Ti	Cu	Ni		Co	Be	Cd	U	
			Li	Sn		As		Y	Ag	
						Se		La		
						Mo		Ce		
						Ba		Pr		
						Sr		Nd		

1000 Na

The 1000 Na standard is prepared by diluting 1ml of the 10000mg/L Na stock solution (ST100301-26, expires 2/28/2015) to a final volume of 10ml. The 1000 Na standard contains Na at 100000 ng/ml.

500 Ca

The 500 Ca standard is prepared by diluting 0.5ml of the 10000mg/L Ca stock solution (ST100301-9, expires 2/28/2015) to a final volume of 10ml. The 500 Ca standard contains Ca at 50000 ng/ml.

500 K

The 500 K standard is prepared by diluting 0.5ml of the 10000mg/L K stock solution (ST100301-22, expires 2/28/2015) to a final volume of 10ml. The 500 K standard contains K at 50000 ng/ml.

Linear Dynamic Range

The instrument Linear Dynamic Range (LDR) is determined at least every 6 months. The current LDR was determined on 9/22/2010. The file containing the LDR data is 10I22m00. The instrument LDR is given below (ng/ml).

1000000	500000	100000	50000	20000	10000	5000	2000	1000	500	300	100	20
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

ICB/CCB and all diluent

1% HNO_3, 1%HCl in double deionized water

HNO_3 Lot No. J29049
HCl Lot No. J34056

Internal Standards

Internal standards are introduced continuously using a second channel on the peristaltic pump. The internal standard solution is prepared from 1000mg/L stock solutions. The internal standard solution contains the following elements at the listed concentrations (ng/ml).

500	100	50
Li	Rh	Bi
Ga	In	
Ge	Pt	

Pipet ID Numbers

1.0 to 5.0 ml -- M-55
0.1 to 1.0ml -- M-61
0.01 to 0.1ml -- M-57
0.5ml -- M-14

Dilutions

2X dilutions made by diluting 5ml of sample to 10ml final volume
5X dilutions made by diluting 1ml of sample to 5ml final volume
10X dilutions made by diluting 1ml of sample to 10ml final volume
50X dilutions made by diluting 0.1ml of sample to 5ml final volume
100X dilutions made by diluting 0.1ml of sample to 10ml final volume
200X dilutions made by diluting 0.05ml of sample to 10ml final volume
500X dilutions made by diluting 0.02ml of sample to 10ml final volume

Analytical Spikes

None in this sequence.

Daily Maintenance Items

1. Check / change pump tubing
2. Check / clean drain containers
3. Tune instrument per manufacturer's procedures
4. Perform resolution / mass calibration / stability test and print QC tune report

Monthly Maintenance Items

1. Check / clean torch and cones
2. Check / clean nebulizer and spray chamber
3. Check / fill water recirculating reservoir
4. Check / fill vacuum pump oil

Additional Comments

No additional comments.

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 18 Nov 2011 11:02:34 am
Operator:
Misc Info:
Vial Number: 0
Current Method: C:\ICPMH\1\METHODS\2008TUNE.m

Minimum Response(CPS)

Element	Actual	Required	Flag

RSD (%)

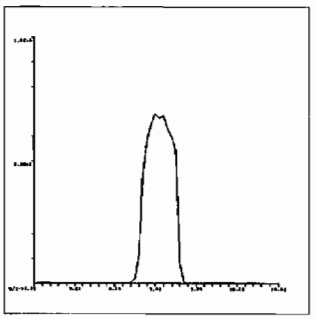
Element	Actual	Required	Flag
9 Be	1.47	5.00	
24 Mg	1.05	5.00	
25 Mg	0.81	5.00	
26 Mg	1.20	5.00	
59 Co	1.05	5.00	
115 In	0.47	5.00	
206 Pb	0.97	5.00	
207 Pb	1.10	5.00	
208 Pb	1.35	5.00	

Ion Ratio

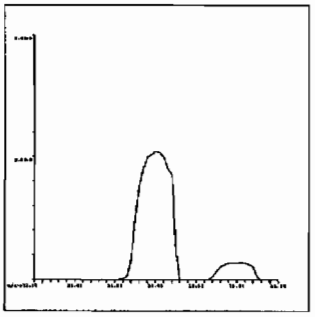
Element	Actual	Required	Flag

Maximum Bkg. Count(CPS)

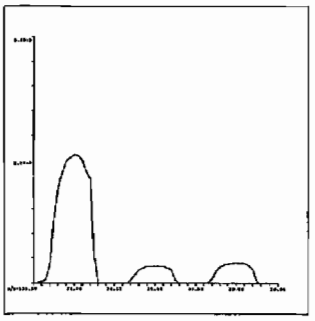
Element	Actual	Required	Flag



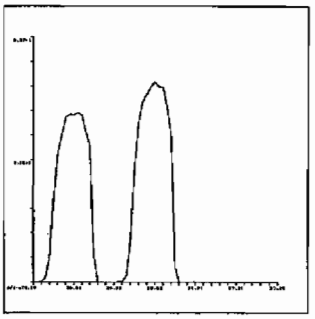
9 Be
Mass Calib.
Actual: 9.05
Required: 8.90-9.10
Flag:
Peak Width
Actual: 0.50
Required: 0.80
Flag:



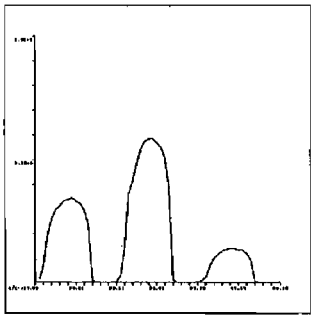
24 Mg
Mass Calib.
Actual: 24.00
Required: 23.90-24.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



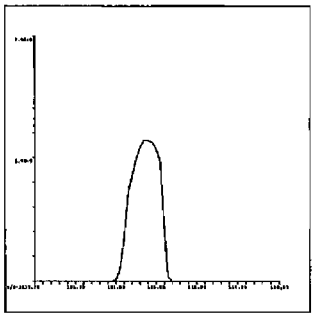
25 Mg
Mass Calib.
Actual: 25.00
Required: 24.90-25.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



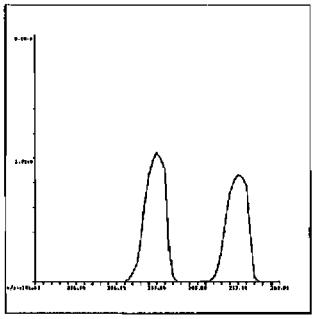
26 Mg
Mass Calib.
Actual: 26.00
Required: 25.90-26.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



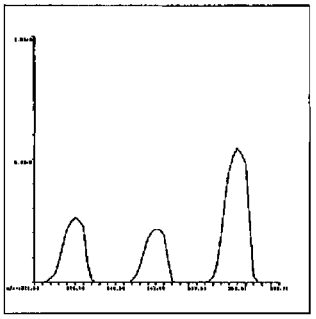
59 Co
Mass Calib.
Actual: 58.95
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



115 In
Mass Calib.
Actual: 114.90
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.50
Required: 0.80
Flag:

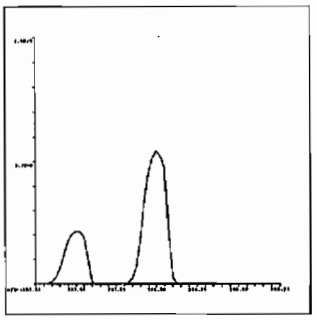


206 Pb
Mass Calib.
Actual: 206.00
Required: 205.90-206.10
Flag:
Peak Width
Actual: 0.45
Required: 0.80
Flag:



207 Pb
Mass Calib.
Actual: 207.00
Required: 206.90-207.10
Flag:
Peak Width
Actual: 0.40
Required: 0.80
Flag:

C:\ICPMH\1\7500\QCTUNE.D



208 Pb
Mass Calib.
Actual: 208.00
Required: 207.90-208.10
Flag:
Peak Width
Actual: 0.40
Required: 0.80
Flag:

QC Tune Result:Pass

Batch Summary Report

Batch Folder: C:¥ICPMH¥1¥DATA¥11K18p00.B¥
Analysis File: 11K18p00.batch.xml
Tune Step: #1 hehe.u

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
1		11/18/2011 11:31:15 AM	001SMPL_11K18I00.D	blank	Sample		1.0000
2		11/18/2011 11:33:46 AM	002CALB_11K18I00.D	blank	CalBlk	1	1.0000
3		11/18/2011 11:36:17 AM	003CALB_11K18I00.D	blank	CalBlk	1	1.0000
4		11/18/2011 11:38:49 AM	004CALS_11K18I00.D	H/1000	CalStd	2	1.0000
5		11/18/2011 11:41:21 AM	005CALS_11K18I00.D	H/100	CalStd	3	1.0000
6		11/18/2011 11:43:51 AM	006CALS_11K18I00.D	H/10	CalStd	4	1.0000
7		11/18/2011 11:46:20 AM	007CALS_11K18I00.D	HIGH	CalStd	5	1.0000
8		11/18/2011 11:52:37 AM	008SMPL_11K18I00.D	ICV	6-ICV		1.0000
9		11/18/2011 11:58:55 AM	009SMPL_11K18I00.D	ICB	6-CCB		1.0000
10		11/18/2011 12:01:26 PM	010SMPL_11K18I00.D	CRI1	Sample		1.0000
11		11/18/2011 12:03:58 PM	011SMPL_11K18I00.D	CRI2	Sample		1.0000
12		11/18/2011 12:06:29 PM	012SMPL_11K18I00.D	ICSA	Sample		1.0000
13		11/18/2011 12:08:59 PM	013SMPL_11K18I00.D	ICSAB	Sample		1.0000
14		11/18/2011 12:15:16 PM	014SMPL_11K18I00.D	IP111116-5MB 10X	6-CCB		1.0000
15		11/18/2011 12:17:45 PM	015SMPL_11K18I00.D	IM111116-5LCS 10X	6-LCS		1.0000
16		11/18/2011 12:20:14 PM	016SMPL_11K18I00.D	1111041-23 10X	Sample		1.0000
17		11/18/2011 12:22:44 PM	017SMPL_11K18I00.D	1111067-35 10X	Sample		1.0000
18		11/18/2011 12:25:14 PM	018SMPL_11K18I00.D	1111086-38 10X	Sample		1.0000
19		11/18/2011 12:27:45 PM	019SMPL_11K18I00.D	1111037-3 10X	Sample		1.0000
20		11/18/2011 12:30:15 PM	020SMPL_11K18I00.D	CCV	6-CCV		1.0000
21		11/18/2011 12:32:46 PM	021SMPL_11K18I00.D	CCB	6-CCB		1.0000
22		11/18/2011 12:35:19 PM	022SMPL_11K18I00.D	1111037-3D 10X	Sample		1.0000
23		11/18/2011 12:37:50 PM	023SMPL_11K18I00.D	1111037-3L 50X	Sample		1.0000
24		11/18/2011 12:41:20 PM	024SMPL_11K18I00.D	1111037-3MS 10X	Sample		1.0000
25		11/18/2011 12:43:51 PM	025SMPL_11K18I00.D	1111037-3MSD 10X	Sample		1.0000
26		11/18/2011 12:46:23 PM	026SMPL_11K18I00.D	1111038-1 10X	Sample		1.0000
27		11/18/2011 12:48:54 PM	027SMPL_11K18I00.D	1111038-2 10X	Sample		1.0000
28		11/18/2011 12:51:23 PM	028SMPL_11K18I00.D	1111040-1 10X	Sample		1.0000

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
29		11/18/2011 12:53:53 PM	029SMPL_11K18l00.D	1111040-3 10X	Sample		1.0000
30		11/18/2011 12:56:23 PM	030SMPL_11K18l00.D	1111040-4 10X	Sample		1.0000
31		11/18/2011 12:58:54 PM	031SMPL_11K18l00.D	1111040-5 10X	Sample		1.0000
32		11/18/2011 1:43:00 PM	001SMPL_11K18n01.D	CCV	6-CCV		1.0000
33		11/18/2011 1:45:31 PM	002SMPL_11K18n01.D	CCB	6-CCB		1.0000
34		11/18/2011 1:48:02 PM	003SMPL_11K18n01.D	1111078-35 10X	Sample		1.0000
35		11/18/2011 1:50:33 PM	004SMPL_11K18n01.D	1111040-7 10X	Sample		1.0000
36		11/18/2011 1:53:04 PM	005SMPL_11K18n01.D	1111051-1 10X	Sample		1.0000
37		11/18/2011 1:55:35 PM	006SMPL_11K18n01.D	1111051-2 10X	Sample		1.0000
38		11/18/2011 2:21:06 PM	001SMPL_11K18o00.D	CCV	6-CCV		1.0000
39		11/18/2011 2:23:38 PM	002SMPL_11K18o00.D	CCB	6-CCB		1.0000
40		11/18/2011 2:26:09 PM	003SMPL_11K18o00.D	IP111116-4MB 10X	6-CCB		1.0000
41		11/18/2011 2:28:39 PM	004SMPL_11K18o00.D	IM111116-4RVS 10X	Sample		1.0000
42		11/18/2011 2:31:11 PM	005SMPL_11K18o00.D	IM111116-4LCS 10X	6-LCS		1.0000
43		11/18/2011 2:33:42 PM	006SMPL_11K18o00.D	1111137-1 10X	Sample		1.0000
44		11/18/2011 2:36:13 PM	007SMPL_11K18o00.D	1111138-1 10X	Sample		1.0000
45		11/18/2011 2:38:42 PM	008SMPL_11K18o00.D	1111140-1 10X	Sample		1.0000
46		11/18/2011 2:41:13 PM	009SMPL_11K18o00.D	1111160-1 10X	Sample		1.0000
47		11/18/2011 2:43:44 PM	010SMPL_11K18o00.D	1111162-16 10X	Sample		1.0000
48		11/18/2011 2:46:14 PM	011SMPL_11K18o00.D	1111185-13 10X	Sample		1.0000
49		11/18/2011 2:48:44 PM	012SMPL_11K18o00.D	1111185-13D 10X	Sample		1.0000
50		11/18/2011 2:51:14 PM	013SMPL_11K18o00.D	CCV	6-CCV		1.0000
51		11/18/2011 2:53:45 PM	014SMPL_11K18o00.D	CCB	6-CCB		1.0000
52		11/18/2011 2:56:17 PM	015SMPL_11K18o00.D	1111185-13L 50X	Sample		1.0000
53		11/18/2011 2:58:49 PM	016SMPL_11K18o00.D	1111185-13MS 10X	Sample		1.0000
54		11/18/2011 3:01:19 PM	017SMPL_11K18o00.D	1111185-13MSD 10X	Sample		1.0000
55		11/18/2011 3:03:51 PM	018SMPL_11K18o00.D	1111205-1 10X	Sample		1.0000
56		11/18/2011 3:06:22 PM	019SMPL_11K18o00.D	1111205-2 10X	Sample		1.0000
57		11/18/2011 3:12:41 PM	020SMPL_11K18o00.D	IP111117-3MB 10X	6-CCB		1.0000
58		11/18/2011 3:17:35 PM	021SMPL_11K18o00.D	IP111117-3LCS 10X	6-LCS		1.0000
59		11/18/2011 3:20:05 PM	022SMPL_11K18o00.D	1111005-1 10X	Sample		1.0000
60		11/18/2011 3:22:36 PM	023SMPL_11K18o00.D	1111005-2 10X	Sample		1.0000
61		11/18/2011 3:25:07 PM	024SMPL_11K18o00.D	1111005-2D 10X	Sample		1.0000

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
62		11/18/2011 3:27:37 PM	025SMPL_11K18c00.D	CCV	6-CCV		1.0000
63		11/18/2011 3:38:33 PM	001SMPL.D	CCB	6-CCB		1.0000
64		11/18/2011 3:41:03 PM	002SMPL.D	1111005-2L 50X	Sample		1.0000
65		11/18/2011 3:43:34 PM	003SMPL.D	1111005-2MS 10X	Sample		1.0000
66		11/18/2011 3:46:05 PM	004SMPL.D	1111005-2MSD 10X	Sample		1.0000
67		11/18/2011 3:48:37 PM	005SMPL.D	1111005-3 10X	Sample		1.0000
68		11/18/2011 3:51:07 PM	006SMPL.D	1111005-4 10X	Sample		1.0000
69		11/18/2011 3:53:39 PM	007SMPL.D	1111005-5 10X	Sample		1.0000
70		11/18/2011 3:57:59 PM	008SMPL.D	1111005-6 10X	Sample		1.0000
71		11/18/2011 4:00:29 PM	009SMPL.D	CCV	6-CCV		1.0000
72		11/18/2011 4:03:01 PM	010SMPL.D	CCB	6-CCB		1.0000
73		11/18/2011 4:05:34 PM	011SMPL.D	IP111117-1MB 10X	6-CCB		1.0000
74		11/18/2011 4:08:04 PM	012SMPL.D	IM111117-1RVS 10X	Sample		1.0000
75		11/18/2011 4:10:35 PM	013SMPL.D	IM111117-1LCS 10X	6-LCS		1.0000
76		11/18/2011 4:13:05 PM	014SMPL.D	1111160-2 10X	Sample		1.0000
77		11/18/2011 4:15:36 PM	015SMPL.D	1111160-2D 10X	Sample		1.0000
78		11/18/2011 4:18:06 PM	016SMPL.D	1111160-2L 50X	Sample		1.0000
79		11/18/2011 4:20:37 PM	017SMPL.D	1111160-2MS 10X	Sample		1.0000
80		11/18/2011 4:23:07 PM	018SMPL.D	1111160-2MSD 10X	Sample		1.0000
81		11/18/2011 4:25:39 PM	019SMPL.D	1111160-2A 10X	Sample		1.0000
82		11/18/2011 4:28:09 PM	020SMPL.D	1111160-3 10X	Sample		1.0000
83		11/18/2011 4:34:28 PM	021SMPL.D	CCV	6-CCV		1.0000
84		11/18/2011 4:37:00 PM	022SMPL.D	CCB	6-CCB		1.0000
85		11/18/2011 4:39:31 PM	023SMPL.D	ZZZZZZ	Sample		1.0000
86		11/18/2011 4:42:02 PM	024SMPL.D	ZZZZZZ	Sample		1.0000
87		11/18/2011 4:44:33 PM	025SMPL.D	ZZZZZZ	Sample		1.0000
88		11/18/2011 4:47:03 PM	026SMPL.D	ZZZZZZ	Sample		1.0000
89		11/18/2011 4:49:34 PM	027SMPL.D	ZZZZZZ	Sample		1.0000
90		11/18/2011 4:52:06 PM	028SMPL.D	ZZZZZZ	Sample		1.0000
91		11/18/2011 4:54:38 PM	029SMPL.D	ZZZZZZ	Sample		1.0000
92		11/18/2011 4:57:07 PM	030SMPL.D	ZZZZZZ	Sample		1.0000
93		11/18/2011 4:59:38 PM	031SMPL.D	ZZZZZZ	Sample		1.0000
94		11/18/2011 5:02:10 PM	032SMPL.D	ZZZZZZ	Sample		1.0000

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
95		11/18/2011 5:08:27 PM	033SMPL.D	CCV	6-CCV		1.0000
96		11/18/2011 5:10:59 PM	034SMPL.D	CCB	6-CCB		1.0000
97		11/18/2011 5:13:30 PM	035SMPL.D	ZZZZZZ	Sample		1.0000
98		11/18/2011 5:16:01 PM	036SMPL.D	ZZZZZZ	Sample		1.0000
99		11/18/2011 5:22:20 PM	037SMPL.D	ZZZZZZ	Sample		1.0000
100		11/18/2011 5:24:50 PM	038SMPL.D Not	IM111117-2RVS 10X	Sample		1.0000
101		11/18/2011 5:27:22 PM	039SMPL.D ↓	IM111117-2LCS 10X	6-LCS		1.0000
102		11/18/2011 5:29:53 PM	040SMPL.D	ZZZZZZ	Sample		1.0000
103		11/18/2011 5:32:24 PM	041SMPL.D	ZZZZZZ	Sample		1.0000
104		11/18/2011 5:34:56 PM	042SMPL.D	ZZZZZZ	Sample		1.0000
105		11/18/2011 5:37:27 PM	043SMPL.D	ZZZZZZ	Sample		1.0000
106		11/18/2011 5:39:57 PM	044SMPL.D	ZZZZZZ	Sample		1.0000
107		11/18/2011 5:46:15 PM	045SMPL.D	CCV	6-CCV		1.0000
108		11/18/2011 5:48:45 PM	046SMPL.D	CCB	6-CCB		1.0000
109		11/18/2011 5:51:16 PM	047SMPL.D	ZZZZZZ	Sample		1.0000
110		11/18/2011 5:53:47 PM	048SMPL.D	1111162-2 10X	Sample		1.0000
111		11/18/2011 5:56:18 PM	049SMPL.D	1111162-3 10X	Sample		1.0000
112		11/18/2011 5:58:49 PM	050SMPL.D	1111162-4 10X	Sample		1.0000
113		11/18/2011 6:01:20 PM	051SMPL.D	1111162-5 10X	Sample		1.0000
114		11/18/2011 6:03:51 PM	052SMPL.D	1111162-6 10X	Sample		1.0000
115		11/18/2011 6:06:22 PM	053SMPL.D	1111162-7 10X	Sample		1.0000
116		11/18/2011 6:08:53 PM	054SMPL.D	1111162-8 10X	Sample		1.0000
117		11/18/2011 6:11:25 PM	055SMPL.D	1111162-9 10X	Sample		1.0000
118		11/18/2011 6:13:56 PM	056SMPL.D	1111162-10 10X	Sample		1.0000
119		11/18/2011 6:20:14 PM	057SMPL.D	CCV	6-CCV		1.0000
120		11/18/2011 6:22:46 PM	058SMPL.D	CCB	6-CCB		1.0000
121		11/18/2011 6:25:18 PM	059SMPL.D	1111162-11 10X	Sample		1.0000
122		11/18/2011 6:27:49 PM	060SMPL.D	1111162-12 10X	Sample		1.0000
123		11/18/2011 6:30:21 PM	061SMPL.D	1111162-13 10X	Sample		1.0000
124		11/18/2011 6:32:54 PM	062SMPL.D	1111162-14 10X	Sample		1.0000
125		11/18/2011 6:35:26 PM	063SMPL.D	1111162-15 10X	Sample		1.0000
126		11/18/2011 6:37:58 PM	064SMPL.D No As, Se	1110371-1 50X	Sample		1.0000
127		11/18/2011 6:40:30 PM	065SMPL.D ↓	1111008-1 50X	Sample		1.0000

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
128		11/18/2011 6:43:03 PM	066SMPL.D No As,Se	1111008-2 50X	Sample		1.0000
129		11/18/2011 6:49:23 PM	067SMPL.D	CCV	6-CCV		1.0000
130		11/18/2011 6:51:54 PM	068SMPL.D	CCB	6-CCB		1.0000
131		11/18/2011 6:54:24 PM	069SMPL.D As,Se only	1110371-1 50X	Sample		1.0000
132		11/18/2011 6:56:57 PM	070SMPL.D	1111008-1 50X	Sample		1.0000
133		11/18/2011 6:59:30 PM	071SMPL.D	1111008-2 50X	Sample		1.0000
134		11/18/2011 7:05:50 PM	072SMPL.D	EX111117-4MB 10X	6-CCB		1.0000
135		11/18/2011 7:08:21 PM	073SMPL.D	EX111117-4RVS 10X	Sample		1.0000
136		11/18/2011 7:10:54 PM	074SMPL.D	EX111117-4LCS 10X	6-LCS		1.0000
137		11/18/2011 7:13:27 PM	075SMPL.D	1111165-21 200X	Sample		1.0000
138		11/18/2011 7:15:58 PM	076SMPL.D	1111165-21D 200X	Sample		1.0000
139		11/18/2011 7:18:28 PM	077SMPL.D	1111165-21L 1000X	Sample		1.0000
140		11/18/2011 7:21:01 PM	078SMPL.D	1111165-21MS 200X	Sample		1.0000
141		11/18/2011 7:27:20 PM	079SMPL.D	CCV	6-CCV		1.0000
142		11/18/2011 7:29:52 PM	080SMPL.D	CCB	6-CCB		1.0000
143		11/18/2011 7:32:22 PM	081SMPL.D	1111165-21MSD 200X	Sample		1.0000
144		11/18/2011 7:34:55 PM	082SMPL.D	1111165-22 200X	Sample		1.0000
145		11/18/2011 7:37:28 PM	083SMPL.D	1111167-11 200X	Sample		1.0000
146		11/18/2011 7:40:01 PM	084SMPL.D	1111167-12 200X	Sample		1.0000
147		11/18/2011 7:42:34 PM	085SMPL.D	1111167-13 200X	Sample		1.0000
148		11/18/2011 7:48:54 PM	086SMPL.D	IP111117-2MB 10X	6-CCB		1.0000
149		11/18/2011 7:51:25 PM	087SMPL.D	CCV	6-CCV		1.0000
150		11/18/2011 7:53:57 PM	088SMPL.D	CCB	6-CCB		1.0000

Analyte Table

		27 Al [1]		51 V [1]		52 Cr [1]		63 Cu [1]		75 As [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		233.34		587.68		771.14		794.47		14.00
2	blank	-0.391	193.34	0.007	585.34	-0.011	741.14	0.002	851.15	0.004	19.33
3	blank	0.000	290.02	0.000	584.68	0.000	798.92	0.000	836.70	0.000	15.33
4	H/1000	5.229	1780.18	0.110	1176.05	0.481	3674.90	1.107	7155.00	0.088	107.33
5	H/100	49.087	14583.60	1.002	5819.71	4.944	31291.96	10.532	63709.80	0.912	1013.37
6	H/10	500.089	144211.16	10.122	53615.17	50.500	303227.53	105.122	611187.82	9.580	10218.88
7	HIGH	4478.331	1390318.10	99.988	548411.38	499.951	2933443.36	999.482	5684542.00	100.043	104387.60
8	ICV	977.601	308402.89	20.323	114582.63	105.973	662471.40	212.222	1285636.13	19.526	21699.07
9	ICB	-0.157	263.35	0.025	744.02	-0.003	800.03	0.036	1044.50	0.007	22.67
10	CRI1	22.234	6935.08	0.119	1323.39	0.511	4014.99	1.102	7439.56	0.089	114.00
11	CRI2	9.464	3207.12	0.218	1823.11	0.985	6883.74	2.311	14547.73	0.178	209.33
12	ICSA	8942.606	2718573.61	-0.048	440.68	0.627	4825.22	0.030	1157.84	-0.003	14.67
13	ICSAB	9182.967	2845958.81	9.954	56386.00	52.141	320194.41	103.828	617374.28	9.986	10892.66
14	IP111116-5MB ...	0.443	413.36	-0.029	450.34	-0.015	743.36	-0.021	750.03	-0.003	13.00
15	IM111116-5LCS...	462.610	134990.45	9.967	51815.24	50.189	301387.57	102.213	594368.29	9.337	9960.73
16	1111041-23 10X	1.651	750.06	0.012	648.02	-0.001	828.92	0.062	1200.06	0.003	19.00
17	1111067-35 10X	3.484	1213.44	0.005	627.68	0.231	2101.27	0.012	930.04	-0.002	14.00
18	1111086-38 10X	2.977	1100.09	0.004	628.35	-0.008	788.92	-0.042	643.36	-0.003	13.33
19	1111037-3 10X	2.573	1086.78	0.011	739.35	0.025	1050.05	-0.036	731.14	0.006	23.00
20	CCV	489.887	144522.51	10.356	54283.03	50.815	307442.76	104.723	613532.34	9.582	10298.94
21	CCB	0.057	313.35	0.021	708.02	0.012	872.26	0.024	972.27	0.005	20.67
22	1111037-3D 10X	3.431	1376.86	0.018	773.69	0.028	1057.88	-0.026	784.47	0.006	23.00
23	1111037-3L 50X	1.239	690.05	0.019	769.35	0.002	891.15	0.005	945.60	0.004	21.33
24	1111037-3MS 10X	476.535	142957.44	10.020	54375.03	52.435	314300.21	104.142	604536.54	9.858	10498.40
25	1111037-3MSD ...	485.607	145483.60	10.144	54558.26	52.421	314899.94	104.524	608040.84	9.714	10366.99
26	1111038-1 10X	8.971	2950.41	-0.001	863.03	0.761	5230.91	0.345	2822.51	0.301	324.67
27	1111038-2 10X	4.471	1723.54	-0.015	749.02	0.910	6220.15	0.419	3303.72	0.505	544.01
28	1111040-1 10X	4.375	1496.81	0.610	3763.77	5.830	29059.01	2.175	11011.64	1.411	1233.72
29	1111040-3 10X	1.969	766.72	0.075	945.36	1.715	8020.95	0.651	3390.41	5.398	4140.87
30	1111040-4 10X	1685.753	418651.43	0.138	1233.72	0.106	1102.28	0.345	2117.95	0.192	159.33
31	1111040-5 10X	2539.847	643150.11	0.321	2101.81	0.633	3374.84	0.459	2594.69	0.147	125.00

Analyte Table

		27 Al [1]		51 V [1]		52 Cr [1]		63 Cu [1]		75 As [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	521.253	162791.11	10.316	59557.64	55.132	331020.36	109.825	638641.95	10.228	10910.33
33	CCB	1.005	596.71	0.036	819.69	0.092	1305.63	0.875	5410.97	0.024	38.67
34	1111078-35 10X	4.446	1736.92	0.021	796.35	0.038	1091.16	3.168	18735.34	0.050	68.67
35	1111040-7 10X	7.347	2150.23	0.645	3624.08	5.566	25351.81	2.276	10485.69	1.449	1155.38
36	1111051-1 10X	1264.991	310951.26	0.206	1456.07	0.064	888.93	0.297	1846.80	0.125	104.33
37	1111051-2 10X	1369.688	346151.15	0.247	1664.42	0.059	881.15	0.346	2075.72	0.148	122.67
38	CCV	506.379	148901.66	10.298	55045.90	54.986	307160.72	109.489	592342.04	10.427	10347.63
39	CCB	0.150	340.02	0.054	864.36	0.007	813.37	0.549	3564.88	0.009	23.33
40	IP111116-4MB ...	0.343	386.69	0.041	812.69	-0.020	667.80	0.522	3394.85	0.000	14.67
41	IM111116-4RVS...	4.860	1550.16	0.144	1233.05	0.532	3438.20	1.508	8148.80	0.096	100.67
42	IM111116-4LCS...	450.488	121992.42	9.400	46412.08	50.339	264434.29	99.992	508618.26	9.454	8822.08
43	1111137-1 10X	0.791	513.37	0.054	868.36	-0.013	720.03	0.435	3045.89	0.037	49.67
44	1111138-1 10X	0.399	406.69	0.156	1313.37	-0.010	744.47	0.810	4990.83	1.828	1737.77
45	1111140-1 10X	0.765	476.70	0.093	974.36	-0.018	668.91	3.662	18750.87	-0.001	14.00
46	1111160-1 10X	5876.140	1685134.92	19.209	89029.98	6.811	34924.76	14.533	71485.79	5.018	4492.64
47	1111162-16 10X	220.463	54585.98	0.495	2801.25	0.188	1660.10	0.760	4386.22	0.175	166.67
48	1111185-13 10X	0.679	450.03	0.324	1974.46	-0.006	711.13	0.490	3121.46	0.025	36.00
49	1111185-13D 10X	5.369	1583.48	0.346	2048.81	-0.003	726.69	0.561	3471.54	0.024	35.33
50	CCV	464.304	111961.54	10.010	43409.69	49.525	244415.66	102.294	488835.33	9.621	8434.54
51	CCB	1.006	453.36	0.023	572.68	-0.018	580.02	0.513	2875.85	0.003	14.67
52	1111185-13L 50X	0.813	450.02	0.098	892.70	-0.022	598.91	0.518	3068.10	0.009	21.00
53	1111185-13MS ...	451.477	106335.64	9.799	42598.61	48.657	237167.88	98.194	463435.63	9.274	8029.00
54	1111185-13MSD...	443.023	108086.88	9.526	43124.31	48.274	240710.29	97.123	468944.48	9.124	8081.69
55	1111205-1 10X	0.482	390.02	0.363	2116.48	0.004	714.47	0.693	3847.18	0.230	203.00
56	1111205-2 10X	0.685	466.69	0.428	2602.22	-0.002	717.81	0.934	5152.00	0.223	205.67
57	IP111117-3MB ...	0.952	523.36	-0.010	530.68	0.174	1617.88	1.420	7663.00	0.055	63.00
58	IP111117-3LCS...	461.245	118657.17	9.580	43816.76	48.111	247361.45	102.725	511347.27	9.477	8653.98
59	1111005-1 10X	13531.796	4148306.71	18.916	86367.71	6.831	35022.74	3.911	19808.83	2.214	1990.13
60	1111005-2 10X	16697.203	5162577.00	17.217	78524.97	8.206	41790.55	5.160	25804.92	2.326	2081.81
61	1111005-2D 10X	15640.892	4900008.68	16.658	75809.51	7.705	39400.21	5.175	25951.81	2.465	2213.16
62	CCV	480.863	115391.36	10.111	44364.18	49.311	246558.45	102.135	494414.02	9.461	8403.18

Analyte Table

		27 Al [1]		51 V [1]		52 Cr [1]		63 Cu [1]		75 As [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	CCB	5.220	1390.14	0.136	1029.70	-0.008	627.80	0.647	3477.08	0.002	14.33
64	1111005-2L 50X	4188.427	1042097.07	3.639	15755.81	1.584	8435.60	1.454	7620.74	0.469	419.34
65	1111005-2MS 10X	16315.341	4864899.82	26.252	117207.97	59.229	284797.11	108.139	503689.74	12.288	10495.06
66	1111005-2MSD ...	17062.121	5079725.97	25.318	114182.66	58.850	287816.38	108.635	514632.95	12.375	10751.89
67	1111005-3 10X	16707.960	5101635.24	22.161	97233.09	37.385	185117.58	9.015	43883.14	3.132	2762.25
68	1111005-4 10X	17417.117	5259800.34	32.535	143863.14	11.857	58454.98	5.829	28284.49	4.413	3834.47
69	1111005-5 10X	14485.204	4320687.54	39.391	171757.10	10.087	49390.24	6.423	30793.51	6.048	5202.85
70	1111005-6 10X	20567.977	7968288.63	49.226	219140.80	24.156	117691.77	13.959	66303.29	5.541	4786.38
71	CCV	476.453	110828.30	10.136	41885.18	48.908	234429.96	101.673	471867.07	9.365	7973.64
72	CCB	10.237	2383.62	0.123	932.36	-0.009	618.91	0.591	3194.80	0.009	19.67
73	IP111117-1MB ...	9.053	2163.57	0.031	604.34	-0.037	503.35	0.508	2884.74	0.004	16.00
74	IM111117-1RVS...	19.864	4460.80	0.161	1072.71	0.504	2919.19	1.477	7092.75	0.113	102.67
75	IM111117-1LCS...	470.700	108294.88	10.011	40579.31	49.128	234494.58	100.798	465871.11	9.512	8065.35
76	1111160-2 10X	7876.114	2205805.23	21.765	91430.59	8.744	42744.08	11.810	55796.72	5.546	4755.38
77	1111160-2D 10X	8148.700	2271165.85	21.912	92692.76	9.151	43984.93	12.023	55872.50	5.627	4746.04
78	1111160-2L 50X	1894.868	458232.22	4.363	18590.06	1.740	9067.05	2.652	13085.39	1.077	932.36
79	1111160-2MS 10X	9270.419	2715857.88	35.770	150993.56	59.729	287028.00	112.157	522037.95	14.943	12755.34
80	1111160-2MSD ...	9493.478	2702979.34	33.744	141859.22	57.606	276089.23	108.155	502064.32	14.321	12191.25
81	1111160-2A 10X	7833.575	2207069.45	21.637	90892.50	8.906	43199.70	12.128	56857.08	9.310	7912.61
82	1111160-3 10X	8813.550	2588541.32	18.343	79453.59	11.204	53506.44	16.004	73873.08	6.694	5624.99
83	CCV	474.145	103823.28	9.763	39579.24	48.238	223393.73	100.742	451753.38	9.374	7712.52
84	CCB	4.517	1153.44	0.007	485.68	-0.018	570.02	0.415	2413.55	0.016	24.67
85	ZZZZZZ	8947.528	2627301.99	17.319	73730.24	11.142	54249.76	15.447	72699.83	6.331	5423.25
86	ZZZZZZ	8455.862	2459291.11	18.216	78883.93	11.042	53872.88	17.213	81100.09	7.088	6082.15
87	ZZZZZZ	3737.264	938905.79	25.646	106936.04	2.636	13386.70	4.105	19871.09	4.720	4046.52
88	ZZZZZZ	6203.923	1620605.34	33.443	134667.82	6.036	29008.95	8.646	40050.07	5.601	4684.69
89	ZZZZZZ	6365.285	1702617.42	29.957	124645.82	6.537	31285.24	9.293	42895.97	6.671	5565.97
90	ZZZZZZ	2116.241	508899.90	54.256	220105.86	1.332	6911.56	2.437	11762.15	4.289	3573.40
91	ZZZZZZ	2482.873	604864.63	54.980	222226.59	1.491	7735.25	4.398	20839.00	3.969	3340.02
92	ZZZZZZ	2370.407	566139.20	54.868	212800.67	1.421	7322.83	3.109	14777.95	4.073	3390.70
93	ZZZZZZ	2644.098	648203.05	86.375	341388.27	2.004	9997.57	3.070	14542.16	5.280	4371.27

Analyte Table

		27 Al [1]		51 V [1]		52 Cr [1]		63 Cu [1]		75 As [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
94	ZZZZZZ	3428.061	856237.36	20.461	84641.29	1.893	9557.32	3.173	15128.24	4.758	3972.50
95	CCV	462.879	102901.00	10.065	40093.75	47.913	226995.70	100.039	458792.76	9.308	7831.91
96	CCB	1.619	550.03	0.006	478.34	-0.028	530.02	0.335	2082.40	0.003	14.67
97	ZZZZZZ	5010.032	1307567.69	34.122	138674.73	4.955	23806.23	60.088	272406.38	11.877	9866.35
98	ZZZZZZ	9542.604	2698917.25	21.675	89828.24	11.183	53434.85	17.024	78568.77	5.602	4711.70
99	ZZZZZZ	4.823	1190.10	-0.063	234.67	-0.012	592.24	0.312	1969.04	0.011	20.67
100	IM111117-2RVS...	9.374	2140.24	0.029	572.34	0.479	2734.71	1.506	7030.50	0.098	88.67
101	IM111117-2LCS...	449.993	97726.41	9.635	37564.25	47.596	218058.05	98.256	435808.05	9.265	7539.10
102	ZZZZZZ	5719.476	1506284.19	15.656	65052.93	7.415	34576.31	11.226	50476.37	5.819	4743.04
103	ZZZZZZ	5812.389	1539412.37	15.996	66638.23	7.499	35221.93	11.448	51836.11	6.124	5029.12
104	ZZZZZZ	1349.259	309598.25	3.307	13283.33	1.430	7479.57	2.373	11634.29	1.123	958.70
105	ZZZZZZ	6962.706	1898713.82	26.907	112650.38	54.963	261613.36	105.290	485371.33	14.271	12062.49
106	ZZZZZZ	6913.213	1896703.62	26.631	110347.93	56.899	265306.11	109.249	493371.54	14.708	12177.56
107	CCV	466.398	101236.82	9.895	38720.18	47.810	219269.44	100.047	444246.10	9.304	7579.12
108	CCB	3.197	856.74	-0.001	438.34	-0.004	612.25	0.250	1667.89	0.014	22.33
109	ZZZZZZ	5704.319	1481700.34	15.920	64199.70	7.296	34349.05	10.816	49103.23	9.368	7700.51
110	1111162-2 10X	3914.696	959074.57	19.572	79586.87	4.390	20771.03	6.129	27917.25	4.050	3308.35
111	1111162-3 10X	4107.292	1012527.07	19.233	79424.82	4.759	22603.37	6.353	29081.48	3.857	3170.99
112	1111162-4 10X	3199.025	784480.46	44.008	174000.09	1.826	9378.35	3.425	16505.10	2.421	2057.81
113	1111162-5 10X	2607.390	632723.26	40.830	161664.50	1.750	8904.72	2.892	13876.04	2.655	2226.83
114	1111162-6 10X	3725.400	910879.28	52.178	209357.90	3.856	18437.09	3.797	17676.37	5.128	4211.56
115	1111162-7 10X	3182.581	765156.79	66.513	264025.44	1.852	9334.98	2.572	12361.47	2.805	2339.51
116	1111162-8 10X	2913.993	697641.03	10.936	43935.06	3.701	17602.86	5.543	25283.01	3.778	3085.31
117	1111162-9 10X	4352.404	1080023.89	13.913	56104.00	5.275	24737.52	7.660	34586.52	4.134	3366.02
118	1111162-10 10X	2906.699	680867.10	20.269	79497.46	3.034	14274.10	4.067	18382.66	2.422	1944.12
119	CCV	453.340	99668.23	10.083	38797.03	47.923	219569.69	99.829	442860.40	9.227	7510.42
120	CCB	2.248	663.38	0.009	487.01	-0.035	501.13	0.176	1420.08	0.011	20.67
121	1111162-11 10X	3346.166	800941.89	9.561	38407.48	3.753	17984.37	4.705	21741.26	3.421	2816.59
122	1111162-12 10X	4672.003	1183917.48	12.560	51939.27	5.334	25177.05	6.585	30034.36	3.595	2949.28
123	1111162-13 10X	7359.554	2007545.96	19.183	77874.52	9.167	43343.53	11.945	54610.60	5.719	4745.05
124	1111162-14 10X	7364.231	1954807.99	18.866	75318.87	9.361	43292.20	12.760	57037.64	6.006	4876.08

Analyte Table

		27 Al [1]		51 V [1]		52 Cr [1]		63 Cu [1]		75 As [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
125	1111162-15 10X	4109.254	995101.00	25.261	103959.72	4.285	20483.97	6.266	28782.11	3.696	3048.63
126	1110371-1 50X	2.154	6988.39	-0.073	2214.16	0.181	1518.98	0.528	3069.22	71.108	58033.85
127	1111008-1 50X	3043.040	714713.79	6.371	25002.44	4.239	19953.26	5.391	24481.77	1.505	1230.05
128	1111008-2 50X	4.533	11154.17	-0.047	2905.94	0.189	1586.77	0.532	3148.13	60.673	50511.05
129	CCV	459.997	99171.38	9.998	38537.10	47.475	216501.01	100.192	442365.77	9.217	7466.73
130	CCB	0.778	373.35	-0.030	347.34	-0.051	418.90	0.093	1046.71	0.020	27.00
131	1110371-1 50X	1.456	543.37	0.022	540.34	0.098	1110.05	0.310	2051.27	0.176	153.33
132	1111008-1 50X	10.902	2426.47	0.084	764.02	0.586	3263.69	0.316	2053.50	1.287	1028.04
133	1111008-2 50X	3.535	947.77	0.027	565.34	0.201	1524.54	0.357	2179.07	0.230	189.00
134	EX111117-4MB...	0.616	386.69	-0.048	304.33	-0.038	513.35	0.076	1057.83	-0.007	7.67
135	EX111117-4RV...	4.628	1153.43	0.064	692.35	0.427	2491.33	1.042	5031.96	0.099	88.33
136	EX111117-4LCS...	439.183	96000.53	9.515	37378.49	46.982	216448.39	97.362	434265.05	8.983	7351.01
137	1111165-21 200X	13.861	4170.75	0.033	717.69	0.121	1221.17	0.129	1267.85	1.463	1184.72
138	1111165-21D 2...	14.568	4290.79	0.020	660.02	0.111	1163.39	0.101	1137.83	1.457	1167.71
139	1111165-21L 1...	6.978	1706.84	-0.001	470.68	0.002	652.25	0.063	937.82	0.286	231.33
140	1111165-21MS ...	31.340	8752.65	0.412	2392.85	2.476	11646.47	4.999	22192.98	1.882	1496.74
141	CCV	451.551	96898.26	9.878	37892.99	47.275	213724.61	99.024	433445.10	9.180	7372.35
142	CCB	0.521	326.69	-0.011	413.01	-0.040	462.24	0.091	1023.38	-0.002	10.33
143	1111165-21MSD...	31.790	9046.19	0.438	2569.88	2.350	11317.33	4.847	21983.84	1.845	1498.41
144	1111165-22 200X	9.207	2646.99	-0.002	535.34	0.024	791.14	0.092	1117.84	0.939	771.02
145	1111167-11 200X	14.999	4280.78	0.020	644.35	0.115	1194.51	0.057	956.71	1.318	1069.71
146	1111167-12 200X	16.081	4647.52	0.040	740.69	0.120	1202.28	0.054	931.15	1.465	1172.05
147	1111167-13 200X	13.491	3777.26	0.018	619.68	0.109	1140.06	0.042	867.81	1.319	1043.71
148	IP111117-2MB ...	0.081	233.35	-0.024	354.34	-0.035	472.24	0.100	1040.05	0.000	11.33
149	CCV	466.361	98216.39	9.705	38067.04	47.429	213846.09	99.821	435755.31	9.125	7309.32
150	CCB	-0.124	196.68	-0.013	385.68	-0.027	512.24	0.107	1078.94	0.180	141.42

Analyte Table

		78 Se [1]		98 Mo [1]		109 Ag [1]		111 Cd [1]		121 Sb [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		6.40		28.89		7.78		6.00		20.00
2	blank	-0.021	4.93	-0.002	30.00	-0.001	2.22	-0.003	2.67	-0.001	16.67
3	blank	0.000	7.33	0.000	42.22	0.000	7.78	0.000	7.99	0.000	22.22
4	H/1000	0.085	19.07	0.092	606.69	0.010	102.22	0.031	71.93	0.033	291.12
5	H/100	1.016	146.27	0.958	6186.84	0.103	1026.71	0.288	634.60	0.296	2589.14
6	H/10	9.793	1303.65	9.481	59257.31	0.972	9394.03	3.060	6566.19	2.912	24902.21
7	HIGH	100.021	12967.82	100.052	612119.47	10.003	94630.95	29.994	64749.66	30.009	258262.37
8	ICV	20.456	2829.99	19.486	126937.58	2.033	20477.87	6.132	13986.12	5.940	54013.62
9	ICB	-0.006	6.80	0.012	108.89	0.000	10.00	-0.001	6.65	0.003	50.00
10	CRI1	0.105	22.53	0.097	662.25	0.010	103.34	0.027	67.25	0.030	290.01
11	CRI2	0.209	36.40	0.198	1297.85	0.023	231.12	0.062	144.51	0.067	606.69
12	ICSA	-0.002	8.27	188.121	1218799.15	0.010	105.56	-0.007	-7.36	0.052	497.79
13	ICSAB	9.972	1357.26	200.733	1282042.24	0.997	9855.43	3.035	6769.15	3.054	27135.84
14	IP111116-5MB ...	-0.008	6.67	0.032	228.90	0.000	5.55	-0.001	5.97	0.004	54.45
15	IM111116-5LCS...	9.838	1310.19	9.372	58581.56	0.979	9462.96	3.054	6507.58	2.991	25399.62
16	1111041-23 10X	-0.010	6.40	0.082	516.68	0.001	14.44	-0.002	4.60	0.009	94.45
17	1111067-35 10X	-0.003	7.20	0.011	106.67	0.000	5.56	-0.002	3.99	0.005	60.00
18	1111086-38 10X	-0.012	6.27	0.015	131.12	0.000	7.78	-0.004	1.32	0.004	57.78
19	1111037-3 10X	-0.008	7.20	0.025	202.23	0.000	11.11	-0.001	7.31	0.020	197.78
20	CCV	9.928	1331.39	9.607	60502.97	0.994	9679.76	3.074	6686.76	2.966	25703.42
21	CCB	0.003	7.87	0.017	136.67	0.001	16.67	-0.003	3.31	0.002	41.11
22	1111037-3D 10X	-0.018	5.87	0.024	195.56	0.000	10.00	-0.003	2.64	0.005	65.56
23	1111037-3L 50X	-0.018	5.73	0.011	111.11	0.001	17.78	-0.001	7.99	0.005	66.67
24	1111037-3MS 10X	10.165	1350.86	9.740	60776.18	1.001	9661.95	3.075	6698.07	3.019	26203.13
25	1111037-3MSD ...	10.289	1370.06	9.776	61128.71	1.006	9732.02	3.088	6702.68	3.016	26088.57
26	1111038-1 10X	0.102	20.93	0.859	5188.70	0.000	10.00	0.001	11.37	0.033	301.12
27	1111038-2 10X	0.097	20.67	0.927	5723.32	0.001	15.56	-0.001	6.63	0.029	278.90
28	1111040-1 10X	0.709	82.80	7.475	37926.18	0.009	76.67	0.113	220.71	0.144	1105.61
29	1111040-3 10X	0.956	96.67	1.531	6898.26	0.003	25.56	0.101	175.82	0.040	288.90
30	1111040-4 10X	0.643	67.20	0.215	1002.27	0.004	35.55	0.008	21.21	0.046	328.90
31	1111040-5 10X	0.910	92.67	0.629	2862.52	0.003	28.89	0.096	173.65	0.219	1532.32

Analyte Table

		78 Se [1]		98 Mo [1]		109 Ag [1]		111 Cd [1]		121 Sb [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	10.508	1398.46	9.804	61288.09	1.000	9665.31	3.071	6823.37	2.961	26219.87
33	CCB	0.056	14.13	0.049	318.90	0.007	71.11	0.002	11.30	0.012	118.89
34	1111078-35 10X	0.018	10.40	0.252	1568.99	0.002	26.67	0.002	14.48	0.029	276.67
35	1111040-7 10X	0.772	81.60	7.286	33742.38	0.004	33.33	0.088	157.22	0.150	1044.50
36	1111051-1 10X	0.797	78.80	0.162	733.37	0.003	28.89	0.007	17.91	0.011	90.00
37	1111051-2 10X	0.863	86.13	0.159	734.47	0.001	12.22	0.009	21.25	0.012	96.67
38	CCV	10.667	1320.99	9.823	57124.06	0.988	8883.73	3.000	6274.33	2.921	24350.12
39	CCB	0.012	8.53	0.008	84.45	0.000	10.00	0.002	11.32	0.002	35.56
40	IP111116-4MB ...	0.010	8.27	-0.001	37.78	0.001	14.45	-0.002	3.33	0.003	45.56
41	IM111116-4RVS...	0.121	20.53	0.097	547.79	0.010	87.78	0.029	61.93	0.025	203.34
42	IM111116-4LCS...	10.200	1187.78	9.121	49882.22	0.950	8034.36	2.887	5632.31	2.836	22045.69
43	1111137-1 10X	0.088	17.33	0.021	156.67	0.003	30.00	0.105	208.36	0.002	35.55
44	1111138-1 10X	0.072	15.73	0.053	334.45	0.001	14.44	-0.002	4.62	0.018	164.45
45	1111140-1 10X	0.005	7.60	0.007	77.78	0.000	11.11	-0.003	2.66	0.005	57.78
46	1111160-1 10X	0.576	70.67	0.832	4394.01	0.046	381.12	0.177	338.81	0.203	1535.65
47	1111162-16 10X	0.055	12.80	0.139	748.92	0.002	22.22	0.005	17.24	0.024	200.00
48	1111185-13 10X	0.418	52.40	0.469	2452.45	0.000	8.89	-0.002	3.70	0.132	998.93
49	1111185-13D 10X	0.390	49.60	0.481	2522.46	0.000	8.89	0.000	7.69	0.127	957.82
50	CCV	10.591	1158.32	9.676	49707.12	1.008	8006.58	3.121	5606.97	3.062	21925.51
51	CCB	0.016	7.60	0.010	82.22	0.001	12.22	-0.003	1.32	-0.001	14.44
52	1111185-13L 50X	0.106	17.33	0.086	456.68	0.001	12.22	-0.002	3.94	0.024	182.23
53	1111185-13MS ...	10.049	1085.51	9.794	49682.66	1.002	7858.73	2.949	5315.54	3.095	22238.21
54	1111185-13MSD...	9.925	1097.11	9.732	50511.85	0.987	7920.98	2.952	5490.84	2.986	22119.06
55	1111205-1 10X	0.111	17.87	0.884	4316.21	0.001	14.44	0.012	28.81	0.030	237.79
56	1111205-2 10X	0.153	23.07	0.954	4863.03	0.002	21.11	0.010	26.07	0.028	232.23
57	IP111117-3MB ...	0.000	6.93	0.003	57.78	0.000	11.11	0.000	7.99	0.002	35.55
58	IP111117-3LCS...	9.849	1122.17	9.365	50101.76	0.983	8131.07	3.030	5732.30	2.729	20566.97
59	1111005-1 10X	0.176	26.40	0.303	1624.55	0.052	426.68	0.020	45.14	0.267	2015.71
60	1111005-2 10X	0.224	31.73	0.303	1616.78	0.066	541.13	0.055	111.14	0.316	2373.58
61	1111005-2D 10X	0.283	38.27	0.274	1471.20	0.069	564.46	0.044	88.49	0.314	2330.22
62	CCV	10.098	1119.11	9.693	50439.43	1.006	8093.28	3.043	5584.21	2.955	21599.48

Analyte Table

		78 Se [1]		98 Mo [1]		109 Ag [1]		111 Cd [1]		121 Sb [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	CCB	0.001	6.27	0.001	41.11	0.001	13.33	0.001	7.99	0.002	33.33
64	1111005-2L 50X	0.055	12.67	0.063	357.79	0.016	131.11	0.009	23.29	0.060	451.13
65	1111005-2MS 10X	10.120	1078.97	10.210	51113.73	1.097	8491.29	3.202	5729.52	3.421	24374.64
66	1111005-2MSD ...	10.446	1132.57	10.257	52237.38	1.092	8596.89	3.282	5940.13	3.337	24067.57
67	1111005-3 10X	0.746	88.13	0.885	4591.84	0.072	577.80	0.097	182.77	0.399	2900.31
68	1111005-4 10X	0.384	48.00	0.237	1238.95	0.102	804.48	0.059	114.52	0.268	1961.26
69	1111005-5 10X	0.319	40.67	0.426	2183.51	0.144	1127.84	0.055	107.73	0.347	2545.80
70	1111005-6 10X	0.573	68.00	0.797	4066.13	0.146	1147.84	0.144	266.17	1.023	7331.83
71	CCV	10.060	1068.71	9.690	48341.97	1.005	7755.34	3.089	5455.09	2.995	21071.03
72	CCB	0.001	6.13	0.007	68.89	0.001	16.67	-0.003	2.66	0.004	41.11
73	IP111117-1MB ...	0.014	7.60	-0.001	30.00	-0.001	2.22	-0.001	4.66	0.002	34.44
74	IM111117-1RVS...	0.109	16.93	0.092	464.46	0.011	85.56	0.034	61.94	0.027	196.67
75	IM111117-1LCS...	10.093	1067.64	9.367	46533.20	1.025	7874.29	3.060	5369.28	2.642	18475.46
76	1111160-2 10X	2.315	252.53	0.560	2848.08	0.054	422.23	0.157	285.66	0.140	1010.05
77	1111160-2D 10X	2.363	253.47	0.524	2619.15	0.057	443.35	0.162	297.02	0.103	754.48
78	1111160-2L 50X	0.469	56.27	0.121	641.13	0.013	105.56	0.030	59.92	0.037	284.45
79	1111160-2MS 10X	11.300	1203.51	7.363	36859.24	1.106	8551.32	3.269	5829.95	0.888	6325.80
80	1111160-2MSD ...	10.957	1163.77	7.083	35355.90	1.029	7937.65	3.129	5556.05	0.870	6173.53
81	1111160-2A 10X	6.662	708.95	2.501	12487.26	2.034	15654.56	2.157	3817.64	2.091	14740.40
82	1111160-3 10X	0.714	80.93	0.827	4099.47	0.071	548.91	0.174	312.18	0.142	1008.94
83	CCV	10.002	1026.57	9.795	47218.58	1.009	7524.10	3.069	5242.49	3.035	20669.31
84	CCB	-0.005	5.47	0.009	75.56	0.002	17.78	-0.001	5.32	0.008	70.00
85	ZZZZZZ	0.671	78.00	0.503	2560.25	0.075	584.47	0.163	297.70	0.108	785.59
86	ZZZZZZ	0.784	90.13	0.744	3772.72	0.087	686.69	0.186	336.88	0.139	1006.72
87	ZZZZZZ	10.880	1161.37	0.219	1134.50	0.034	273.34	0.037	73.19	0.035	266.67
88	ZZZZZZ	10.324	1076.04	0.795	3923.88	0.051	394.46	0.112	202.85	0.082	590.02
89	ZZZZZZ	7.762	808.82	0.608	3005.88	0.053	408.90	0.143	252.97	0.081	576.69
90	ZZZZZZ	8.528	885.63	0.739	3634.91	0.030	232.23	0.030	58.22	0.035	258.89
91	ZZZZZZ	7.749	813.49	1.185	5865.60	0.042	322.23	0.203	355.30	0.036	267.78
92	ZZZZZZ	8.154	846.16	1.151	5632.19	0.027	212.23	0.065	119.31	0.037	275.56
93	ZZZZZZ	8.026	829.49	1.524	7412.90	0.043	330.01	0.045	84.43	0.054	387.79

Analyte Table

		78 Se [1]		98 Mo [1]		109 Ag [1]		111 Cd [1]		121 Sb [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
94	ZZZZZZ	7.276	758.55	0.260	1306.74	0.031	237.79	0.026	51.84	0.020	154.45
95	CCV	9.998	1049.90	9.719	47906.13	0.998	7614.17	3.128	5513.16	2.959	20783.90
96	CCB	0.028	8.67	0.004	54.45	0.001	11.11	-0.002	3.33	0.003	37.78
97	ZZZZZZ	6.652	691.35	0.606	2984.77	0.491	3701.60	4.683	8237.17	0.449	3170.37
98	ZZZZZZ	1.729	186.67	0.558	2780.28	0.068	521.13	0.253	450.34	0.134	950.04
99	ZZZZZZ	0.002	6.13	-0.003	22.22	0.002	18.89	0.103	165.33	0.002	31.11
100	IM111117-2RVS...	0.082	13.87	0.095	466.68	0.009	66.67	0.025	45.94	0.032	221.12
101	IM111117-2LCS...	9.797	994.83	9.314	44412.68	1.005	7406.30	3.155	5295.51	2.829	18924.96
102	ZZZZZZ	1.279	135.47	0.796	3829.40	0.048	363.35	0.084	149.54	0.184	1257.85
103	ZZZZZZ	1.273	135.87	0.785	3804.95	0.058	434.46	0.099	176.87	0.193	1335.64
104	ZZZZZZ	0.222	29.87	0.163	841.15	0.010	86.67	0.017	37.23	0.046	337.79
105	ZZZZZZ	10.199	1076.44	8.855	43884.78	1.025	7856.51	3.212	5601.02	1.515	10539.22
106	ZZZZZZ	10.594	1094.84	9.163	44484.21	1.077	8085.51	3.199	5508.91	1.576	10825.00
107	CCV	10.003	1016.97	9.675	46178.76	1.000	7377.39	2.975	5025.21	2.968	19987.36
108	CCB	-0.009	4.93	0.016	101.11	0.000	6.67	0.000	6.66	0.007	61.11
109	ZZZZZZ	5.288	545.34	2.614	12616.24	1.969	14655.85	1.993	3399.52	2.087	14188.78
110	1111162-2 10X	2.751	284.40	0.820	3949.44	0.031	236.67	0.073	131.52	0.115	796.70
111	1111162-3 10X	2.611	272.13	0.817	3959.44	0.031	238.89	0.074	133.52	0.116	807.81
112	1111162-4 10X	10.095	1065.11	1.877	9330.61	0.029	230.00	0.039	74.20	0.055	402.23
113	1111162-5 10X	20.245	2102.67	0.844	4165.05	0.023	182.23	0.046	86.82	0.058	416.68
114	1111162-6 10X	21.786	2221.75	7.747	37237.93	0.030	228.90	0.031	60.79	0.089	621.14
115	1111162-7 10X	13.558	1403.13	1.060	5194.25	0.021	161.12	0.036	68.70	0.044	317.79
116	1111162-8 10X	0.652	72.00	0.482	2334.65	0.029	222.23	0.055	99.72	0.099	681.14
117	1111162-9 10X	1.085	115.60	0.530	2559.13	0.044	326.68	0.102	176.36	0.123	840.04
118	1111162-10 10X	2.310	234.93	0.364	1737.90	0.024	181.11	0.052	95.12	0.158	1090.06
119	CCV	9.788	994.30	9.673	46120.97	1.003	7397.38	3.044	5067.23	3.018	20018.54
120	CCB	-0.018	4.27	0.009	74.44	0.000	8.89	-0.002	3.32	0.003	37.78
121	1111162-11 10X	0.444	51.60	0.308	1517.87	0.020	157.78	0.055	100.48	0.095	664.47
122	1111162-12 10X	0.927	100.40	0.305	1494.54	0.026	195.56	0.079	139.82	0.112	776.70
123	1111162-13 10X	0.744	82.93	0.512	2522.46	0.058	438.90	0.108	189.69	0.176	1207.85
124	1111162-14 10X	0.666	73.20	0.567	2726.95	0.056	420.01	0.127	221.66	0.192	1312.30

Analyte Table

		78 Se [1]		98 Mo [1]		109 Ag [1]		111 Cd [1]		121 Sb [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
125	1111162-15 10X	2.926	304.93	1.705	8245.56	0.036	271.12	0.063	112.99	0.102	700.03
126	1110371-1 50X	36.235	3678.95	1.370	6589.23	0.003	31.11	-0.001	5.19	0.094	635.58
127	1111008-1 50X	0.082	14.53	0.382	1849.02	0.013	100.00	0.047	85.78	0.078	537.80
128	1111008-2 50X	30.013	3109.10	1.582	7756.42	0.001	16.67	0.002	11.05	0.117	795.59
129	CCV	9.863	996.97	9.658	45827.84	1.008	7397.38	3.155	5231.98	3.012	19910.58
130	CCB	0.004	6.13	0.007	63.33	0.001	15.56	-0.003	1.99	0.003	37.78
131	1110371-1 50X	0.012	7.33	1.129	5315.40	0.010	76.67	0.006	16.68	0.088	575.58
132	1111008-1 50X	0.009	7.07	0.511	2399.11	0.013	96.67	0.008	19.71	0.075	496.68
133	1111008-2 50X	0.005	6.40	1.351	6140.17	0.008	58.89	0.013	27.92	0.119	780.03
134	EX111117-4MB...	-0.016	4.67	-0.004	17.78	0.000	7.78	-0.003	2.00	0.001	27.78
135	EX111117-4RV...	0.090	14.53	0.083	408.90	0.010	74.44	0.030	53.28	0.034	231.12
136	EX111117-4LCS...	9.495	970.03	9.370	44919.81	0.977	7246.20	3.118	5274.78	2.879	19407.74
137	1111165-21 200X	0.663	72.13	0.073	377.79	0.001	12.22	-0.001	4.62	0.022	165.56
138	1111165-21D 2...	0.599	65.20	0.006	61.11	0.001	14.44	-0.003	1.32	0.022	163.34
139	1111165-21L 1...	0.145	19.73	0.009	72.22	0.000	3.33	0.000	6.66	0.008	68.89
140	1111165-21MS ...	1.006	104.80	0.452	2123.51	0.045	331.12	0.159	268.41	0.145	967.82
141	CCV	9.745	976.43	9.571	45031.12	1.003	7296.23	3.104	5084.03	3.079	20100.84
142	CCB	-0.018	4.13	0.012	86.67	0.001	13.33	-0.003	2.66	0.002	32.22
143	1111165-21MSD...	1.012	107.47	0.454	2181.29	0.049	366.68	0.145	243.73	0.149	990.05
144	1111165-22 200X	0.314	37.87	0.006	62.22	0.001	13.33	-0.003	2.66	0.012	100.00
145	1111167-11 200X	0.544	60.53	-0.001	30.00	0.000	5.55	-0.001	5.33	0.012	95.56
146	1111167-12 200X	0.610	66.13	0.000	34.44	0.001	13.33	-0.002	3.33	0.012	97.78
147	1111167-13 200X	0.513	56.00	-0.001	28.89	0.000	7.78	-0.001	4.67	0.013	103.34
148	IP111117-2MB ...	-0.002	5.47	-0.005	12.22	0.000	5.56	-0.001	4.67	-0.001	14.44
149	CCV	10.080	1006.83	9.684	45445.68	0.991	7191.74	3.080	5057.98	3.004	19659.18
150	CCB	0.084	13.20	0.004	50.00	0.000	8.89	0.000	5.99	0.003	34.45

Analyte Table

		137 Ba [1]		205 Tl [1]		206 (Pb) [1]		207 (Pb) [1]		208 Pb [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		30.00		19.05		103.34		126.67		583.37
2	blank	-0.016	56.67	0.000	22.38	-0.010	123.34	0.019	216.68	0.003	703.39
3	blank	0.000	96.68	0.000	17.62	0.000	186.68	0.000	116.68	0.000	633.38
4	H/1000	0.107	390.03	0.002	53.81	0.053	566.71	0.055	446.70	0.053	2116.85
5	H/100	0.964	2830.39	0.021	385.72	0.542	4160.79	0.486	3097.14	0.510	15167.11
6	H/10	10.041	28006.46	0.203	3485.19	5.172	36807.35	5.057	30034.88	5.137	141814.14
7	HIGH	99.996	279979.16	2.000	34405.98	49.982	357179.04	49.994	298535.83	49.986	1386370.75
8	ICV	19.736	58444.80	0.426	7518.62	10.068	73839.91	10.408	63745.75	10.168	289362.24
9	ICB	-0.004	90.01	0.008	136.19	-0.007	143.34	0.006	146.68	0.003	710.05
10	CRI1	0.097	386.69	0.024	430.49	0.051	570.04	0.046	403.36	0.052	2140.18
11	CRI2	0.276	893.41	0.043	769.07	0.093	890.07	0.094	703.39	0.104	3640.37
12	ICSA	0.041	236.68	0.004	94.29	-0.001	206.68	0.003	153.34	0.003	810.05
13	ICSAB	10.180	29505.89	0.209	3622.37	5.190	37338.80	5.338	32062.74	5.271	147118.17
14	IP111116-5MB ...	-0.027	30.00	0.003	67.14	-0.008	140.01	-0.002	106.67	-0.007	466.69
15	IM111116-5LCS...	9.850	27285.21	0.209	3559.97	5.021	35587.45	5.085	30071.88	5.101	140257.20
16	1111041-23 10X	0.049	226.68	0.009	165.72	0.000	190.01	0.012	186.68	0.010	890.05
17	1111067-35 10X	-0.008	80.00	0.005	93.34	-0.014	96.67	-0.002	106.67	-0.007	476.70
18	1111086-38 10X	-0.003	93.34	0.003	70.48	-0.014	96.67	0.002	133.34	-0.008	463.36
19	1111037-3 10X	23.090	65302.29	0.006	126.19	-0.011	130.01	-0.002	120.01	-0.001	680.05
20	CCV	9.949	28129.80	0.203	3518.53	4.961	35704.35	5.050	30329.02	5.037	140613.79
21	CCB	0.007	116.67	0.008	139.52	-0.006	146.68	0.002	123.34	0.000	620.04
22	1111037-3D 10X	14.806	42042.31	0.003	70.00	-0.006	170.01	-0.006	96.67	-0.006	563.36
23	1111037-3L 50X	2.845	8069.17	0.002	54.76	-0.007	153.34	-0.001	120.01	-0.003	620.05
24	1111037-3MS 10X	24.864	70217.92	0.216	3712.39	5.166	36887.64	5.011	29874.65	5.161	142977.00
25	1111037-3MSD ...	25.189	70900.09	0.212	3658.57	5.290	37926.64	5.189	31044.03	5.237	145657.62
26	1111038-1 10X	2641.086	7257833.85	0.024	403.34	0.034	416.69	0.030	286.69	0.037	1606.79
27	1111038-2 10X	2041.067	5759369.71	0.010	174.77	0.035	420.03	0.041	343.35	0.046	1826.83
28	1111040-1 10X	3145.669	7693194.68	1.893	23493.36	1.617	8476.20	1.652	7205.43	1.636	33222.84
29	1111040-3 10X	2578.179	5598529.50	2.741	28989.74	0.501	2326.98	0.499	1913.57	0.486	8724.77
30	1111040-4 10X	20274.766	44230689.34	3.600	36214.02	0.431	1923.56	0.450	1646.85	0.430	7394.42
31	1111040-5 10X	11044.553	24757790.47	0.976	10005.35	0.095	526.70	0.129	536.71	0.122	2433.54

Analyte Table

		137 Ba [1]		205 Tl [1]		206 (Pb) [1]		207 (Pb) [1]		208 Pb [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	10.093	29142.08	0.211	3352.78	5.205	34301.35	5.162	28388.39	5.233	133768.70
33	CCB	0.290	830.08	0.019	288.10	0.041	413.36	0.032	266.69	0.037	1436.77
34	1111078-35 10X	13.884	39398.26	0.009	152.86	0.670	4587.61	0.671	3797.32	0.663	17538.19
35	1111040-7 10X	2938.517	6519838.44	1.868	21292.46	1.701	8182.64	1.608	6448.38	1.648	30743.75
36	1111051-1 10X	12185.105	25909042.11	0.696	6990.74	0.045	310.02	0.055	266.68	0.049	1200.08
37	1111051-2 10X	12355.216	26343506.28	0.715	6970.24	0.035	260.01	0.057	266.68	0.056	1286.76
38	CCV	10.546	28667.62	0.209	3184.65	5.061	31989.28	5.028	26524.87	5.054	123890.53
39	CCB	0.434	1156.76	0.007	114.76	-0.002	160.01	0.018	196.68	0.010	813.39
40	IP111116-4MB ...	0.528	1390.14	0.004	68.57	0.004	196.68	0.007	140.01	0.007	746.72
41	IM111116-4RVS...	0.582	1493.48	0.023	338.58	0.056	496.71	0.043	320.02	0.053	1790.15
42	IM111116-4LCS...	9.781	24804.08	0.198	2938.88	5.013	30920.19	4.840	24905.60	4.917	117637.58
43	1111137-1 10X	19.312	48955.19	0.007	120.95	0.018	290.02	0.017	200.01	0.020	1100.09
44	1111138-1 10X	41.086	103438.14	0.014	227.88	0.226	1576.83	0.267	1493.48	0.249	6594.21
45	1111140-1 10X	5.214	12739.24	0.002	49.52	0.082	676.71	0.104	640.05	0.089	2703.57
46	1111160-1 10X	108.281	263209.77	0.141	2186.37	15.811	101066.40	15.576	83185.54	15.620	387512.39
47	1111162-16 10X	8.539	20521.08	0.012	194.32	0.264	1836.89	0.270	1523.50	0.253	6770.95
48	1111185-13 10X	4.325	10534.10	0.002	50.00	0.005	206.68	-0.001	106.67	0.005	723.38
49	1111185-13D 10X	4.244	10263.94	0.002	51.90	0.003	196.68	0.013	180.01	0.015	960.07
50	CCV	10.673	24917.67	0.205	3026.52	5.087	31224.43	5.155	26401.33	5.121	121934.40
51	CCB	0.014	110.01	0.008	120.00	-0.009	110.01	0.015	166.68	0.010	766.72
52	1111185-13L 50X	0.853	1986.88	0.005	80.00	-0.004	146.68	0.014	176.68	0.006	723.38
53	1111185-13MS ...	13.865	32464.95	0.203	2987.94	5.063	30916.86	5.031	25636.74	5.039	119372.58
54	1111185-13MSD...	13.776	33280.35	0.205	3097.96	4.829	30322.22	5.001	26197.70	4.912	119630.31
55	1111205-1 10X	1.764	4174.11	0.009	134.76	0.012	220.01	0.037	260.02	0.023	1003.40
56	1111205-2 10X	1.763	4334.14	0.006	94.76	0.009	206.68	0.016	173.35	0.018	916.73
57	IP111117-3MB ...	0.000	93.34	0.002	50.95	0.003	193.34	-0.001	103.34	0.011	856.73
58	IP111117-3LCS...	10.520	25859.16	0.210	3237.04	5.224	33422.44	5.281	28191.52	5.287	131165.77
59	1111005-1 10X	351.215	853776.76	0.264	4051.06	6.605	42014.57	6.465	34344.60	6.516	160845.95
60	1111005-2 10X	411.424	996397.67	0.320	4804.14	8.233	51414.35	8.604	44853.15	8.380	202996.82
61	1111005-2D 10X	411.896	986338.74	0.309	4656.00	8.329	52059.89	8.528	44505.46	8.326	201925.24
62	CCV	10.333	24637.16	0.214	3197.04	5.144	31922.44	5.049	26147.73	5.143	123784.30

Analyte Table

		137 Ba [1]		205 Tl [1]		206 (Pb) [1]		207 (Pb) [1]		208 Pb [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	CCB	0.131	356.69	0.003	50.48	-0.002	153.34	0.016	180.01	0.008	736.71
64	1111005-2L 50X	81.542	189398.07	0.060	913.85	1.658	10430.88	1.770	9253.35	1.669	40680.16
65	1111005-2MS 10X	435.053	1007696.00	0.536	8019.36	13.285	82588.61	13.251	68791.29	13.335	321682.12
66	1111005-2MSD ...	421.403	987877.38	0.554	8162.77	13.557	82997.43	13.544	69263.98	13.634	323922.96
67	1111005-3 10X	413.908	970770.82	0.338	5076.61	9.824	61208.46	9.605	49975.82	9.760	235964.51
68	1111005-4 10X	359.432	845950.56	0.316	4716.02	7.742	48086.37	7.485	38792.22	7.515	181036.21
69	1111005-5 10X	358.729	849720.17	0.277	4151.08	8.048	49992.80	7.870	40824.35	7.970	192089.25
70	1111005-6 10X	522.488	1214027.74	0.526	7782.08	17.046	104661.16	16.504	84657.57	16.852	401540.71
71	CCV	10.681	24510.35	0.224	3337.54	5.139	31845.56	5.163	26681.90	5.128	123251.18
72	CCB	0.168	430.03	0.009	136.67	0.013	236.68	0.025	220.02	0.017	933.40
73	IP111117-1MB ...	0.138	373.36	0.004	71.91	-0.005	140.01	-0.006	76.67	0.001	596.70
74	IM111117-1RVS...	0.322	763.39	0.025	357.63	0.050	453.36	0.068	426.70	0.058	1853.48
75	IM111117-1LCS...	10.533	24019.65	0.223	3243.71	5.120	30973.70	5.291	26708.53	5.209	122224.94
76	1111160-2 10X	85.860	197192.22	0.192	3008.42	15.178	98186.60	12.120	65517.25	12.904	324065.03
77	1111160-2D 10X	84.421	195205.67	0.205	3225.61	15.183	98826.94	12.011	65346.50	12.846	324608.48
78	1111160-2L 50X	17.218	39679.07	0.053	822.41	3.101	19824.22	2.423	12943.00	2.629	65261.15
79	1111160-2MS 10X	98.942	228622.94	0.400	6422.85	20.535	136645.82	17.264	96003.79	18.119	468046.09
80	1111160-2MSD ...	98.758	227166.09	0.405	6338.54	20.048	130131.04	16.956	91961.02	17.720	446499.42
81	1111160-2A 10X	86.586	198376.67	0.301	4713.16	25.028	162292.46	21.986	119125.83	22.780	573441.24
82	1111160-3 10X	116.165	263425.10	0.249	4012.47	15.197	101277.91	14.566	81080.55	14.890	385092.13
83	CCV	10.499	23308.54	0.206	3083.20	5.070	31548.23	5.018	26071.02	5.030	121425.16
84	CCB	0.015	113.34	0.013	193.81	0.007	203.35	0.020	196.68	0.015	876.73
85	ZZZZZZ	113.368	261112.47	0.224	3604.27	20.152	134284.05	19.352	107743.48	19.695	509364.08
86	ZZZZZZ	126.003	289851.73	0.256	4171.08	16.384	110443.16	15.991	90028.76	16.222	424358.36
87	ZZZZZZ	24.730	57019.30	0.098	1542.47	10.056	65332.93	6.435	34969.56	7.308	184440.36
88	ZZZZZZ	55.395	125256.74	0.178	2755.04	24.944	159183.96	11.964	63840.07	14.995	371595.51
89	ZZZZZZ	60.027	133505.27	0.186	2918.88	22.353	144809.66	11.996	64991.99	14.424	362880.93
90	ZZZZZZ	12.506	27959.80	0.086	1310.07	25.802	160378.45	6.808	35440.44	11.157	269503.98
91	ZZZZZZ	12.311	27421.97	0.090	1351.98	35.572	220791.16	16.024	83188.85	20.519	494643.54
92	ZZZZZZ	12.080	27087.99	0.090	1340.55	31.072	189500.56	9.846	50250.77	14.595	345798.90
93	ZZZZZZ	21.850	48831.94	0.127	1914.42	36.813	228000.95	10.432	54060.96	16.482	396524.97

Analyte Table

		137 Ba [1]		205 Tl [1]		206 (Pb) [1]		207 (Pb) [1]		208 Pb [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
94	ZZZZZZ	17.854	39923.06	0.056	858.13	14.004	88190.68	8.072	42512.72	9.492	232195.79
95	CCV	10.077	23088.15	0.207	3099.87	5.154	32032.64	5.114	26518.33	5.095	122822.59
96	CCB	-0.025	30.00	0.011	163.34	0.009	216.68	0.011	156.67	0.013	856.72
97	ZZZZZZ	43.904	100133.47	0.215	3589.98	445.657	3067520.06	418.847	2408939.39	424.896	11352013.73
98	ZZZZZZ	102.821	232841.79	0.229	3611.42	26.697	174330.35	24.793	135251.01	25.386	643341.72
99	ZZZZZZ	0.029	136.68	0.006	90.48	0.191	1216.79	0.194	993.43	0.188	4583.86
100	IM111117-2RVS...	0.167	423.36	0.024	334.77	0.131	880.07	0.095	536.71	0.120	3096.96
101	IM111117-2LCS...	10.239	22316.97	0.226	3300.87	5.077	30826.90	5.160	26137.43	5.126	120723.63
102	ZZZZZZ	108.242	237180.66	0.180	2708.84	11.424	71187.02	10.698	55680.08	11.058	267376.77
103	ZZZZZZ	108.611	240961.53	0.185	2831.71	11.615	73430.02	11.013	58156.71	11.217	275202.76
104	ZZZZZZ	21.117	47323.65	0.038	593.35	2.338	14884.86	2.154	11421.62	2.242	55319.74
105	ZZZZZZ	116.273	262658.88	0.370	5817.37	16.198	105671.54	15.329	83540.87	15.503	392528.15
106	ZZZZZZ	117.987	263218.61	0.379	5901.68	16.229	104852.38	15.420	83218.80	15.746	394791.87
107	CCV	10.362	22754.24	0.210	3109.40	5.092	31331.09	5.067	26014.06	5.048	120498.29
108	CCB	0.024	126.67	0.008	128.57	0.012	226.68	0.016	173.35	0.017	916.73
109	ZZZZZZ	105.610	233274.66	0.278	4265.40	20.967	133177.91	19.941	105833.02	20.407	503098.52
110	1111162-2 10X	65.020	143277.67	0.135	2033.49	10.542	65346.07	6.794	35220.07	7.764	186890.63
111	1111162-3 10X	65.884	146259.41	0.140	2107.31	10.322	64096.93	7.258	37675.86	7.910	190752.28
112	1111162-4 10X	17.495	39508.27	0.208	3152.26	26.951	168701.90	6.219	32603.91	10.992	267408.64
113	1111162-5 10X	16.003	35819.29	0.140	2146.36	20.421	129169.83	5.701	30205.49	8.984	220894.95
114	1111162-6 10X	24.414	54052.61	0.331	5035.17	33.685	212377.23	7.426	39213.64	13.362	327332.81
115	1111162-7 10X	15.647	34643.45	0.188	2790.28	27.874	171066.46	6.013	30920.28	10.956	261328.00
116	1111162-8 10X	60.195	130639.13	0.096	1438.18	6.804	42087.62	5.910	30532.88	6.192	148657.41
117	1111162-9 10X	77.730	168175.55	0.132	1980.62	9.309	57721.41	8.057	41733.83	8.282	199330.31
118	1111162-10 10X	37.860	83324.99	0.075	1122.43	7.282	44518.18	5.014	25626.65	5.613	133264.63
119	CCV	10.350	22393.78	0.209	3075.10	5.139	31404.90	5.171	26378.05	5.139	121870.62
120	CCB	0.015	110.01	0.009	132.86	0.003	176.68	0.013	163.34	0.012	803.39
121	1111162-11 10X	46.161	102411.37	0.086	1335.78	6.468	41121.89	5.945	31561.71	6.195	152825.43
122	1111162-12 10X	63.626	139443.42	0.101	1562.47	8.392	53371.46	7.593	40353.42	7.920	195486.03
123	1111162-13 10X	97.727	213986.00	0.189	2942.22	12.369	79586.03	11.984	64408.24	12.200	304605.09
124	1111162-14 10X	108.213	236714.52	0.193	2954.60	13.070	82631.71	12.414	65583.77	12.756	313047.13

Analyte Table

		137 Ba [1]		205 Tl [1]		206 (Pb) [1]		207 (Pb) [1]		208 Pb [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
125	1111162-15 10X	52.293	113484.65	0.145	2166.84	12.946	80125.56	7.253	37562.54	8.616	207173.01
126	1110371-1 50X	637.520	1361965.24	0.094	1400.08	501.607	3050591.72	566.643	2879964.23	542.136	12797814.81
127	1111008-1 50X	43.998	95373.67	0.052	774.31	3.643	22274.30	3.782	19287.09	3.779	89584.68
128	1111008-2 50X	770.819	1663288.88	0.110	1639.63	602.237	3699175.68	672.835	3453698.28	643.712	15347370.30
129	CCV	10.497	22627.54	0.210	3153.21	5.212	32510.58	5.191	27022.38	5.243	126854.71
130	CCB	0.218	506.70	0.008	129.53	0.152	1016.75	0.177	933.41	0.184	4567.21
131	1110371-1 50X	0.381	870.06	0.005	82.38	0.120	890.07	0.121	716.72	0.132	3647.04
132	1111008-1 50X	0.158	410.03	0.048	696.69	0.101	760.06	0.142	800.06	0.123	3370.34
133	1111008-2 50X	1.466	3133.81	0.003	50.95	0.094	710.05	0.112	646.72	0.102	2853.59
134	EX111117-4MB...	0.012	113.34	0.001	30.48	-0.001	173.34	0.016	193.34	0.012	883.39
135	EX111117-4RV...	0.098	280.01	0.023	325.25	0.058	486.70	0.069	426.70	0.069	2060.18
136	EX111117-4LCS...	9.997	21986.56	0.204	3019.85	5.010	30813.30	5.066	26007.31	5.055	120603.36
137	1111165-21 200X	2.414	5257.81	0.006	109.52	0.015	266.68	0.029	260.01	0.030	1296.75
138	1111165-21D 2...	2.230	4914.33	0.002	48.57	0.013	253.35	0.026	240.02	0.020	1066.75
139	1111165-21L 1...	0.479	1053.42	0.002	40.00	0.005	190.02	0.013	163.34	0.007	706.72
140	1111165-21MS ...	2.686	5794.72	0.010	162.38	0.237	1600.17	0.207	1143.44	0.235	6077.52
141	CCV	10.282	21899.70	0.208	2995.08	4.986	29804.65	5.201	25937.15	5.140	119166.16
142	CCB	-0.010	56.67	0.007	110.95	-0.005	133.34	0.007	133.34	0.006	670.05
143	1111165-21MSD...	2.740	5894.75	0.013	206.67	0.259	1743.53	0.265	1446.82	0.259	6684.33
144	1111165-22 200X	2.736	5924.75	0.002	43.81	0.005	203.35	0.003	126.68	0.007	756.72
145	1111167-11 200X	2.363	5137.76	0.002	50.48	-0.001	173.35	-0.003	96.67	0.002	643.37
146	1111167-12 200X	2.295	4904.39	0.001	33.33	-0.006	136.68	0.006	140.01	0.001	613.37
147	1111167-13 200X	2.952	6348.26	0.001	27.62	-0.005	143.35	0.000	106.67	0.000	576.70
148	IP111117-2MB ...	-0.015	46.67	0.001	23.81	-0.005	130.01	0.012	156.68	0.004	623.38
149	CCV	10.295	21983.02	0.211	3064.15	5.005	30215.68	5.155	25943.87	5.090	119089.28
150	CCB	-0.016	46.67	0.006	99.05	-0.010	106.67	0.004	120.01	0.004	623.37

Analyte Table

		232 Th [1]		238 U [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		64.45		21.11
2	blank	0.000	50.00	0.000	4.44
3	blank	0.000	61.11	0.000	14.44
4	H/1000	0.007	243.34	0.015	382.23
5	H/100	0.063	1869.04	0.103	2753.63
6	H/10	0.921	25552.70	1.017	26243.64
7	HIGH	10.008	279596.08	9.998	260246.53
8	ICV	2.014	57690.76	2.073	55265.48
9	ICB	0.002	104.45	0.001	33.33
10	CRI1	0.016	505.58	0.013	353.34
11	CRI2	0.030	923.38	0.024	661.14
12	ICSA	0.020	654.47	0.004	125.56
13	ICSAB	1.056	29628.23	1.065	27789.87
14	IP111116-5MB ...	0.000	73.34	0.000	11.11
15	IM111116-5LCS...	0.948	26177.12	1.006	25864.08
16	1111041-23 10X	0.009	283.34	0.001	30.00
17	1111067-35 10X	0.002	117.78	0.001	31.11
18	1111086-38 10X	0.002	107.78	0.006	156.67
19	1111037-3 10X	0.001	104.45	0.022	587.80
20	CCV	0.940	26384.15	0.997	26033.35
21	CCB	0.010	316.68	0.000	22.22
22	1111037-3D 10X	0.006	230.01	0.022	590.02
23	1111037-3L 50X	0.003	143.34	0.004	124.45
24	1111037-3MS 10X	0.956	26610.10	1.057	27384.46
25	1111037-3MSD ...	0.988	27607.57	1.069	27791.02
26	1111038-1 10X	0.029	818.93	0.004	114.45
27	1111038-2 10X	0.011	333.34	0.004	114.44
28	1111040-1 10X	0.011	277.78	0.004	85.56
29	1111040-3 10X	0.007	158.89	0.006	98.90
30	1111040-4 10X	0.003	85.55	0.003	62.22
31	1111040-5 10X	0.003	94.45	0.003	52.22

Analyte Table

		232 Th [1]		238 U [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	0.961	24702.31	1.018	24339.28
33	CCB	0.028	697.81	0.003	74.45
34	1111078-35 10X	0.013	397.79	1.360	32550.78
35	1111040-7 10X	0.020	415.57	0.006	113.34
36	1111051-1 10X	0.007	155.56	0.004	73.33
37	1111051-2 10X	0.009	173.34	0.003	52.22
38	CCV	0.926	22800.31	0.990	22695.51
39	CCB	0.011	300.01	0.000	12.22
40	IP111116-4MB ...	0.004	152.22	0.000	23.33
41	IM111116-4RVS...	0.017	453.35	0.010	217.78
42	IM111116-4LCS...	0.896	21548.42	0.959	21433.69
43	1111137-1 10X	0.049	1233.48	0.062	1406.76
44	1111138-1 10X	0.006	206.67	0.005	120.00
45	1111140-1 10X	0.007	217.78	0.017	390.02
46	1111160-1 10X	2.578	64386.44	5.141	119571.16
47	1111162-16 10X	0.125	3123.73	0.366	8358.05
48	1111185-13 10X	0.010	303.34	0.337	7489.00
49	1111185-13D 10X	0.004	165.56	0.340	7583.47
50	CCV	0.940	22497.64	1.024	22802.36
51	CCB	0.012	308.90	0.000	18.89
52	1111185-13L 50X	0.004	147.78	0.066	1417.86
53	1111185-13MS ...	0.943	22452.03	1.321	29250.97
54	1111185-13MSD...	0.951	23275.53	1.310	29821.51
55	1111205-1 10X	0.021	493.35	0.273	5259.93
56	1111205-2 10X	0.008	232.23	0.281	5608.94
57	IP111117-3MB ...	-0.001	25.55	0.000	20.00
58	IP111117-3LCS...	0.983	24525.35	0.963	22336.24
59	1111005-1 10X	2.351	58304.30	0.838	19364.11
60	1111005-2 10X	2.951	71869.11	1.014	23009.34
61	1111005-2D 10X	2.813	68595.64	1.012	22980.41
62	CCV	0.983	23779.66	1.046	23533.56

Analyte Table

		232 Th [1]		238 U [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	CCB	-0.001	42.22	0.000	17.78
64	1111005-2L 50X	0.576	13990.26	0.202	4558.57
65	1111005-2MS 10X	3.856	93591.03	2.092	47318.06
66	1111005-2MSD ...	4.098	97951.94	2.007	44706.76
67	1111005-3 10X	3.619	87967.41	1.943	43984.81
68	1111005-4 10X	2.842	68786.61	3.288	74112.20
69	1111005-5 10X	2.661	64473.46	1.505	33944.78
70	1111005-6 10X	7.518	180276.74	2.519	56298.07
71	CCV	0.992	23954.41	1.038	23328.82
72	CCB	0.005	162.23	0.002	44.44
73	IP111117-1MB ...	-0.001	36.67	0.003	71.11
74	IM111117-1RVS...	0.009	244.45	0.017	370.01
75	IM111117-1LCS...	0.847	19977.29	1.128	24734.41
76	1111160-2 10X	6.237	157513.94	27.696	651458.19
77	1111160-2D 10X	5.783	146979.48	28.061	664408.19
78	1111160-2L 50X	1.290	32008.79	5.730	132304.70
79	1111160-2MS 10X	7.424	193006.44	27.496	665897.34
80	1111160-2MSD ...	7.430	188409.51	25.586	604357.53
81	1111160-2A 10X	6.403	162286.11	30.015	708583.00
82	1111160-3 10X	8.091	210511.71	2.853	69171.64
83	CCV	0.977	23714.00	1.029	23205.22
84	CCB	0.016	397.79	0.007	151.12
85	ZZZZZZ	8.442	219740.05	2.279	55270.28
86	ZZZZZZ	8.497	223678.49	1.807	44323.48
87	ZZZZZZ	3.260	82642.14	45.984	1085799.73
88	ZZZZZZ	5.184	129282.86	110.465	2566380.07
89	ZZZZZZ	5.291	133946.37	91.284	2152351.33
90	ZZZZZZ	2.291	55680.02	333.137	7537446.40
91	ZZZZZZ	2.196	53315.80	287.206	6491445.09
92	ZZZZZZ	2.685	64052.98	273.806	6080930.17
93	ZZZZZZ	6.006	145425.64	701.069	15811191.09

Analyte Table

		232 Th [1]		238 U [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS
94	ZZZZZZ	2.885	70981.21	159.415	3651529.02
95	CCV	1.005	24357.25	1.314	29615.69
96	CCB	0.015	382.24	0.120	2489.15
97	ZZZZZZ	2.907	78306.06	81.044	2033302.40
98	ZZZZZZ	6.630	169166.00	17.382	413202.51
99	ZZZZZZ	0.001	73.33	0.036	737.81
100	IM111117-2RVS...	0.008	231.12	0.042	847.82
101	IM111117-2LCS...	0.848	20071.84	1.060	23333.24
102	ZZZZZZ	7.001	170212.13	13.910	315060.02
103	ZZZZZZ	6.858	169193.63	14.101	324064.80
104	ZZZZZZ	1.419	34948.79	2.775	63594.93
105	ZZZZZZ	7.819	199176.19	15.002	356046.30
106	ZZZZZZ	8.014	202166.94	15.399	361926.42
107	CCV	1.000	23971.10	1.062	23687.16
108	CCB	0.017	417.79	0.007	147.78
109	ZZZZZZ	6.941	172267.29	15.601	360642.48
110	1111162-2 10X	4.137	100064.84	27.078	609956.69
111	1111162-3 10X	4.399	106573.77	25.479	575005.31
112	1111162-4 10X	2.949	72170.33	160.971	3667996.69
113	1111162-5 10X	2.428	60035.66	114.763	2641732.94
114	1111162-6 10X	3.637	89663.82	346.481	7954593.01
115	1111162-7 10X	2.638	63308.33	132.133	2952062.53
116	1111162-8 10X	4.166	100373.60	9.798	219922.88
117	1111162-9 10X	4.359	105439.29	8.070	181785.29
118	1111162-10 10X	3.105	74003.13	12.353	274080.91
119	CCV	1.007	23997.80	1.079	23922.05
120	CCB	0.017	430.01	0.024	504.46
121	1111162-11 10X	3.202	79291.40	1.124	25946.62
122	1111162-12 10X	4.247	105333.80	2.246	51900.40
123	1111162-13 10X	6.802	170800.87	1.622	37967.11
124	1111162-14 10X	6.742	166398.79	1.635	37621.65

Analyte Table

		232 Th [1]		238 U [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS
125	1111162-15 10X	4.361	105395.56	61.716	1389140.85
126	1110371-1 50X	1.217	28995.87	15.234	337610.70
127	1111008-1 50X	2.116	50271.22	1.034	22886.94
128	1111008-2 50X	1.519	36562.75	13.553	303373.36
129	CCV	0.977	23745.18	1.051	23748.28
130	CCB	0.024	575.58	0.007	161.11
131	1110371-1 50X	0.015	413.35	0.006	145.56
132	1111008-1 50X	0.010	287.79	0.003	82.22
133	1111008-2 50X	0.009	246.67	0.007	150.00
134	EX111117-4MB...	0.003	132.23	0.003	76.67
135	EX111117-4RV...	0.013	332.23	0.012	261.12
136	EX111117-4LCS...	0.926	22205.01	1.054	23512.30
137	1111165-21 200X	0.033	845.59	3.775	83170.36
138	1111165-21D 2...	0.015	413.35	3.752	82289.74
139	1111165-21L 1...	0.007	205.56	0.767	15865.49
140	1111165-21MS ...	0.037	922.27	3.737	81720.81
141	CCV	0.958	22328.45	1.050	22760.14
142	CCB	0.021	498.91	0.001	30.00
143	1111165-21MSD...	0.049	1216.74	3.742	82394.38
144	1111165-22 200X	0.012	340.01	1.952	42615.41
145	1111167-11 200X	0.008	248.90	3.768	83069.23
146	1111167-12 200X	0.005	170.00	3.520	77019.79
147	1111167-13 200X	0.003	127.78	3.647	78600.08
148	IP111117-2MB ...	0.000	58.89	0.002	50.00
149	CCV	0.927	21778.67	1.064	23275.38
150	CCB	0.062	1354.71	0.001	32.22

ISTD Table

		71 Ga (ISTD) [1]		72 Ge (ISTD) [1]		103 Rh (ISTD) [1]		115 In (ISTD) [1]		195 Pt (ISTD) [1]	
	Sample Name	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
1	blank	55252.18		25621.18		200751.75		173748.46		75030.46	
2	blank	57342.76	100.0	24382.77	100.0	197635.87	100.0	175859.11	100.0	74068.98	100.0
3	blank	57071.67	100.0	25708.17	100.0	197026.80	100.0	176072.35	100.0	74009.22	100.0
4	H/1000	62872.68	110.2	27724.70	107.8	215019.87	109.1	191298.40	108.6	77268.56	104.4
5	H/100	65319.45	114.5	28823.39	112.1	227232.58	115.3	202237.29	114.9	81591.81	110.2
6	H/10	64712.82	113.4	29277.54	113.9	221375.60	112.4	199427.07	113.3	78920.67	106.6
7	HIGH	69814.60	122.3	30676.68	119.3	216910.09	110.1	200874.30	114.1	78967.24	106.7
8	ICV	70878.63	124.2	31365.05	122.0	230841.47	117.2	212125.12	120.5	81474.88	110.1
9	ICB	60102.75	105.3	27260.54	106.0	201047.96	102.0	182756.80	103.8	69842.04	94.4
10	CRI1	66738.39	116.9	30015.36	116.8	224387.31	113.9	203696.91	115.7	78485.06	106.0
11	CRI2	68046.99	119.2	29568.02	115.0	224232.14	113.8	203021.08	115.3	79148.82	106.9
12	ICSA	68374.83	119.8	31017.40	120.7	229664.32	116.6	210695.04	119.7	82238.49	111.1
13	ICSAB	69700.45	122.1	31301.40	121.8	226443.42	114.9	207223.60	117.7	80264.07	108.5
14	IP111116-5MB ...	58573.43	102.6	25554.56	99.4	204007.23	103.5	181104.65	102.9	71162.32	96.2
15	IM111116-5LCS...	65482.57	114.7	28733.24	111.8	221393.39	112.4	198026.51	112.5	77529.35	104.8
16	1111041-23 10X	60343.75	105.7	26128.65	101.6	205229.91	104.2	184490.74	104.8	72029.27	97.3
17	1111067-35 10X	59125.96	103.6	26496.02	103.1	203875.11	103.5	183710.20	104.3	72901.16	98.5
18	1111086-38 10X	60125.99	105.4	26866.46	104.5	205193.53	104.1	183595.40	104.3	70914.20	95.8
19	1111037-3 10X	65650.48	115.0	29875.02	116.2	221754.62	112.6	202658.13	115.1	79456.53	107.4
20	CCV	66213.05	116.0	28970.20	112.7	223071.56	113.2	202123.67	114.8	78286.93	105.8
21	CCB	58687.29	102.8	26612.65	103.5	199187.09	101.1	179246.57	101.8	70169.99	94.8
22	1111037-3D 10X	67728.76	118.7	29838.34	116.1	220309.75	111.8	203295.59	115.5	77673.26	105.0
23	1111037-3L 50X	65215.33	114.3	29340.90	114.1	216316.98	109.8	200953.58	114.1	74970.36	101.3
24	1111037-3MS 10X	67313.80	117.9	29985.44	116.6	221022.47	112.2	202423.40	115.0	77516.54	104.7
25	1111037-3MSD ...	67220.48	117.8	29721.63	115.6	221498.19	112.4	201723.10	114.6	76353.80	103.2
26	1111038-1 10X	65663.73	115.1	38386.37	149.3	212318.06	107.8	197237.53	112.0	73807.71	99.7
27	1111038-2 10X	68963.91	120.8	37170.34	144.6	217018.97	110.1	202545.50	115.0	75764.02	102.4
28	1111040-1 10X	60935.33	106.8	28552.72	111.1	179689.08	91.2	175527.21	99.7	60159.54	81.3
29	1111040-3 10X	55459.43	97.2	26098.71	101.5	158998.21	80.7	155886.87	88.5	50698.07	68.5
30	1111040-4 10X	55820.11	97.8	25981.75	101.1	159288.51	80.8	156575.93	88.9	50761.74	68.6
31	1111040-5 10X	56934.61	99.8	26235.43	102.1	159416.80	80.9	160888.96	91.4	50818.21	68.7

ISTD Table

		71 Ga (ISTD) [1]		72 Ge (ISTD) [1]		103 Rh (ISTD) [1]		115 In (ISTD) [1]		195 Pt (ISTD) [1]	
	Sample Name	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
32	CCV	70102.63	122.8	31909.09	124.1	221416.96	112.4	206479.13	117.3	72136.27	97.5
33	CCB	62591.82	109.7	28085.41	109.2	199107.61	101.1	181125.97	102.9	63714.11	86.1
34	1111078-35 10X	69945.29	122.6	30155.64	117.3	214542.44	108.9	203107.75	115.4	69872.55	94.4
35	1111040-7 10X	57004.31	99.9	26299.02	102.3	164019.10	83.2	159239.15	90.4	52771.65	71.3
36	1111051-1 10X	55242.27	96.8	24472.82	95.2	153344.69	77.8	152627.12	86.7	49206.32	66.5
37	1111051-2 10X	56823.97	99.6	24893.28	96.8	155875.83	79.1	153023.53	86.9	47918.71	64.7
38	CCV	65988.37	115.6	29544.57	114.9	206022.18	104.6	194367.60	110.4	65780.10	88.9
39	CCB	59356.39	104.0	26619.34	103.5	191469.59	97.2	175448.17	99.6	61368.14	82.9
40	IP111116-4MB ...	58513.52	102.5	27043.85	105.2	189709.67	96.3	175881.14	99.9	61471.81	83.1
41	IM111116-4RVS...	58125.56	101.8	25430.85	98.9	186191.69	94.5	172127.36	97.8	61060.75	82.5
42	IM111116-4LCS...	60784.73	106.5	27260.77	106.0	193676.68	98.3	181236.04	102.9	65103.88	88.0
43	1111137-1 10X	59720.92	104.6	26746.29	104.0	194544.43	98.7	181596.48	103.1	64822.49	87.6
44	1111138-1 10X	59520.09	104.3	25931.69	100.9	195981.15	99.5	180549.87	102.5	65606.25	88.6
45	1111140-1 10X	56248.88	98.6	24709.66	96.1	186963.76	94.9	174035.95	98.8	62252.41	84.1
46	1111160-1 10X	64532.21	113.1	25768.16	100.2	185506.07	94.2	174381.22	99.0	64377.58	87.0
47	1111162-16 10X	55442.57	97.1	25206.99	98.1	181588.67	92.2	171631.06	97.5	62978.30	85.1
48	1111185-13 10X	55569.59	97.4	24496.04	95.3	182750.23	92.8	173297.78	98.4	63322.83	85.6
49	1111185-13D 10X	54713.22	95.9	24202.40	94.1	183089.49	92.9	171899.14	97.6	63422.97	85.7
50	CCV	54127.76	94.8	23962.00	93.2	181951.46	92.3	166944.78	94.8	63677.92	86.0
51	CCB	47487.34	83.2	21398.39	83.2	162509.30	82.5	148369.66	84.3	56669.48	76.6
52	1111185-13L 50X	51703.65	90.6	22192.63	86.3	172198.73	87.4	159777.81	90.7	60086.26	81.2
53	1111185-13MS ...	52846.98	92.6	24028.76	93.5	179679.98	91.2	167555.84	95.2	63440.34	85.7
54	1111185-13MSD...	54753.19	95.9	25000.10	97.2	183837.96	93.3	172812.18	98.1	64317.43	86.9
55	1111205-1 10X	54011.19	94.6	24148.74	93.9	171687.46	87.1	166027.74	94.3	58553.45	79.1
56	1111205-2 10X	57192.04	100.2	26212.22	102.0	179239.63	91.0	172661.97	98.1	59908.59	80.9
57	IP111117-3MB ...	56389.39	98.8	25400.95	98.8	184725.29	93.8	170654.13	96.9	62900.79	85.0
58	IP111117-3LCS...	57723.69	101.1	25267.30	98.3	189536.62	96.2	175764.45	99.8	66022.18	89.2
59	1111005-1 10X	68957.62	120.8	25387.42	98.8	185481.01	94.1	174436.33	99.1	63768.35	86.2
60	1111005-2 10X	69539.94	121.8	25327.37	98.5	184959.21	93.9	173790.67	98.7	64176.82	86.7
61	1111005-2D 10X	70487.41	123.5	25294.06	98.4	185488.54	94.1	171872.16	97.6	64216.50	86.8
62	CCV	53864.13	94.4	24262.50	94.4	184360.96	93.6	170498.50	96.8	64229.99	86.8

ISTD Table

		71 Ga (ISTD) [1]		72 Ge (ISTD) [1]		103 Rh (ISTD) [1]		115 In (ISTD) [1]		195 Pt (ISTD) [1]	
	Sample Name	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
63	CCB	49199.62	86.2	21872.24	85.1	164045.50	83.3	151037.87	85.8	58442.92	79.0
64	1111005-2L 50X	55947.48	98.0	23451.37	91.2	179848.18	91.3	166617.93	94.6	62251.42	84.1
65	1111005-2MS 10X	67069.68	117.5	24890.09	96.8	177360.93	90.0	166253.07	94.4	62378.82	84.3
66	1111005-2MSD ...	66962.71	117.3	25110.44	97.7	180385.13	91.6	168229.07	95.5	63225.61	85.4
67	1111005-3 10X	68695.73	120.4	24412.65	95.0	182374.93	92.6	168307.90	95.6	63620.90	86.0
68	1111005-4 10X	67939.23	119.0	24653.08	95.9	180056.40	91.4	168931.34	95.9	63828.35	86.2
69	1111005-5 10X	67119.47	117.6	24319.20	94.6	178379.25	90.5	169992.03	96.5	62205.14	84.1
70	1111005-6 10X	87149.84	152.7	24866.62	96.7	179059.07	90.9	166743.30	94.7	62847.90	84.9
71	CCV	52198.49	91.5	22833.69	88.8	176704.43	89.7	164118.90	93.2	62596.98	84.6
72	CCB	47119.86	82.6	20804.15	80.9	161848.49	82.1	149500.44	84.9	58472.98	79.0
73	IP111117-1MB ...	47677.76	83.5	21404.96	83.3	164263.28	83.4	150406.47	85.4	57590.22	77.8
74	IM111117-1RVS...	47701.45	83.6	20874.23	81.2	165136.01	83.8	151071.01	85.8	57907.62	78.2
75	IM111117-1LCS...	51626.70	90.5	22403.04	87.1	175975.89	89.3	163050.81	92.6	61271.40	82.8
76	1111160-2 10X	63006.62	110.4	23380.95	90.9	177723.90	90.2	164760.02	93.6	63178.98	85.4
77	1111160-2D 10X	62699.03	109.9	23551.35	91.6	174862.54	88.8	165870.47	94.2	63289.36	85.5
78	1111160-2L 50X	54378.50	95.3	23170.74	90.1	177340.72	90.0	165025.53	93.7	62559.71	84.5
79	1111160-2MS 10X	65894.61	115.5	23541.15	91.6	177277.47	90.0	165764.06	94.1	62120.90	83.9
80	1111160-2MSD ...	64054.03	112.2	23441.12	91.2	176761.30	89.7	165047.91	93.7	63389.82	85.7
81	1111160-2A 10X	63361.17	111.0	23364.48	90.9	176434.80	89.5	164351.55	93.3	62412.39	84.3
82	1111160-3 10X	66052.12	115.7	24075.49	93.6	174260.19	88.4	162690.46	92.4	62325.37	84.2
83	CCV	49138.89	86.1	22396.24	87.1	170726.54	86.7	158847.21	90.2	60990.12	82.4
84	CCB	45822.37	80.3	20183.56	78.5	159594.00	81.0	149059.14	84.7	56990.56	77.0
85	ZZZZZZ	66052.35	115.7	23648.24	92.0	177643.70	90.2	165246.53	93.9	63038.81	85.2
86	ZZZZZZ	65446.15	114.7	24065.45	93.6	177997.82	90.3	165064.64	93.7	63835.07	86.3
87	ZZZZZZ	56496.15	99.0	23217.52	90.3	177613.47	90.1	165217.93	93.8	62602.64	84.6
88	ZZZZZZ	58743.90	102.9	22442.92	87.3	173405.08	88.0	162188.75	92.1	60779.15	82.1
89	ZZZZZZ	60155.94	105.4	23197.42	90.2	173053.30	87.8	159532.36	90.6	62660.60	84.7
90	ZZZZZZ	54061.32	94.7	22663.27	88.2	172588.85	87.6	159925.02	90.8	61421.70	83.0
91	ZZZZZZ	54776.65	96.0	22563.20	87.8	174291.57	88.5	159374.03	90.5	61927.36	83.7
92	ZZZZZZ	53696.96	94.1	21661.95	84.3	172413.66	87.5	160399.59	91.1	61605.48	83.2
93	ZZZZZZ	55138.31	96.6	22085.90	85.9	171609.31	87.1	160142.16	91.0	63276.05	85.5

ISTD Table

		71 Ga (ISTD) [1]		72 Ge (ISTD) [1]		103 Rh (ISTD) [1]		115 In (ISTD) [1]		195 Pt (ISTD) [1]	
	Sample Name	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
94	ZZZZZZ	56174.65	98.4	23017.36	89.5	172980.17	87.8	160107.47	90.9	62556.21	84.5
95	CCV	49897.58	87.4	22029.20	85.7	174673.94	88.7	163797.12	93.0	63034.98	85.2
96	CCB	44966.83	78.8	20093.31	78.2	159748.17	81.1	146415.80	83.2	57251.63	77.4
97	ZZZZZZ	58723.80	102.9	22660.02	88.1	172484.59	87.5	163559.72	92.9	62402.17	84.3
98	ZZZZZZ	63622.06	111.5	23053.83	89.7	174341.39	88.5	162464.38	92.3	60671.54	82.0
99	ZZZZZZ	44883.31	78.6	20270.21	78.8	158592.89	80.5	143992.58	81.8	56151.09	75.9
100	IM111117-2RVS...	45909.67	80.4	20443.64	79.5	160829.86	81.6	146464.19	83.2	57127.88	77.2
101	IM111117-2LCS...	48760.94	85.4	21528.50	83.7	168876.62	85.7	155981.54	88.6	61368.18	82.9
102	ZZZZZZ	59225.88	103.8	23064.15	89.7	169033.98	85.8	157186.74	89.3	61672.63	83.3
103	ZZZZZZ	59593.89	104.4	23123.90	89.9	170317.08	86.4	159157.28	90.4	62947.67	85.1
104	ZZZZZZ	51566.67	90.4	21638.48	84.2	175008.78	88.8	160534.20	91.2	62000.65	83.8
105	ZZZZZZ	61360.24	107.5	23317.55	90.7	175537.37	89.1	162056.01	92.0	62398.98	84.3
106	ZZZZZZ	61711.43	108.1	23090.65	89.8	171972.30	87.3	160058.02	90.9	62148.33	84.0
107	CCV	48737.73	85.4	21618.73	84.1	169080.28	85.8	157024.26	89.2	61073.88	82.5
108	CCB	44291.59	77.6	19429.11	75.6	154626.32	78.5	142419.35	80.9	54561.66	73.7
109	ZZZZZZ	58426.57	102.4	22406.52	87.2	170583.75	86.6	158508.91	90.0	60735.61	82.1
110	1111162-2 10X	55088.04	96.5	22606.55	87.9	169219.09	85.9	158073.48	89.8	60939.33	82.3
111	1111162-3 10X	55452.47	97.2	22953.70	89.3	170237.65	86.4	159222.72	90.4	61769.89	83.5
112	1111162-4 10X	55134.16	96.6	22115.90	86.0	175515.11	89.1	161753.56	91.9	61927.35	83.7
113	1111162-5 10X	54582.94	95.6	22089.21	85.9	173288.83	88.0	160267.39	91.0	62760.09	84.8
114	1111162-6 10X	55000.69	96.4	22396.21	87.1	170223.22	86.4	158654.88	90.1	60769.06	82.1
115	1111162-7 10X	54061.32	94.7	22165.95	86.2	172399.91	87.5	158507.38	90.0	61652.14	83.3
116	1111162-8 10X	53826.89	94.3	22225.99	86.5	169065.60	85.8	155648.29	88.4	60233.54	81.4
117	1111162-9 10X	55800.48	97.8	22359.51	87.0	168619.67	85.6	155204.90	88.1	59694.98	80.7
118	1111162-10 10X	52663.13	92.3	21805.53	84.8	165753.32	84.1	157798.62	89.6	60387.15	81.6
119	CCV	49339.25	86.5	21284.88	82.8	168903.01	85.7	154691.06	87.9	60504.60	81.8
120	CCB	44111.17	77.3	19952.96	77.6	160609.97	81.5	145592.88	82.7	55635.74	75.2
121	1111162-11 10X	53817.15	94.3	22209.50	86.4	170366.56	86.5	159096.26	90.4	60649.23	81.9
122	1111162-12 10X	56984.40	99.8	22903.69	89.1	169759.02	86.2	157182.08	89.3	61163.77	82.6
123	1111162-13 10X	61356.92	107.5	22563.23	87.8	172023.56	87.3	157088.12	89.2	61193.75	82.7
124	1111162-14 10X	59690.91	104.6	22202.68	86.4	168324.79	85.4	156939.53	89.1	60059.27	81.2

ISTD Table

		71 Ga (ISTD) [1]		72 Ge (ISTD) [1]		103 Rh (ISTD) [1]		115 In (ISTD) [1]		195 Pt (ISTD) [1]	
	Sample Name	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
125	1111162-15 10X	54456.17	95.4	22916.94	89.1	170767.28	86.7	155671.61	88.4	60002.17	81.1
126	1110371-1 50X	476770.60	835.4	228534.24	889.0	169627.80	86.1	153350.63	87.1	59962.30	81.0
127	1111008-1 50X	52813.93	92.5	21535.34	83.8	168117.64	85.3	155447.12	88.3	61227.53	82.7
128	1111008-2 50X	441878.33	774.3	202933.92	789.4	173037.39	87.8	154870.29	88.0	60587.67	81.9
129	CCV	48379.95	84.8	21294.83	82.8	168106.67	85.3	154138.82	87.5	61639.43	83.3
130	CCB	44134.44	77.3	20080.08	78.1	156469.66	79.4	140633.32	79.9	55408.01	74.9
131	1110371-1 50X	47059.47	82.5	20310.19	79.0	165717.85	84.1	148396.33	84.3	58329.02	78.8
132	1111008-1 50X	45337.79	79.4	20230.04	78.7	164087.92	83.3	149383.90	84.8	57194.78	77.3
133	1111008-2 50X	45454.78	79.6	20500.47	79.7	160225.13	81.3	149297.35	84.8	58115.02	78.5
134	EX111117-4MB...	49292.78	86.4	21384.92	83.2	169440.60	86.0	157849.26	89.7	61713.11	83.4
135	EX111117-4RV...	44946.85	78.8	20206.64	78.6	159467.71	80.9	146520.38	83.2	57539.58	77.7
136	EX111117-4LCS...	49054.87	86.0	21722.16	84.5	169831.88	86.2	157224.90	89.3	60173.21	81.3
137	1111165-21 200X	62514.72	109.5	25086.89	97.6	166474.60	84.5	153706.75	87.3	58797.62	79.4
138	1111165-21D 2...	61411.17	107.6	25133.97	97.8	164889.31	83.7	155296.03	88.2	58777.90	79.4
139	1111165-21L 1...	47306.57	82.9	20897.59	81.3	158974.49	80.7	145876.00	82.9	55144.14	74.5
140	1111165-21MS ...	60661.27	106.3	24816.63	96.5	163992.21	83.2	152518.05	86.6	59021.79	79.7
141	CCV	48142.67	84.4	21191.27	82.4	166659.19	84.6	152253.37	86.5	60072.68	81.2
142	CCB	44087.96	77.3	19852.95	77.2	153895.15	78.1	141666.53	80.5	55227.13	74.6
143	1111165-21MSD...	61782.43	108.3	25457.57	99.0	167370.20	84.9	152266.53	86.5	59581.15	80.5
144	1111165-22 200X	57519.39	100.8	23855.04	92.8	167839.38	85.2	153227.82	87.0	58834.73	79.5
145	1111167-11 200X	59643.89	104.5	24602.88	95.7	166715.28	84.6	153465.07	87.2	59121.86	79.9
146	1111167-12 200X	60684.29	106.3	24739.76	96.2	164581.98	83.5	150778.89	85.6	59383.01	80.2
147	1111167-13 200X	58037.97	101.7	23951.87	93.2	162541.06	82.5	152282.41	86.5	57395.47	77.6
148	IP111117-2MB ...	42784.27	75.0	19175.41	74.6	151585.79	76.9	138827.29	78.8	55174.03	74.6
149	CCV	47270.17	82.8	21675.25	84.3	166217.62	84.4	152648.57	86.7	58784.79	79.4
150	CCB	43576.69	76.4	18841.65	73.3	153245.87	77.8	143020.35	81.2	53772.51	72.7

ISTD Table

		209 Bi (ISTD) [1]	
	Sample Name	CPS	Recovery%
1	blank	102104.01	
2	blank	103362.61	100.0
3	blank	103931.09	100.0
4	H/1000	111589.00	107.4
5	H/100	117998.17	113.5
6	H/10	114496.76	110.2
7	HIGH	115555.74	111.2
8	ICV	118368.40	113.9
9	ICB	102369.65	98.5
10	CRI1	114901.74	110.6
11	CRI2	117463.67	113.0
12	ICSA	119092.87	114.6
13	ICSAB	115780.59	111.4
14	IP111116-5MB ...	106253.79	102.2
15	IM111116-5LCS...	114017.90	109.7
16	1111041-23 10X	105430.89	101.4
17	1111067-35 10X	105857.77	101.9
18	1111086-38 10X	106803.01	102.8
19	1111037-3 10X	115901.45	111.5
20	CCV	115797.66	111.4
21	CCB	101614.75	97.8
22	1111037-3D 10X	116865.41	112.4
23	1111037-3L 50X	112204.16	108.0
24	1111037-3MS 10X	114947.87	110.6
25	1111037-3MSD ...	115383.73	111.0
26	1111038-1 10X	106682.54	102.6
27	1111038-2 10X	105926.77	101.9
28	1111040-1 10X	83329.61	80.2
29	1111040-3 10X	71028.94	68.3
30	1111040-4 10X	67563.36	65.0
31	1111040-5 10X	68784.85	66.2

ISTD Table

		209 Bi (ISTD) [1]	
	Sample Name	CPS	Recovery%
32	CCV	106040.26	102.0
33	CCB	95660.96	92.0
34	1111078-35 10X	106200.57	102.2
35	1111040-7 10X	76549.83	73.7
36	1111051-1 10X	67408.91	64.9
37	1111051-2 10X	65433.18	63.0
38	CCV	101677.42	97.8
39	CCB	95229.58	91.6
40	IP111116-4MB ...	94882.90	91.3
41	IM111116-4RVS...	94523.84	90.9
42	IM111116-4LCS...	99214.78	95.5
43	1111137-1 10X	99536.82	95.8
44	1111138-1 10X	99982.88	96.2
45	1111140-1 10X	98280.73	94.6
46	1111160-1 10X	103255.91	99.4
47	1111162-16 10X	101261.32	97.4
48	1111185-13 10X	98449.04	94.7
49	1111185-13D 10X	98992.77	95.2
50	CCV	98770.69	95.0
51	CCB	88691.61	85.3
52	1111185-13L 50X	94127.53	90.6
53	1111185-13MS ...	98224.68	94.5
54	1111185-13MSD...	100982.81	97.2
55	1111205-1 10X	85298.17	82.1
56	1111205-2 10X	88294.77	85.0
57	IP111117-3MB ...	97936.52	94.2
58	IP111117-3LCS...	102933.02	99.0
59	1111005-1 10X	102509.81	98.6
60	1111005-2 10X	100674.03	96.9
61	1111005-2D 10X	100791.88	97.0
62	CCV	99838.65	96.1

ISTD Table

		209 Bi (ISTD) [1]	
	Sample Name	CPS	Recovery%
63	CCB	92012.04	88.5
64	1111005-2L 50X	100020.76	96.2
65	1111005-2MS 10X	100380.11	96.6
66	1111005-2MSD ...	98845.11	95.1
67	1111005-3 10X	100509.45	96.7
68	1111005-4 10X	100107.39	96.3
69	1111005-5 10X	100153.53	96.4
70	1111005-6 10X	99187.84	95.4
71	CCV	99718.64	95.9
72	CCB	91327.50	87.9
73	IP111117-1MB ...	92625.19	89.1
74	IM111117-1RVS...	92306.13	88.8
75	IM111117-1LCS...	97346.27	93.7
76	1111160-2 10X	104469.97	100.5
77	1111160-2D 10X	105121.67	101.1
78	1111160-2L 50X	102495.90	98.6
79	1111160-2MS 10X	107522.48	103.5
80	1111160-2MSD ...	104886.15	100.9
81	1111160-2A 10X	104839.83	100.9
82	1111160-3 10X	107623.15	103.6
83	CCV	100127.17	96.3
84	CCB	90534.91	87.1
85	ZZZZZZ	107662.80	103.6
86	ZZZZZZ	108879.01	104.8
87	ZZZZZZ	104843.24	100.9
88	ZZZZZZ	103138.22	99.2
89	ZZZZZZ	104694.78	100.7
90	ZZZZZZ	100455.11	96.7
91	ZZZZZZ	100395.89	96.6
92	ZZZZZZ	98639.97	94.9
93	ZZZZZZ	100144.37	96.4

ISTD Table

		209 Bi (ISTD) [1]	
	Sample Name	CPS	Recovery%
94	ZZZZZZ	101698.08	97.9
95	CCV	99995.65	96.2
96	CCB	91974.50	88.5
97	ZZZZZZ	111374.26	107.2
98	ZZZZZZ	105538.07	101.5
99	ZZZZZZ	89422.84	86.0
100	IM111117-2RVS...	88795.49	85.4
101	IM111117-2LCS...	97687.72	94.0
102	ZZZZZZ	100553.54	96.8
103	ZZZZZZ	102026.41	98.2
104	ZZZZZZ	101765.39	97.9
105	ZZZZZZ	105377.11	101.4
106	ZZZZZZ	104359.61	100.4
107	CCV	99005.77	95.3
108	CCB	89322.94	85.9
109	ZZZZZZ	102647.48	98.8
110	1111162-2 10X	100012.87	96.2
111	1111162-3 10X	100194.13	96.4
112	1111162-4 10X	101194.36	97.4
113	1111162-5 10X	102200.84	98.3
114	1111162-6 10X	101929.81	98.1
115	1111162-7 10X	99194.46	95.4
116	1111162-8 10X	99650.76	95.9
117	1111162-9 10X	100016.34	96.2
118	1111162-10 10X	98520.44	94.8
119	CCV	98368.86	94.6
120	CCB	90185.13	86.8
121	1111162-11 10X	102429.75	98.6
122	1111162-12 10X	102580.31	98.7
123	1111162-13 10X	103856.58	99.9
124	1111162-14 10X	102130.77	98.3

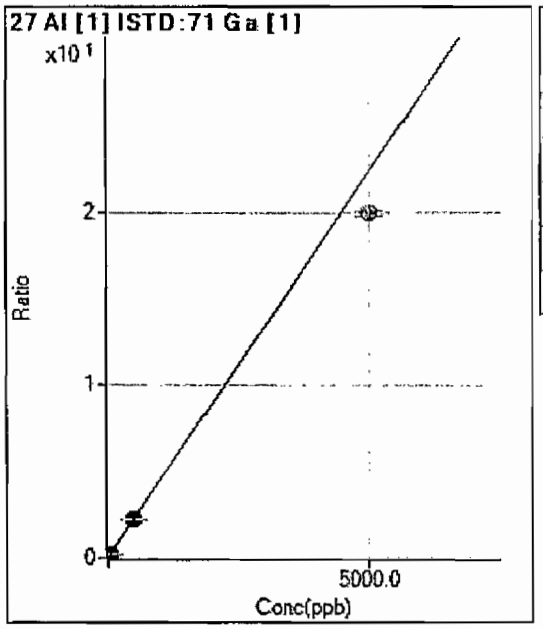
ISTD Table

		209 Bi (ISTD) [1]	
	Sample Name	CPS	Recovery%
125	1111162-15 10X	99942.40	96.2
126	1110371-1 50X	98401.62	94.7
127	1111008-1 50X	98178.06	94.5
128	1111008-2 50X	99409.23	95.6
129	CCV	100351.63	96.6
130	CCB	90627.06	87.2
131	1110371-1 50X	96603.76	92.9
132	1111008-1 50X	94728.83	91.1
133	1111008-2 50X	93339.73	89.8
134	EX111117-4MB...	98489.34	94.8
135	EX111117-4RV...	90437.76	87.0
136	EX111117-4LCS...	98975.92	95.2
137	1111165-21 200X	97822.41	94.1
138	1111165-21D 2...	97365.15	93.7
139	1111165-21L 1...	91743.75	88.3
140	1111165-21MS ...	97073.65	93.4
141	CCV	96167.32	92.5
142	CCB	89288.42	85.9
143	1111165-21MSD...	97778.25	94.1
144	1111165-22 200X	96940.14	93.3
145	1111167-11 200X	97881.50	94.2
146	1111167-12 200X	97167.60	93.5
147	1111167-13 200X	95670.66	92.1
148	IP111117-2MB ...	87491.65	84.2
149	CCV	97094.33	93.4
150	CCB	88939.39	85.6

Calibration for 087SMPL.D

Batch Folder: C:¥ICPMH¥1¥DATA¥11K18p00.B¥
Analysis File: 11K18p00.batch.xml
DA Date-Time: 11/21/2011 9:10:46 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:
Tune Step: #1 hehe.u

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB_11K18I00.D	blank	11/18/2011 11:36:17 AM
2	004CALS_11K18I00.D	H/1000	11/18/2011 11:38:49 AM
3	005CALS_11K18I00.D	H/100	11/18/2011 11:41:21 AM
4	006CALS_11K18I00.D	H/10	11/18/2011 11:43:51 AM
5	007CALS_11K18I00.D	HIGH	11/18/2011 11:46:20 AM
6			



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	290.02	0.0051	P	18.0
2	☐	5.000	5.229	1780.18	0.0283	P	12.6
3	☐	50.000	49.087	14583.60	0.2233	P	2.2
4	☐	500.000	500.089	144211.16	2.2285	P	1.2
5	☑	5000.000		1390318.10	19.9160	A	1.6
6	☐	1000.000					

y = 0.0044 * x + 0.0051

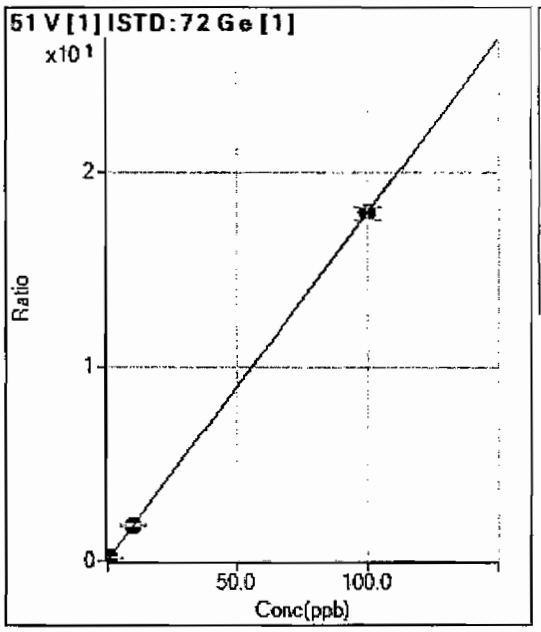
R = 1.0000

DL = 0.6161

BEC = 1.142

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	584.68	0.0228	P	3.7
2	☐	0.100	0.110	1176.05	0.0424	P	2.2
3	☐	1.000	1.002	5819.71	0.2019	P	3.5
4	☐	10.000	10.122	53615.17	1.8320	P	3.0
5	☐	100.000	99.988	548411.38	17.8947	P	3.7
6	☐	20.000					

y = 0.1787 * x + 0.0228

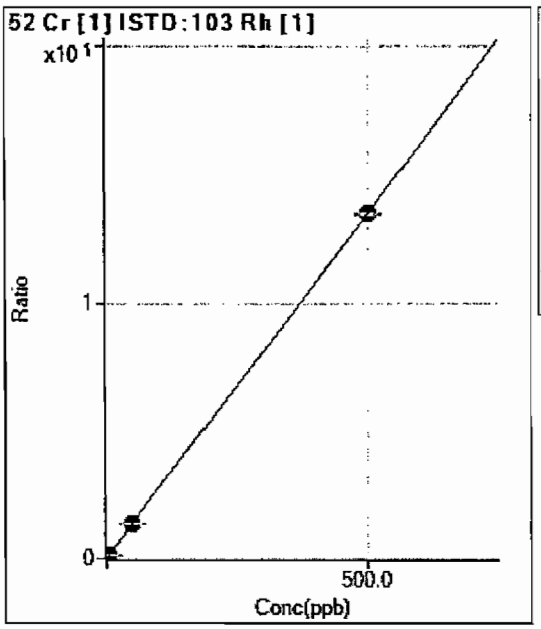
R = 1.0000

DL = 0.01413

BEC = 0.1273

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	798.92	0.0041	P	8.6
2	☐	0.500	0.481	3674.90	0.0171	P	7.0
3	☐	5.000	4.944	31291.96	0.1377	P	1.7
4	☐	50.000	50.500	303227.53	1.3697	P	1.0
5	☐	500.000	499.951	2933443.36	13.5242	A	0.4
6	☐	100.000					

y = 0.0270 * x + 0.0041

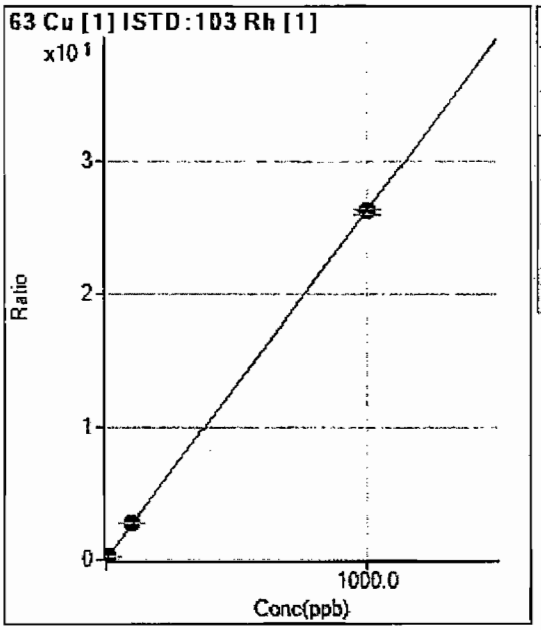
R = 1.0000

DL = 0.03858

BEC = 0.1502

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	836.70	0.0042	P	10.5
2	☐	1.000	1.107	7155.00	0.0333	P	3.4
3	☐	10.000	10.532	63709.80	0.2804	P	1.3
4	☐	100.000	105.122	611187.82	2.7608	P	0.6
5	☐	1000.000	999.482	5684542.00	26.2134	A	1.6
6	☐	200.000					

y = 0.0262 * x + 0.0042

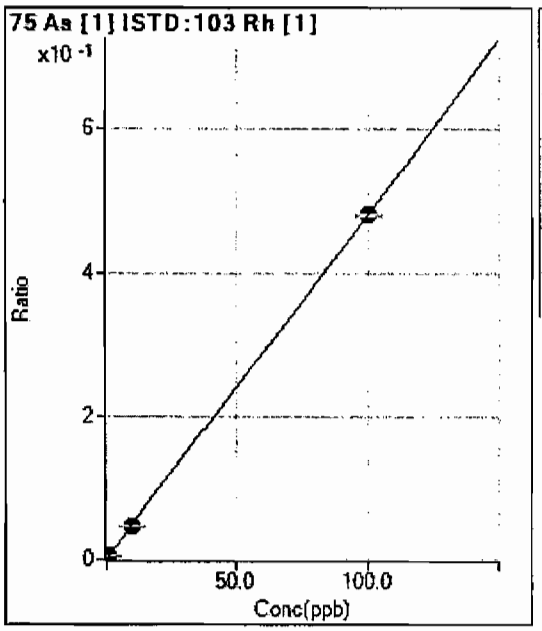
R = 1.0000

DL = 0.05076

BEC = 0.1618

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15.33	0.0001	P	23.1
2	☐	0.100	0.088	107.33	0.0005	P	10.9
3	☐	1.000	0.912	1013.37	0.0045	P	3.3
4	☐	10.000	9.580	10218.88	0.0462	P	1.1
5	☐	100.000	100.043	104387.60	0.4813	P	0.7
6	☐	20.000					

y = 0.0048 * x + 7.7472E-005

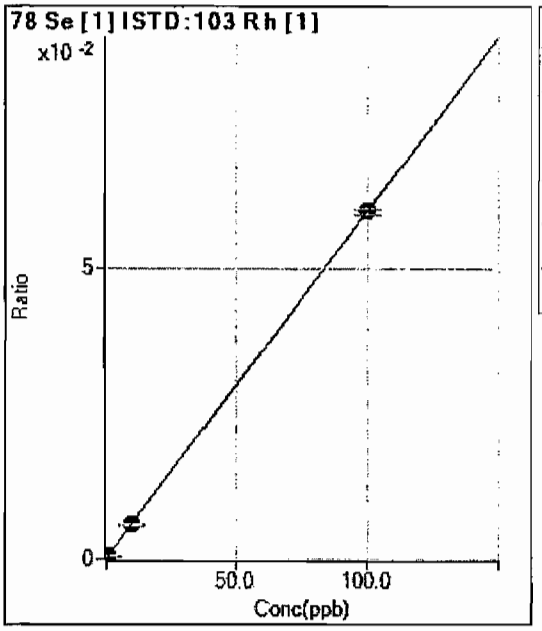
R = 1.0000

DL = 0.01118

BEC = 0.01611

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.33	0.0000	P	34.7
2	☐	0.100	0.085	19.07	0.0001	P	26.4
3	☐	1.000	1.016	146.27	0.0006	P	10.6
4	☐	10.000	9.793	1303.65	0.0059	P	3.2
5	☐	100.000	100.021	12967.82	0.0598	P	1.9
6	☐	20.000					

y = 5.9750E-004 * x + 3.7439E-005

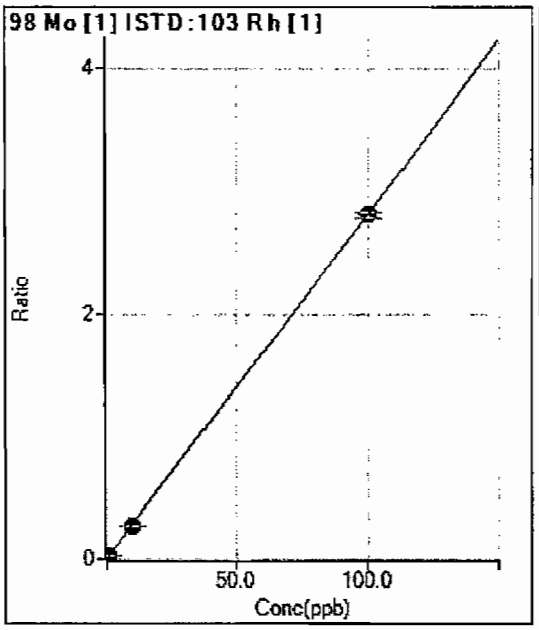
R = 1.0000

DL = 0.06521

BEC = 0.06266

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	42.22	0.0002	P	25.4
2		0.100	0.092	606.69	0.0028	P	4.7
3		1.000	0.958	6186.84	0.0272	P	3.5
4		10.000	9.481	59257.31	0.2677	P	0.4
5		100.000	100.052	612119.47	2.8227	P	1.6
6		20.000					

y = 0.0282 * x + 2.1424E-004

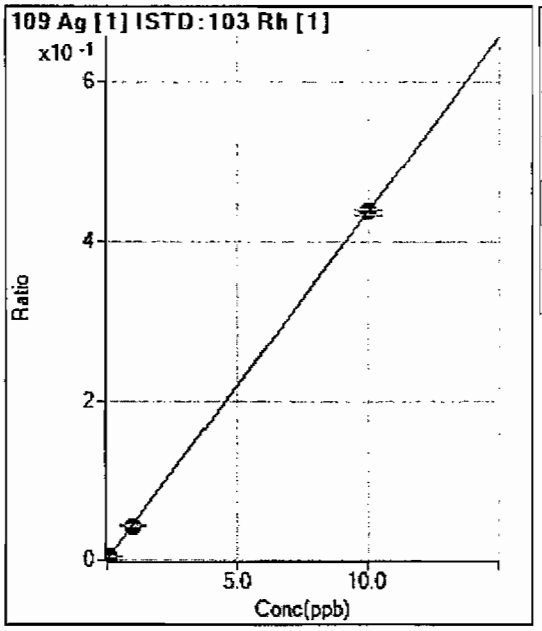
R = 1.0000

DL = 0.005778

BEC = 0.007595

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	7.78	0.0000	P	88.5
2		0.010	0.010	102.22	0.0005	P	12.5
3		0.100	0.103	1026.71	0.0045	P	8.4
4		1.000	0.972	9394.03	0.0424	P	4.9
5		10.000	10.003	94630.95	0.4364	P	1.7
6		2.000					

y = 0.0436 * x + 3.8923E-005

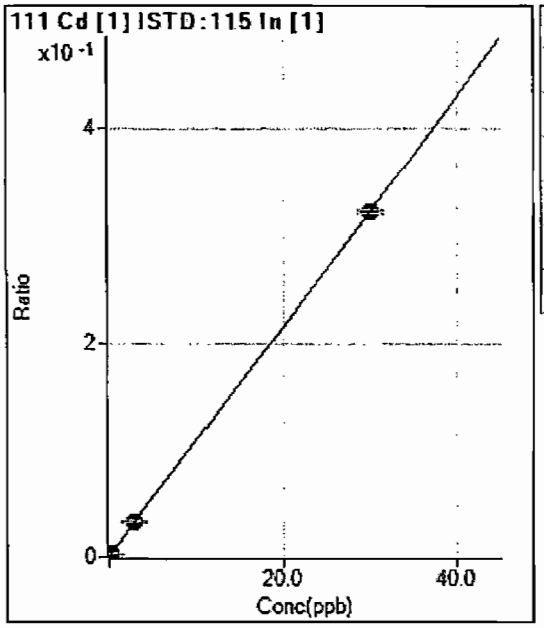
R = 1.0000

DL = 0.002368

BEC = 0.0008923

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.99	0.0000	P	110.0
2	☐	0.030	0.031	71.93	0.0004	P	27.4
3	☐	0.300	0.288	634.60	0.0031	P	3.8
4	☐	3.000	3.060	6566.19	0.0329	P	2.6
5	☐	30.000	29.994	64749.66	0.3224	P	1.1
6	☐	6.000					

y = 0.0107 * x + 4.5649E-005

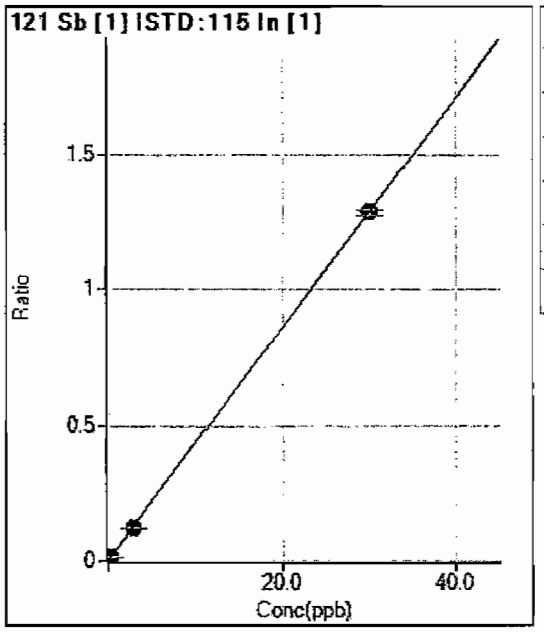
R = 1.0000

DL = 0.01402

BEC = 0.004248

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0001	P	8.0
2	☐	0.030	0.033	291.12	0.0015	P	18.7
3	☐	0.300	0.296	2589.14	0.0128	P	12.3
4	☐	3.000	2.912	24902.21	0.1249	P	0.2
5	☐	30.000	30.009	258262.37	1.2857	P	1.6
6	☐	6.000					

y = 0.0428 * x + 1.2616E-004

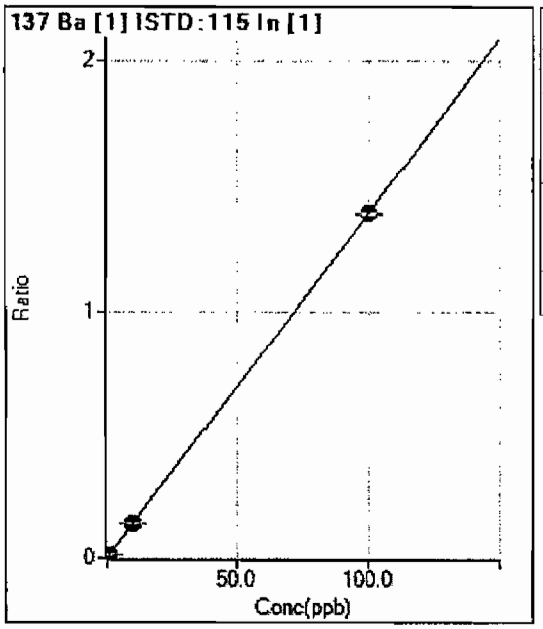
R = 1.0000

DL = 0.0007056

BEC = 0.002945

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	96.68	0.0005	P	14.4
2	☐	0.100	0.107	390.03	0.0020	P	24.5
3	☐	1.000	0.964	2830.39	0.0140	P	11.3
4	☐	10.000	10.041	28006.46	0.1405	P	1.3
5	☐	100.000	99.996	279979.16	1.3939	P	0.7
6	☐	20.000					

y = 0.0139 * x + 5.4838E-004

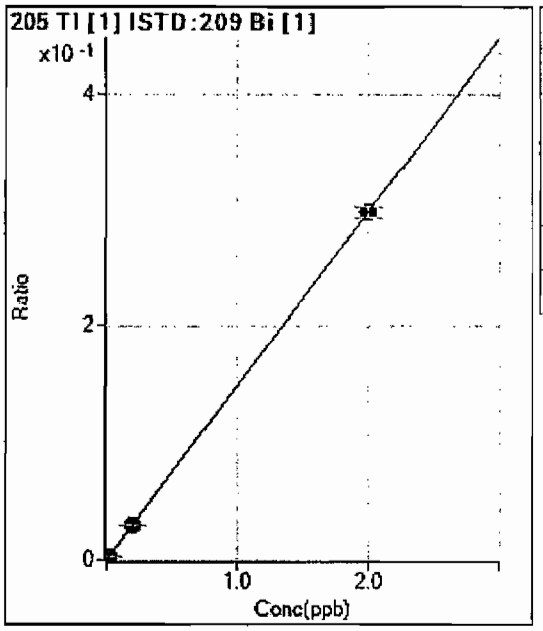
R = 1.0000

DL = 0.01703

BEC = 0.03936

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17.62	0.0002	P	24.9
2	☐	0.002	0.002	53.81	0.0005	P	2.2
3	☐	0.020	0.021	385.72	0.0033	P	1.3
4	☐	0.200	0.203	3485.19	0.0304	P	1.6
5	☐	2.000	2.000	34405.98	0.2978	P	3.0
6	☐	0.400					

y = 0.1488 * x + 1.7091E-004

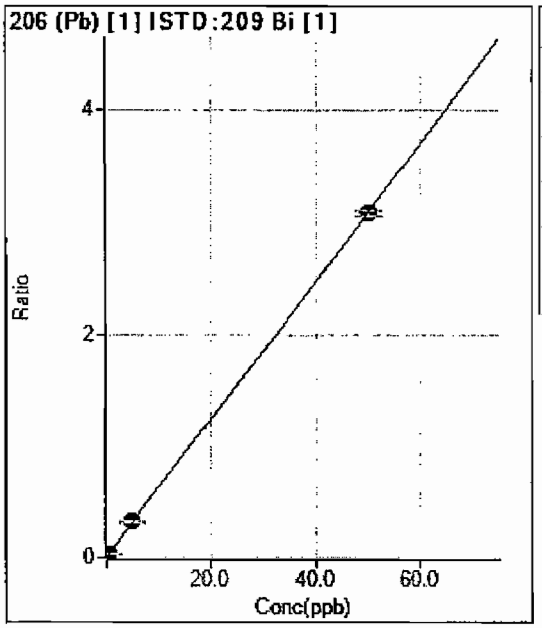
R = 1.0000

DL = 0.0008565

BEC = 0.001148

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	186.68	0.0018	P	9.2
2	☐	0.050	0.053	566.71	0.0051	P	6.8
3	☐	0.500	0.542	4160.79	0.0353	P	2.7
4	☐	5.000	5.172	36807.35	0.3215	P	3.4
5	☐	50.000	49.982	357179.04	3.0909	P	1.6
6	☐	10.000					

y = 0.0618 * x + 0.0018

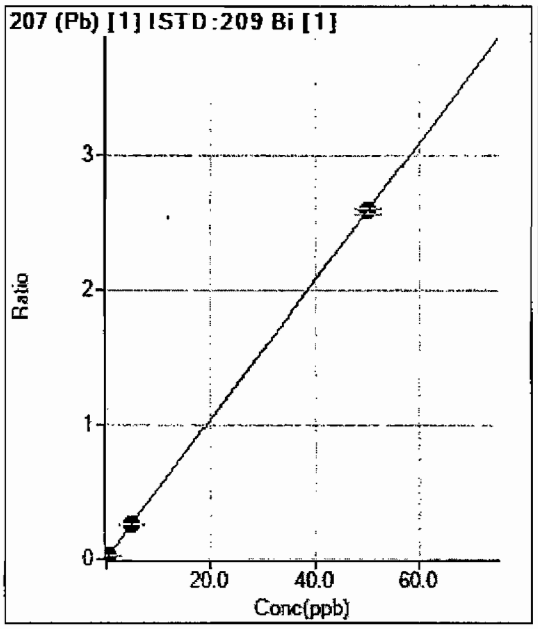
R = 1.0000

DL = 0.008061

BEC = 0.02914

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	116.68	0.0011	P	24.1
2	☐	0.050	0.055	446.70	0.0040	P	17.4
3	☐	0.500	0.486	3097.14	0.0263	P	4.3
4	☐	5.000	5.057	30034.88	0.2623	P	2.9
5	☐	50.000	49.994	298535.83	2.5834	P	1.3
6	☐	10.000					

y = 0.0517 * x + 0.0011

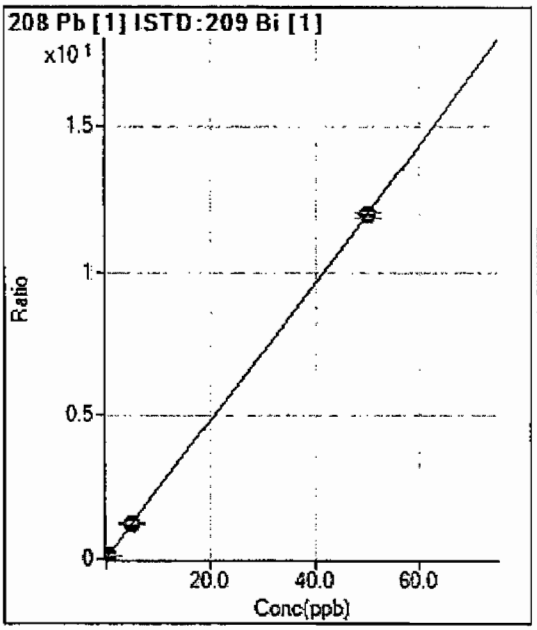
R = 1.0000

DL = 0.01587

BEC = 0.02192

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	633.38	0.0061	P	30.2
2	☐	0.050	0.053	2116.85	0.0190	P	4.1
3	☐	0.500	0.510	15167.11	0.1286	P	1.9
4	☐	5.000	5.137	141814.14	1.2386	P	2.1
5	☐	50.000	49.986	1386370.75	11.9979	P	1.4
6	☐	10.000					

y = 0.2399 * x + 0.0061

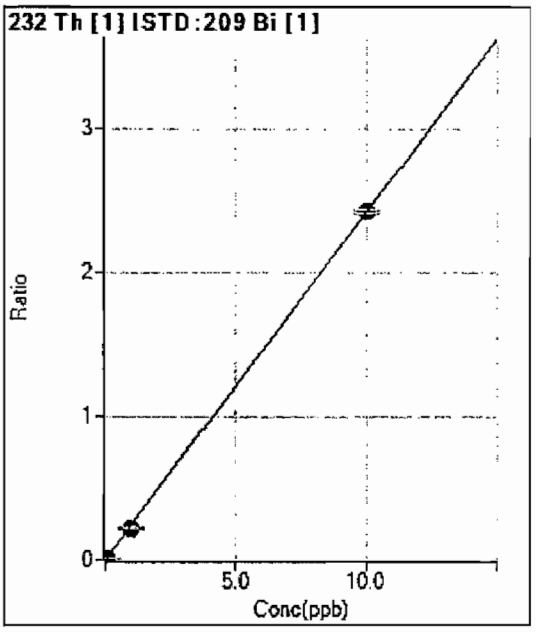
R = 1.0000

DL = 0.0232

BEC = 0.0256

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0006	P	6.8
2	☐	0.010	0.007	243.34	0.0022	P	30.9
3	☐	0.100	0.063	1869.04	0.0158	P	0.8
4	☐	1.000	0.921	25552.70	0.2232	P	2.2
5	☐	10.000	10.008	279596.08	2.4196	P	0.9
6	☐	2.000					

y = 0.2417 * x + 5.8927E-004

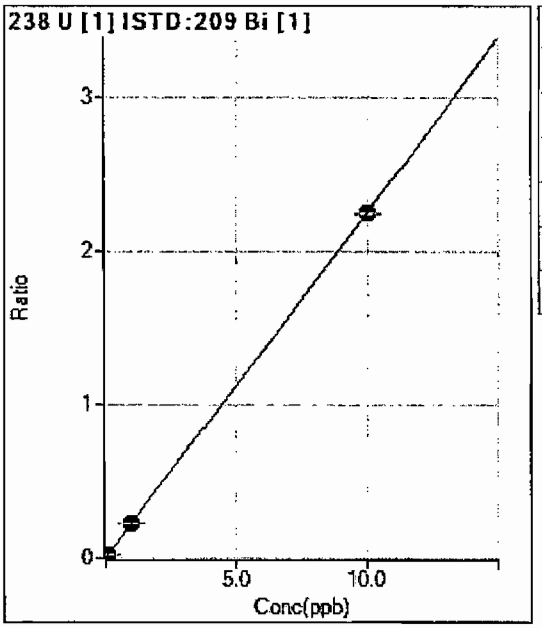
R = 1.0000

DL = 0.0004991

BEC = 0.002438

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.44	0.0001	P	53.2
2	☐	0.010	0.015	382.23	0.0034	P	9.1
3	☐	0.100	0.103	2753.63	0.0234	P	4.0
4	☐	1.000	1.017	26243.64	0.2292	P	2.4
5	☐	10.000	9.998	260246.53	2.2520	P	0.7
6	☐	2.000					

y = 0.2252 * x + 1.3652E-004

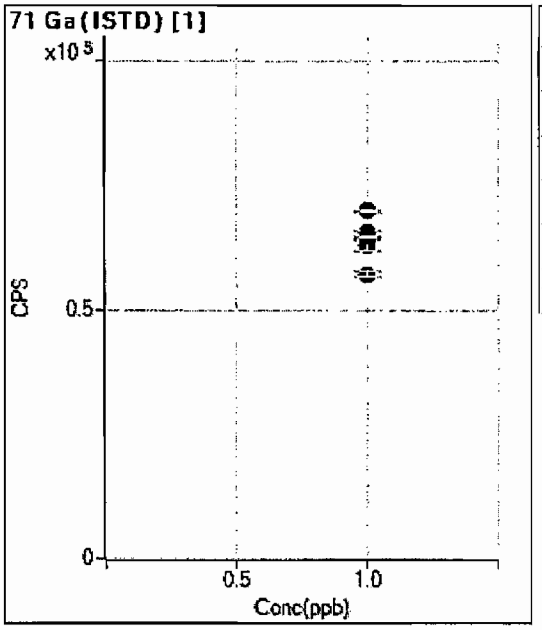
R = 1.0000

DL = 0.0009674

BEC = 0.0006061

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		57071.67		P	1.9
2	☐	1.000		62872.68		P	3.6
3	☐	1.000		65319.45		P	1.8
4	☐	1.000		64712.82		P	0.6
5	☐	1.000		69814.60		P	0.8
6	☐	1.000					

Header Information for Analytical Sequence 11K21k00

Instrument: Agilent ICPMS Model 7700X; Serial No. JP09400112
Software Revision: B.01.01
Date of Analysis: 11/21/2011
Analyst: Ross Miller

Calibration Standards

High Calibration Standard: ST100324-6 (expires 2/28/2015)
This standard contains the following elements at the listed concentrations (ng/ml).

100000	50000	10000	5000	2000	1000	500	200	100	50	30	10	2
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

1/10,1/100, and 1/1000 dilutions of the High Calibration Standard are prepared daily to provide additional calibration standards.

ICV

The ICV is prepared by diluting 1ml of the 2nd Source intermediate (ST110707-8, expires 06/20/2012) to 5ml giving the following concentrations (ng/ml).

20000	10000	2000	1000	400	200	100	40	20	10	6	2	0.4
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

CRI1

The RL1 is prepared by diluting 0.05ml of the Reporting Limit Verification Spike Solution (ST100324-9 expires 2/28/2015) to 50ml giving the following concentrations (ng/ml).

100	50	10	5	2	1	0.5	0.2	0.1	0.05	0.03	0.02	0.01
Na	Ca	Mg	Al	Zn	B	Cr	Mn	V	Pb	Sb	Th	U
	K		Fe	Ti	Cu	Ni		Co	Be	Cd	Tl	Ag
					Li	Sn		As		Y		
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

CRI2

The RL2 is prepared by diluting 0.1ml of the Reporting Limit Verification Spike Solution (ST100324-9 expires 2/28/2015) to 50ml giving the following concentrations (ng/ml).

200	100	20	10	4	2	1	0.4	0.2	0.1	0.06	0.04	0.02
Na	Ca	Mg	Al	Zn	B	Cr	Mn	V	Pb	Sb	Th	U
	K		Fe	Ti	Cu	Ni		Co	Be	Cd	Tl	Ag
					Li	Sn		As		Y		
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

ICSA

The ICSA is prepared by diluting 0.5ml of ICSA intermediate (ST111103-1, expires 12/01/12) to a final volume of 50ml giving the following concentrations (ng/ml).

42.5×10^6	30000	25000	20000	10000	200
Cl	Ca	Fe	C	Al	Mo
		Na		K	Ti
				Mg	
				P	
				S	

ICSAB

The ICSAB is prepared by diluting 0.5ml of ICSA intermediate (ST111103-1, expires 12/01/12) and 5ml of High Calibration Standard: ST100324-6 (expires 2/28/2015) to a final volume of 50ml. The ICSAB contains the following elements at the listed concentrations (ng/ml).

42.5×10^6	35000	25500	20000	15000	11000	10500	10000	400	210
Cl	Ca	Fe	C	K	Mg	Al	P	Ti	Mo
	Na						S		

200	100	50	20	10	5	3	1	0.2
Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	Cu	Ni		Co	Be	Cd	U	
	Li	Sn		As		Y	Ag	
				Se		La		
				Ba		Ce		
				Sr		Pr		
						Nd		

CCV

The CCV is prepared by diluting 5ml of the High Calibration Standard: ST100324-6 (expires 2/28/2015) to a final volume of 50ml. The CCV contains the following elements at the listed concentrations (ng/ml).

10000	5000	1000	500	200	100	50	20	10	5	3	1	0.2
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

Linear Dynamic Range Standards

LDR-Ca,Na,K

The LDR-Ca,Na,K standard is prepared by diluting 1ml of the High Calibration Standard Intermediate Mix (ST100324-5, expires 2/28/2015) to a final volume of 10ml. The LDR-Ca,Na,K standard contains the following elements at the listed concentrations (ng/ml).

100000	50000	20000	10000	5000	2000	1000	500	300	100	20
Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	Al	Ti	Cu	Ni		Co	Be	Cd	U	
			Li	Sn		As		Y	Ag	
						Se		La		
						Mo		Ce		
						Ba		Pr		
						Sr		Nd		

1000 Na

The 1000 Na standard is prepared by diluting 1ml of the 10000mg/L Na stock solution (ST100301-26, expires 2/28/2015) to a final volume of 10ml. The 1000 Na standard contains Na at 100000 ng/ml.

500 Ca

The 500 Ca standard is prepared by diluting 0.5ml of the 10000mg/L Ca stock solution (ST100301-9, expires 2/28/2015) to a final volume of 10ml. The 500 Ca standard contains Ca at 50000 ng/ml.

500 K

The 500 K standard is prepared by diluting 0.5ml of the 10000mg/L K stock solution (ST100301-22, expires 2/28/2015) to a final volume of 10ml. The 500 K standard contains K at 50000 ng/ml.

Linear Dynamic Range

The instrument Linear Dynamic Range (LDR) is determined at least every 6 months. The current LDR was determined on 9/22/2010. The file containing the LDR data is 10I22m00. The instrument LDR is given below (ng/ml).

1000000	500000	100000	50000	20000	10000	5000	2000	1000	500	300	100	20
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

ICB/CCB and all diluent

1% HNO_3, 1%HCl in double deionized water

HNO_3 Lot No. J29049
HCl Lot No. J34056

Internal Standards

Internal standards are introduced continuously using a second channel on the peristaltic pump. The internal standard solution is prepared from 1000mg/L stock solutions. The internal standard solution contains the following elements at the listed concentrations (ng/ml).

500	100	50
Li	Rh	Bi
Ga	In	
Ge	Pt	

Pipet ID Numbers

1.0 to 5.0 ml -- M-55
0.1 to 1.0ml -- M-61
0.01 to 0.1ml -- M-57
0.5ml -- M-14

Dilutions

2X dilutions made by diluting 5ml of sample to 10ml final volume
5X dilutions made by diluting 1ml of sample to 5ml final volume
10X dilutions made by diluting 1ml of sample to 10ml final volume
50X dilutions made by diluting 0.1ml of sample to 5ml final volume
100X dilutions made by diluting 0.1ml of sample to 10ml final volume
200X dilutions made by diluting 0.05ml of sample to 10ml final volume
500X dilutions made by diluting 0.02ml of sample to 10ml final volume

Analytical Spikes

None in this sequence.

Daily Maintenance Items

1. Check / change pump tubing
2. Check / clean drain containers
3. Tune instrument per manufacturer's procedures
4. Perform resolution / mass calibration / stability test and print QC tune report

Monthly Maintenance Items

1. Check / clean torch and cones
2. Check / clean nebulizer and spray chamber
3. Check / fill water recirculating reservoir
4. Check / fill vacuum pump oil

Additional Comments

No additional comments.

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 21 Nov 2011 10:15:53 am
Operator:
Misc Info:
Vial Number: 0
Current Method: C:\ICPMH\1\METHODS\2008TUNE.m

Minimum Response(CPS)

Element	Actual	Required	Flag

RSD (%)

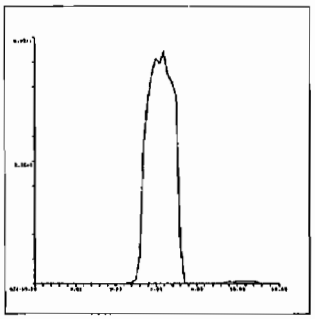
Element	Actual	Required	Flag
9 Be	1.89	5.00	
24 Mg	0.94	5.00	
25 Mg	1.41	5.00	
26 Mg	0.60	5.00	
59 Co	0.36	5.00	
115 In	0.53	5.00	
206 Pb	0.49	5.00	
207 Pb	0.73	5.00	
208 Pb	0.44	5.00	

Ion Ratio

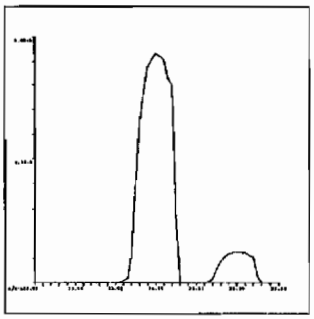
Element	Actual	Required	Flag

Maximum Bkg. Count(CPS)

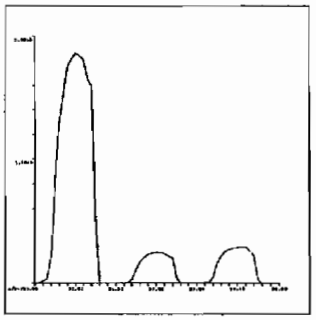
Element	Actual	Required	Flag



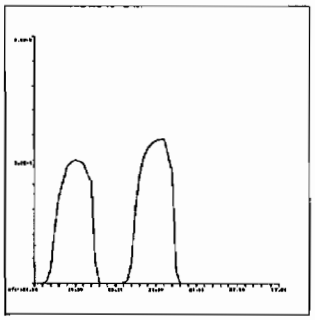
9 Be
Mass Calib.
Actual: 9.05
Required: 8.90-9.10
Flag:
Peak Width
Actual: 0.50
Required: 0.80
Flag:



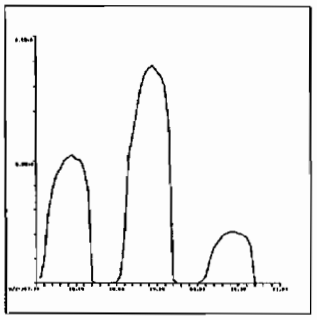
24 Mg
Mass Calib.
Actual: 24.00
Required: 23.90-24.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



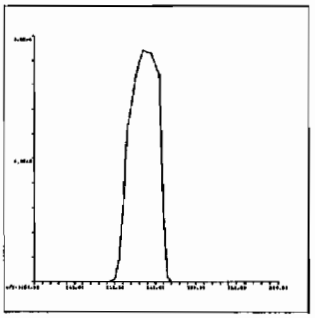
25 Mg
Mass Calib.
Actual: 25.00
Required: 24.90-25.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



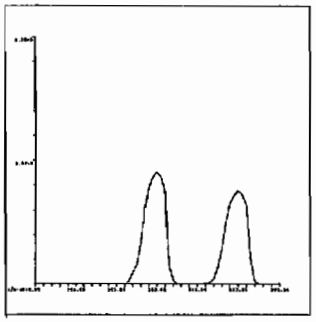
26 Mg
Mass Calib.
Actual: 26.00
Required: 25.90-26.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



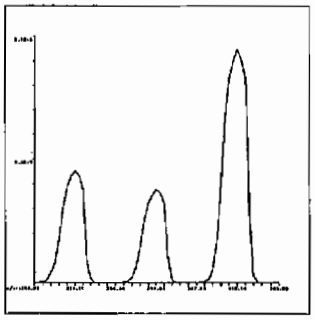
59 Co
Mass Calib.
Actual: 58.95
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



115 In
Mass Calib.
Actual: 114.90
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:

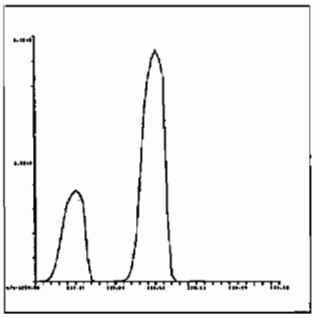


206 Pb
Mass Calib.
Actual: 206.00
Required: 205.90-206.10
Flag:
Peak Width
Actual: 0.45
Required: 0.80
Flag:



207 Pb
Mass Calib.
Actual: 207.00
Required: 206.90-207.10
Flag:
Peak Width
Actual: 0.45
Required: 0.80
Flag:

C:\ICPMH\1\7500\QCTUNE.D



208 Pb
Mass Calib.
Actual: 208.00
Required: 207.90-208.10
Flag:
Peak Width
Actual: 0.45
Required: 0.80
Flag:

QC Tune Result:Pass

Batch Summary Report

Batch Folder: C:¥ICPMH¥1¥DATA¥11K21k00.B¥
Analysis File: 11K21k00.batch.xml
Tune Step: #1 hehe.u

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
1		11/21/2011 10:49:57 AM	001SMPL.D	blank	Sample		1.0000
2		11/21/2011 10:52:08 AM	002CALB.D	blank	CalBlk	1	1.0000
3		11/21/2011 10:54:20 AM	003CALB.D	blank	CalBlk	1	1.0000
4		11/21/2011 10:56:30 AM	004CALS.D	H/1000	CalStd	2	1.0000
5		11/21/2011 10:58:42 AM	005CALS.D	H/100	CalStd	3	1.0000
6		11/21/2011 11:00:53 AM	006CALS.D	H/10	CalStd	4	1.0000
7		11/21/2011 11:03:03 AM	007CALS.D	HIGH	CalStd	5	1.0000
8		11/21/2011 11:08:54 AM	008SMPL.D	ICV	6-ICV		1.0000
9		11/21/2011 11:14:48 AM	009SMPL.D	ICB	6-CCB		1.0000
10		11/21/2011 11:16:58 AM	010SMPL.D	CRI1	Sample		1.0000
11		11/21/2011 11:19:09 AM	011SMPL.D	CRI2	Sample		1.0000
12		11/21/2011 11:21:19 AM	012SMPL.D	ICSA	Sample		1.0000
13		11/21/2011 11:23:29 AM	013SMPL.D	ICSAB	Sample		1.0000
14		11/21/2011 11:29:21 AM	014SMPL.D	IP111118-2MB 10X	6-CCB		1.0000
15		11/21/2011 11:31:31 AM	015SMPL.D	IM111118-2RVS 10X	Sample		1.0000
16		11/21/2011 11:33:41 AM	016SMPL.D	IM111118-2LCS 10X	6-LCS		1.0000
17		11/21/2011 11:35:51 AM	017SMPL.D	1111071-1 10X	Sample		1.0000
18		11/21/2011 11:38:02 AM	018SMPL.D	1111071-1D 10X	Sample		1.0000
19		11/21/2011 11:40:12 AM	019SMPL.D	1111071-1L 50X	Sample		1.0000
20		11/21/2011 11:42:25 AM	020SMPL.D	CCV	6-CCV		1.0000
21		11/21/2011 11:44:36 AM	021SMPL.D	CCB	6-CCB		1.0000
22		11/21/2011 11:46:48 AM	022SMPL.D	1111071-1MS 10X	Sample		1.0000
23		11/21/2011 11:49:00 AM	023SMPL.D	1111071-1MSD 10X	Sample		1.0000
24		11/21/2011 11:51:10 AM	024SMPL.D	1111260-1 10X	Sample		1.0000
25		11/21/2011 11:53:21 AM	025SMPL.D	1111170-1 10X	Sample		1.0000
26		11/21/2011 11:55:32 AM	026SMPL.D	1111171-1 10X	Sample		1.0000
27		11/21/2011 11:57:44 AM	027SMPL.D	1111173-1 10X	Sample		1.0000
28		11/21/2011 11:59:55 AM	028SMPL.D	1111174-1 10X	Sample		1.0000

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
29		11/21/2011 12:02:06 PM	029SMPL.D	1111180-1 10X	Sample		1.0000
30		11/21/2011 12:04:17 PM	030SMPL.D	1111181-1 10X	Sample		1.0000
31		11/21/2011 12:06:27 PM	031SMPL.D	1111182-1 10X	Sample		1.0000
32		11/21/2011 12:08:38 PM	032SMPL.D	CCV	6-CCV		1.0000
33		11/21/2011 12:10:50 PM	033SMPL.D	CCB	6-CCB		1.0000
34		11/21/2011 12:13:01 PM	034SMPL.D	1111183-1 10X	Sample		1.0000
35		11/21/2011 12:15:12 PM	035SMPL.D	1111207-1 10X	Sample		1.0000
36		11/21/2011 12:17:22 PM	036SMPL.D	1111209-1 10X	Sample		1.0000
37		11/21/2011 12:19:33 PM	037SMPL.D	1111210-1 10X	Sample		1.0000
38		11/21/2011 12:21:45 PM	038SMPL.D	1111232-1 10X	Sample		1.0000
39		11/21/2011 12:23:56 PM	039SMPL.D	1111233-1 10X	Sample		1.0000
40		11/21/2011 12:26:08 PM	040SMPL.D	1111234-1 10X	Sample		1.0000
41		11/21/2011 12:28:22 PM	041SMPL.D	1111235-1 10X	Sample		1.0000
42		11/21/2011 12:30:34 PM	042SMPL.D	1111261-1 10X	Sample		1.0000
43		11/21/2011 12:32:44 PM	043SMPL.D	1111104-1 10X	Sample		1.0000
44		11/21/2011 12:38:38 PM	044SMPL.D	CCV	6-CCV		1.0000
45		11/21/2011 12:40:49 PM	045SMPL.D	CCB	6-CCB		1.0000
46		11/21/2011 12:43:00 PM	046SMPL.D	IP111118-3MB 10X	6-CCB		1.0000
47		11/21/2011 12:45:11 PM	047SMPL.D	IM111118-3RVS 10X	Sample		1.0000
48		11/21/2011 12:47:22 PM	048SMPL.D	IM111118-3LCS 10X	6-LCS		1.0000
49		11/21/2011 12:49:33 PM	049SMPL.D	1111106-22 10X	Sample		1.0000
50		11/21/2011 12:51:44 PM	050SMPL.D	1111106-22D 10X	Sample		1.0000
51		11/21/2011 12:53:54 PM	051SMPL.D	1111106-22L 50X	Sample		1.0000
52		11/21/2011 12:56:06 PM	052SMPL.D	1111106-22MS 10X	Sample		1.0000
53		11/21/2011 12:58:18 PM	053SMPL.D	1111106-22MSD 10X	Sample		1.0000
54		11/21/2011 1:00:29 PM	054SMPL.D	1111172-1 10X	Sample		1.0000
55		11/21/2011 1:02:49 PM	055SMPL.D	1111172-2 10X	Sample		1.0000
56		11/21/2011 1:05:00 PM	056SMPL.D	CCV	6-CCV		1.0000
57		11/21/2011 1:07:12 PM	057SMPL.D	CCB	6-CCB		1.0000
58		11/21/2011 1:09:25 PM	058SMPL.D	1111172-3 10X	Sample		1.0000
59		11/21/2011 1:11:36 PM	059SMPL.D	1111172-4 10X	Sample		1.0000
60		11/21/2011 1:13:46 PM	060SMPL.D	1111172-6 10X	Sample		1.0000
61		11/21/2011 1:15:56 PM	061SMPL.D	1111172-10 10X	Sample		1.0000

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
62		11/21/2011 1:18:06 PM	062SMPL.D	1111172-5 10X	Sample		1.0000
63		11/21/2011 1:24:01 PM	063SMPL.D	1111134-1 10X	Sample		1.0000
64		11/21/2011 1:26:12 PM	064SMPL.D	1111134-2 10X	Sample		1.0000
65		11/21/2011 1:28:23 PM	065SMPL.D	1111134-3 10X	Sample		1.0000
66		11/21/2011 1:30:35 PM	066SMPL.D	1111161-1 10X	Sample		1.0000
67		11/21/2011 1:32:46 PM	067SMPL.D	1111161-2 10X	Sample		1.0000
68		11/21/2011 1:38:40 PM	068SMPL.D	CCV	6-CCV		1.0000
69		11/21/2011 1:40:52 PM	069SMPL.D	CCB	6-CCB		1.0000
70		11/21/2011 1:43:05 PM	070SMPL.D	1111161-3 10X	Sample		1.0000
71		11/21/2011 1:45:16 PM	071SMPL.D	1111161-4 10X	Sample		1.0000
72		11/21/2011 1:51:09 PM	072SMPL.D	IP111117-2MB 10X	6-CCB		1.0000
73		11/21/2011 1:53:20 PM	073SMPL.D	IM111117-2LCS 10X	6-LCS		1.0000
74		11/21/2011 1:55:30 PM	074SMPL.D	1111162-1 10X	Sample		1.0000
75		11/21/2011 1:57:41 PM	075SMPL.D	1111162-1D 10X	Sample		1.0000
76		11/21/2011 1:59:52 PM	076SMPL.D	1111162-1L 50X	Sample		1.0000
77		11/21/2011 2:02:01 PM	077SMPL.D	1111162-1MS 10X	Sample		1.0000
78		11/21/2011 2:04:13 PM	078SMPL.D	1111162-1MSD 10X	Sample		1.0000
79		11/21/2011 2:06:24 PM	079SMPL.D	1111160-4 10X	Sample		1.0000
80		11/21/2011 2:08:35 PM	080SMPL.D	CCV	6-CCV		1.0000
81		11/21/2011 2:10:47 PM	081SMPL.D	CCB	6-CCB		1.0000
82		11/21/2011 2:13:01 PM	082SMPL.D	1111160-5 10X	Sample		1.0000
83		11/21/2011 2:15:13 PM	083SMPL.D	1111160-6 100X	Sample		1.0000
84		11/21/2011 2:17:24 PM	084SMPL.D	1111160-7 100X	Sample		1.0000
85		11/21/2011 2:19:36 PM	085SMPL.D	1111160-8 100X	Sample		1.0000
86		11/21/2011 2:21:46 PM	086SMPL.D	1111160-9 200X	Sample		1.0000
87		11/21/2011 2:23:58 PM	087SMPL.D	1111160-10 200X	Sample		1.0000
88		11/21/2011 2:26:10 PM	088SMPL.D	1111160-11 200X	Sample		1.0000
89		11/21/2011 2:28:20 PM	089SMPL.D	1111160-12 1000X	Sample		1.0000
90		11/21/2011 2:30:32 PM	090SMPL.D	1111160-13 100X	Sample		1.0000
91		11/21/2011 2:32:43 PM	091SMPL.D	1111160-14 100X	Sample		1.0000
92		11/21/2011 2:34:54 PM	092SMPL.D	CCV	6-CCV		1.0000
93		11/21/2011 2:37:06 PM	093SMPL.D	CCB	6-CCB		1.0000
94		11/21/2011 2:39:16 PM	094SMPL.D	1111160-15 100X	Sample		1.0000

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
95		11/21/2011 2:51:51 PM	001SMPL_11K21o00.D	1111136-1 10X	Sample		1.0000
96		11/21/2011 2:54:00 PM	002SMPL_11K21o00.D	1111136-1L 50X	Sample		1.0000
97		11/21/2011 2:56:11 PM	003SMPL_11K21o00.D	1111136-1MS 10X	Sample		1.0000
98		11/21/2011 2:58:20 PM	004SMPL_11K21o00.D	1111136-1MSD 10X	Sample		1.0000
99		11/21/2011 3:00:30 PM	005SMPL_11K21o00.D	1111136-2 10X	Sample		1.0000
100		11/21/2011 3:02:40 PM	006SMPL_11K21o00.D	1111136-3 10X	Sample		1.0000
101		11/21/2011 3:04:50 PM	007SMPL_11K21o00.D	1111136-4 10X	Sample		1.0000
102		11/21/2011 3:07:02 PM	008SMPL_11K21o00.D	1111136-5 50X	Sample		1.0000
103		11/21/2011 3:09:12 PM	009SMPL_11K21o00.D	1111136-6 10X	Sample		1.0000
104		11/21/2011 3:15:06 PM	010SMPL_11K21o00.D	CCV	6-CCV		1.0000
105		11/21/2011 3:17:18 PM	011SMPL_11K21o00.D	CCB	6-CCB		1.0000
106		11/21/2011 3:19:29 PM	012SMPL_11K21o00.D	1111136-7 10X	Sample		1.0000
107		11/21/2011 3:21:40 PM	013SMPL_11K21o00.D	1111136-8 10X	Sample		1.0000
108		11/21/2011 3:23:51 PM	014SMPL_11K21o00.D	1111136-9 10X	Sample		1.0000
109		11/21/2011 3:26:03 PM	015SMPL_11K21o00.D	1111136-10 10X	Sample		1.0000
110		11/21/2011 3:28:14 PM	016SMPL_11K21o00.D	1111136-11 10X	Sample		1.0000
111		11/21/2011 3:30:24 PM	017SMPL_11K21o00.D	1111136-12 10X	Sample		1.0000
112		11/21/2011 3:32:36 PM	018SMPL_11K21o00.D	1111136-13 10X	Sample		1.0000
113		11/21/2011 3:34:46 PM	019SMPL_11K21o00.D	1111136-14 10X	Sample		1.0000
114		11/21/2011 3:37:45 PM	020SMPL_11K21o00.D	1111228-1 100X	Sample		1.0000
115		11/21/2011 3:39:56 PM	021SMPL_11K21o00.D	1111228-2 10X	Sample		1.0000
116		11/21/2011 3:45:49 PM	022SMPL_11K21o00.D	CCV	6-CCV		1.0000
117		11/21/2011 3:48:00 PM	023SMPL_11K21o00.D	CCB	6-CCB		1.0000
118		11/21/2011 3:50:52 PM	024SMPL_11K21o00.D	1111228-2L 50X	Sample		1.0000
119		11/21/2011 3:53:04 PM	025SMPL_11K21o00.D	1111228-2MS 10X	Sample		1.0000
120		11/21/2011 3:55:16 PM	026SMPL_11K21o00.D	1111228-2MSD 10X	Sample		1.0000
121		11/21/2011 3:57:26 PM	027SMPL_11K21o00.D	1111228-3 10X	Sample		1.0000
122		11/21/2011 3:59:36 PM	028SMPL_11K21o00.D	1111228-4 200X	Sample		1.0000
123		11/21/2011 4:01:48 PM	029SMPL_11K21o00.D	1111228-5 100X	Sample		1.0000
124		11/21/2011 4:03:59 PM	030SMPL_11K21o00.D	1111228-6 10X	Sample		1.0000
125		11/21/2011 4:06:10 PM	031SMPL_11K21o00.D	1111228-7 10X	Sample		1.0000
126		11/21/2011 4:08:21 PM	032SMPL_11K21o00.D	1111228-8 50X	Sample		1.0000
127		11/21/2011 4:10:33 PM	033SMPL_11K21o00.D	1111228-9 200X	Sample		1.0000

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
128		11/21/2011 4:16:25 PM	034SMPL_11K21o00.D	CCV	6-CCV		1.0000
129		11/21/2011 4:18:37 PM	035SMPL_11K21o00.D	CCB	6-CCB		1.0000
130		11/21/2011 4:20:48 PM	036SMPL_11K21o00.D	1111228-10 10X	Sample		1.0000
131		11/21/2011 4:22:58 PM	037SMPL_11K21o00.D	1111228-11 10X	Sample		1.0000
132		11/21/2011 4:25:08 PM	038SMPL_11K21o00.D	1111228-12 10X	Sample		1.0000
133		11/21/2011 4:27:19 PM	039SMPL_11K21o00.D	1111228-13 100X	Sample		1.0000
134		11/21/2011 4:29:31 PM	040SMPL_11K21o00.D	1111228-14 200X	Sample		1.0000
135		11/21/2011 4:35:24 PM	041SMPL_11K21o00.D	CCV	6-CCV		1.0000
136		11/21/2011 4:37:35 PM	042SMPL_11K21o00.D	CCB	6-CCB		1.0000

Analyte Table

		27 Al [1]		56 Fe [1]		121 Sb [1]		205 Tl [1]		238 U [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		93.34		1613.48		12.22		14.29		6.67
2	blank	-0.097	93.34	0.042	1806.85	0.002	30.00	0.000	19.52	0.000	15.55
3	blank	0.000	113.34	0.000	1646.83	0.000	15.56	0.000	14.76	0.000	22.22
4	H/1000	5.413	1276.78	7.361	35783.41	0.030	224.45	0.003	54.28	0.013	312.23
5	H/100	49.225	10887.37	55.946	266808.82	0.293	2101.28	0.022	346.20	0.104	2409.13
6	H/10	491.862	103588.01	515.667	2352162.67	3.058	20806.20	0.207	3134.64	1.006	22884.62
7	HIGH	5000.821	1051464.41	4998.371	22770419.66	29.994	211496.47	1.999	30372.42	9.999	229483.60
8	ICV	983.489	219330.99	1036.174	5005504.09	6.015	43521.39	0.410	6418.57	2.031	47936.33
9	ICB	-0.164	80.01	0.152	2253.67	0.003	32.22	0.005	84.29	0.000	17.78
10	CRI1	23.374	5174.37	13.465	64838.98	0.033	248.90	0.023	363.82	0.012	302.23
11	CRI2	10.180	2353.61	12.895	62957.96	0.065	474.46	0.044	694.31	0.024	594.47
12	ICSA	8964.206	1979389.35	24706.639	1.18206E+08	0.051	382.24	0.003	58.09	0.004	121.11
13	ICSAB	9477.492	2066749.14	25294.064	1.19510E+08	3.122	22430.64	0.200	3099.87	1.027	23983.09
14	IP111118-2MB ...	1.121	330.02	3.631	16916.08	0.001	23.33	0.002	35.72	0.000	12.22
15	IM111118-2RVS...	5.915	1270.11	7.077	31627.98	0.032	224.45	0.021	306.20	0.010	231.12
16	IM111118-2LCS...	464.833	100559.56	502.013	2352115.49	3.044	20963.06	0.199	3030.81	0.982	22449.61
17	1111071-1 10X	5.997	1403.49	11.041	52837.21	0.032	240.00	0.008	138.10	0.527	12081.82
18	1111071-1D 10X	5.721	1363.47	11.165	54104.18	0.023	178.89	0.004	80.48	0.539	12096.30
19	1111071-1L 50X	1.579	453.36	2.362	12525.34	0.008	67.78	0.003	54.76	0.101	2255.77
20	CCV	485.813	104449.50	511.488	2381809.34	3.049	21448.15	0.200	3067.48	1.008	23282.00
21	CCB	0.077	126.67	0.327	2990.42	-0.001	12.22	0.005	81.43	0.000	15.56
22	1111071-1MS 10X	479.590	100741.33	525.877	2392367.26	2.958	20493.56	0.198	2984.61	1.496	33976.35
23	1111071-1MSD ...	481.959	99912.99	523.776	2351532.52	3.019	20510.21	0.207	3091.77	1.517	34006.12
24	1111260-1 10X	1.603	456.69	13.821	64493.82	0.033	246.67	0.010	158.57	0.506	11225.55
25	1111170-1 10X	0.982	323.35	23.535	107682.12	0.006	55.56	0.004	71.90	0.000	32.22
26	1111171-1 10X	7.971	1800.19	19.602	91187.19	0.025	193.34	0.003	60.00	0.174	3907.24
27	1111173-1 10X	1.955	536.70	3.661	18584.68	0.042	307.79	0.002	48.10	0.020	466.68
28	1111174-1 10X	3.301	833.39	1.280	7755.53	0.012	101.11	0.005	94.76	0.036	844.48
29	1111180-1 10X	1.119	360.02	48.259	223802.55	0.009	78.89	0.007	121.43	0.081	1820.14
30	1111181-1 10X	1.960	536.70	1.887	10420.61	0.003	40.00	0.002	39.05	0.140	3161.51
31	1111182-1 10X	2.218	593.37	2.102	11414.39	0.013	106.67	0.002	46.67	0.047	1078.95

Analyte Table

		27 Al [1]		56 Fe [1]		121 Sb [1]		205 Tl [1]		238 U [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	503.546	106556.44	520.704	2386459.71	3.006	20954.16	0.198	2971.27	1.004	22687.70
33	CCB	0.003	110.00	0.195	2393.62	0.001	21.11	0.005	78.10	-0.001	11.11
34	1111183-1 10X	2.959	733.39	7.658	36174.40	0.011	91.11	0.002	50.48	0.136	3075.92
35	1111207-1 10X	1.738	480.03	1.805	9866.83	0.004	44.45	0.002	40.48	0.016	375.57
36	1111209-1 10X	1.477	433.36	3.464	17603.58	0.011	93.33	0.002	49.52	0.167	3694.97
37	1111210-1 10X	1.075	346.69	5.884	28519.12	0.010	82.23	0.001	29.05	0.211	4745.28
38	1111232-1 10X	1.820	510.03	15.318	72279.45	0.010	88.89	0.000	20.95	0.048	1121.18
39	1111233-1 10X	2.111	570.07	30.299	141318.78	0.017	138.89	0.001	31.43	0.075	1751.24
40	1111234-1 10X	7.560	1703.53	5.101	24906.69	0.022	168.89	0.001	37.14	0.020	470.02
41	1111235-1 10X	1.437	423.36	31.549	145346.19	0.006	56.67	0.002	41.91	0.069	1565.67
42	1111261-1 10X	1.317	396.69	474.042	2157489.13	0.004	42.22	0.001	23.34	0.004	104.45
43	1111104-1 10X	1.126	343.47	304.425	1333227.74	0.001	21.11	0.000	22.38	0.000	21.11
44	CCV	498.345	104191.80	525.544	2379770.75	3.046	20563.66	0.205	3018.90	1.007	22302.83
45	CCB	-0.047	100.00	0.152	2196.93	0.002	27.78	0.005	75.71	0.000	14.45
46	IP111118-3MB ...	0.737	250.01	0.732	4617.56	0.018	127.78	0.002	41.91	0.000	14.44
47	IM111118-3RVS...	4.876	1123.42	6.058	28642.62	0.043	301.12	0.019	300.01	0.008	188.89
48	IM111118-3LCS...	468.702	99315.72	503.028	2308550.48	2.962	20249.88	0.191	2852.20	0.991	22295.02
49	1111106-22 10X	0.582	240.01	1.179	7025.12	0.017	130.00	0.006	109.05	1.942	43679.47
50	1111106-22D 10X	1.034	333.35	1.647	9116.23	0.043	311.12	0.003	55.71	1.923	43003.12
51	1111106-22L 50X	0.414	203.34	0.160	2430.29	0.004	46.67	0.002	40.00	0.358	8080.15
52	1111106-22MS ...	491.725	101022.74	527.919	2348905.49	3.070	20870.68	0.192	2843.62	2.965	66054.43
53	1111106-22MSD...	481.745	99718.59	519.009	2327021.69	3.075	20729.48	0.208	3065.10	2.981	66034.70
54	1111172-1 10X	0.521	226.68	1.790	9716.70	0.009	80.00	0.010	161.43	0.696	15131.36
55	1111172-2 10X	1.601	450.03	6.216	29557.62	0.025	185.56	0.003	59.52	0.035	807.81
56	CCV	499.544	104259.33	521.923	2359190.74	3.029	20799.53	0.207	3097.01	0.999	22543.09
57	CCB	0.199	146.68	0.215	2463.62	0.002	26.67	0.005	86.19	0.000	16.67
58	1111172-3 10X	1.035	333.35	4.130	20249.92	0.010	86.67	0.012	190.00	1.097	24609.70
59	1111172-4 10X	0.819	296.69	8.480	40678.27	0.015	123.34	0.017	265.72	0.587	13150.55
60	1111172-6 10X	1.103	343.35	163.419	726524.96	0.005	53.33	0.002	38.10	0.680	14802.07
61	1111172-10 10X	1.035	340.02	10.297	48773.42	0.005	53.33	0.003	59.05	0.645	14318.28
62	1111172-5 10X	1.599	446.70	161.198	718463.45	0.007	62.23	0.001	27.14	0.667	14423.97

Analyte Table

		27 Al [1]		56 Fe [1]		121 Sb [1]		205 Tl [1]		238 U [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	1111134-1 10X	0.649	250.01	467.673	2066851.27	0.004	43.33	0.001	27.14	-0.001	10.00
64	1111134-2 10X	1.134	343.35	312.125	1358369.46	0.002	31.11	0.000	17.14	0.000	23.33
65	1111134-3 10X	0.509	216.68	491.411	2127294.03	0.003	36.67	0.001	29.52	0.000	17.78
66	1111161-1 10X	0.694	260.02	213.070	945706.19	0.002	33.33	0.000	20.95	0.000	15.55
67	1111161-2 10X	0.408	206.68	237.192	1079350.24	0.002	27.78	0.000	20.95	-0.001	7.78
68	CCV	507.002	105400.31	521.414	2347554.86	3.006	20457.90	0.196	2959.36	1.023	23274.24
69	CCB	0.203	143.34	0.203	2353.62	0.001	23.33	0.004	69.53	-0.001	11.11
70	1111161-3 10X	0.486	213.35	326.732	1419883.73	0.000	14.44	0.002	41.43	0.000	15.55
71	1111161-4 10X	0.904	300.02	207.821	913943.92	0.002	28.89	0.001	33.33	0.000	13.33
72	IP111117-2MB ...	2.314	540.03	8.038	34036.34	0.000	16.67	0.001	30.95	0.001	43.33
73	IM111117-2LCS...	483.585	98447.34	518.750	2287104.55	3.047	20200.96	0.221	3174.17	1.006	21758.57
74	1111162-1 10X	7224.306	1502918.83	15458.021	69675840.63	0.101	707.81	0.160	2488.32	13.399	313205.44
75	1111162-1D 10X	7477.210	1533812.74	16208.006	72035900.59	0.095	662.25	0.169	2616.92	13.913	323641.30
76	1111162-1L 50X	1465.673	307076.68	3074.222	13953200.63	0.023	175.56	0.035	559.54	2.709	63392.16
77	1111162-1MS 10X	9021.449	1825419.14	16772.310	73530172.24	1.016	6792.68	0.366	5655.87	15.162	352906.43
78	1111162-1MSD ...	9021.168	1812382.42	16703.107	72705048.92	1.016	6782.68	0.360	5605.38	14.944	350486.54
79	1111160-4 10X	11631.814	2376007.41	19338.155	85588848.72	0.079	548.91	0.215	3370.41	2.229	52624.09
80	CCV	485.376	98765.71	514.588	2267243.30	2.965	19930.62	0.212	3150.36	1.018	22730.07
81	CCB	0.368	173.35	1.257	6518.25	0.000	16.67	0.011	157.15	0.001	33.33
82	1111160-5 10X	11204.652	2288664.55	21202.588	93833628.60	0.105	724.47	0.232	3709.54	1.764	42463.87
83	1111160-6 100X	433.015	84357.64	882.078	3720077.76	0.004	41.11	0.021	312.86	4.387	94964.08
84	1111160-7 100X	793.315	162495.24	1329.755	5899160.33	0.009	77.78	0.023	349.53	10.736	240453.55
85	1111160-8 100X	808.264	166005.58	1422.228	6326549.07	0.010	84.45	0.023	367.15	8.967	203871.32
86	1111160-9 200X	122.002	24308.82	361.418	1554449.09	0.001	21.11	0.009	145.24	16.934	369722.78
87	1111160-10 200X	142.035	28124.67	375.908	1608058.73	0.001	20.00	0.008	128.58	14.312	314703.84
88	1111160-11 200X	135.196	27179.92	374.853	1627476.59	0.003	34.44	0.007	115.72	13.814	299340.14
89	1111160-12 10...	32.424	6268.17	89.941	371813.60	0.000	16.67	0.002	47.14	7.015	145924.61
90	1111160-13 100X	398.518	80170.48	867.864	3779083.17	0.000	13.33	0.007	117.62	15.829	344138.58
91	1111160-14 100X	617.595	123908.07	1469.774	6385031.78	0.036	254.45	0.026	406.68	8.208	184761.85
92	CCV	479.143	98427.13	507.783	2258792.36	2.973	20025.17	0.201	3005.09	1.027	23139.63
93	CCB	-0.016	103.33	0.513	3597.23	0.002	26.67	0.006	88.10	0.000	22.22

Analyte Table

		27 Al [1]		56 Fe [1]		121 Sb [1]		205 Tl [1]		238 U [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
94	1111160-15 100X	1290.305	261913.08	1808.390	7951827.80	0.010	82.22	0.026	393.82	1.717	38413.38
95	1111136-1 10X	0.445	206.68	7.248	33385.08	0.001	26.67	0.005	90.00	1.226	26104.55
96	1111136-1L 50X	0.673	260.02	0.254	2883.71	0.000	14.44	0.002	41.90	0.222	4986.49
97	1111136-1MS 10X	43.479	8986.13	1.749	9443.13	1.956	13567.13	0.099	1422.94	3.240	69736.06
98	1111136-1MSD ...	44.805	9139.56	1.869	9846.74	1.943	13484.85	0.097	1377.69	3.286	69473.27
99	1111136-2 10X	0.641	243.34	0.283	2907.05	0.010	83.34	0.010	145.24	1.056	20818.29
100	1111136-3 10X	0.715	280.02	0.189	2703.68	0.001	23.33	0.001	28.57	0.193	4240.69
101	1111136-4 10X	0.385	203.34	0.250	2920.40	0.002	28.89	0.001	31.43	0.193	4202.90
102	1111136-5 50X	0.640	256.68	23.211	107832.45	0.001	22.22	0.010	155.71	0.462	10042.46
103	1111136-6 10X	1.254	333.35	204.736	811159.26	0.005	46.67	0.015	178.58	2.512	42074.75
104	CCV	521.017	118814.36	532.215	2628651.21	2.947	22119.13	0.195	3057.01	1.014	23950.85
105	CCB	-0.119	93.33	0.296	3010.42	0.001	22.22	0.006	94.29	0.000	18.89
106	1111136-7 10X	1.076	360.03	1.512	8966.14	0.028	220.00	0.006	103.34	3.226	69677.70
107	1111136-8 10X	2.048	573.37	0.614	4734.25	0.002	31.11	0.001	32.38	1.114	24308.21
108	1111136-9 10X	1.146	320.02	140.131	564406.84	0.005	50.00	0.080	903.37	1.955	33005.11
109	1111136-10 10X	0.883	346.68	0.605	5097.70	0.010	96.67	0.003	55.71	0.242	5565.58
110	1111136-11 10X	1.390	443.36	0.574	4684.23	0.003	43.33	0.003	65.24	2.550	56098.88
111	1111136-12 10X	0.716	293.35	22.266	111143.91	0.001	24.44	0.001	24.76	0.211	4820.87
112	1111136-13 10X	0.547	256.68	20.621	104041.64	0.002	34.44	0.000	22.86	0.195	4472.98
113	1111136-14 10X	1.561	493.37	6.640	35148.86	0.001	27.78	0.001	34.29	0.250	5756.77
114	1111228-1 100X	0.628	280.02	0.289	3403.85	0.003	43.33	0.001	25.72	9.389	223789.22
115	1111228-2 10X	1.302	410.03	0.418	3803.95	0.014	123.34	0.004	78.09	0.586	12738.99
116	CCV	527.958	115495.35	535.350	2536940.07	3.026	21630.61	0.194	2936.50	0.989	22543.14
117	CCB	0.032	120.00	0.296	2913.73	0.003	33.33	0.005	85.24	0.000	20.00
118	1111228-2L 50X	0.958	333.35	0.232	2910.40	0.001	25.56	0.001	36.67	0.110	2461.36
119	1111228-2MS 10X	45.999	9739.94	0.287	3053.75	1.966	13838.49	0.097	1375.79	2.614	55338.43
120	1111228-2MSD ...	44.325	9583.21	0.323	3283.82	1.969	14107.62	0.106	1505.80	2.645	56271.79
121	1111228-3 10X	0.910	323.35	0.133	2446.96	0.012	108.89	0.006	105.72	0.522	11145.49
122	1111228-4 200X	0.924	340.24	0.144	2613.66	0.005	53.33	0.004	78.10	6.907	159055.16
123	1111228-5 100X	0.687	283.35	207.515	1009135.90	0.001	25.56	0.001	37.14	10.314	236563.14
124	1111228-6 10X	1.206	340.02	549.873	2273439.39	0.005	47.78	0.002	33.33	0.741	12992.60

Analyte Table

		27 Al [1]		56 Fe [1]		121 Sb [1]		205 Tl [1]		238 U [1]	
	Sample Name	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
125	1111228-7 10X	0.600	270.01	17.061	86634.90	0.022	186.67	0.001	32.38	0.147	3239.29
126	1111228-8 50X	1.012	360.02	0.272	3227.13	0.005	58.89	0.006	91.43	14.529	304742.98
127	1111228-9 200X	0.798	320.02	0.269	3310.49	0.002	32.22	0.001	32.86	10.823	240291.69
128	CCV	534.469	119432.73	545.473	2640061.32	2.967	21937.70	0.193	2928.88	1.029	23497.88
129	CCB	0.313	176.68	0.761	4937.65	0.004	42.22	0.016	231.43	0.002	56.67
130	1111228-10 10X	0.931	333.35	2.792	15217.72	0.049	380.01	0.006	109.05	9.076	201928.05
131	1111228-11 10X	0.758	286.68	237.231	1110726.67	0.002	31.11	0.005	82.38	0.113	2430.25
132	1111228-12 10X	1.484	383.35	73.012	296003.53	0.005	48.89	0.006	76.67	1.782	29820.26
133	1111228-13 100X	0.785	336.68	1.401	9569.84	0.020	184.45	0.005	94.29	3.886	92765.48
134	1111228-14 200X	1.203	433.36	0.264	3433.86	0.002	33.33	0.005	95.72	18.228	423677.54
135	CCV	575.620	137776.26	564.072	2924462.46	3.002	23753.73	0.196	3086.06	1.017	24150.00
136	CCB	0.920	323.35	1.272	7752.22	0.007	65.56	0.018	262.38	0.005	126.67

ISTD Table

		103 Rh (ISTD) [1]		115 In (ISTD) [1]		195 Pt (ISTD) [1]		209 Bi (ISTD) [1]	
	Sample Name	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
1	blank	160032.18		140360.29		62727.67		88999.23	
2	blank	161942.27	100.0	146440.67	100.0	60963.12	100.0	88687.64	100.0
3	blank	163571.29	100.0	146405.53	100.0	61910.60	100.0	89583.81	100.0
4	H/1000	177427.74	108.5	159719.31	109.1	65963.77	106.5	97670.59	109.0
5	H/100	181965.31	111.2	165995.69	113.4	67420.68	108.9	99495.87	111.1
6	H/10	175114.40	107.1	158930.52	108.6	65743.72	106.2	98174.19	109.6
7	HIGH	175012.90	107.0	164794.15	112.6	66423.53	107.3	99103.26	110.6
8	ICV	185535.75	113.4	169035.09	115.5	69862.28	112.8	101875.44	113.7
9	ICB	160786.79	98.3	146395.15	100.0	58429.76	94.4	88888.76	99.2
10	CRI1	179835.87	109.9	164615.72	112.4	64839.19	104.7	100160.70	111.8
11	CRI2	182117.64	111.3	164890.86	112.6	66483.48	107.4	100660.60	112.4
12	ICSA	183815.15	112.4	168634.50	115.2	68261.73	110.3	100815.61	112.5
13	ICSAB	181521.78	111.0	167792.43	114.6	66601.00	107.6	100760.98	112.5
14	IP111118-2MB ...	161828.35	98.9	145370.55	99.3	58747.57	94.9	88487.18	98.8
15	IM111118-2RVS...	162809.83	99.5	150028.00	102.5	60059.30	97.0	90935.41	101.5
16	IM111118-2LCS...	179872.73	110.0	160846.81	109.9	63573.75	102.7	98671.01	110.1
17	1111071-1 10X	177670.60	108.6	162452.39	111.0	63660.67	102.8	98849.34	110.3
18	1111071-1D 10X	179945.20	110.0	166182.90	113.5	62304.97	100.6	96771.70	108.0
19	1111071-1L 50X	175051.91	107.0	158728.59	108.4	61528.47	99.4	95614.00	106.7
20	CCV	178785.77	109.3	164250.10	112.2	66405.93	107.3	99654.20	111.2
21	CCB	161039.83	98.5	147721.24	100.9	58430.47	94.4	88175.12	98.4
22	1111071-1MS 10X	174651.34	106.8	161815.08	110.5	62599.99	101.1	97992.89	109.4
23	1111071-1MSD ...	172369.64	105.4	158668.93	108.4	63986.08	103.4	96777.43	108.0
24	1111260-1 10X	174407.31	106.6	160732.65	109.8	62700.07	101.3	95564.50	106.7
25	1111170-1 10X	172958.59	105.7	159048.65	108.6	62044.30	100.2	94151.62	105.1
26	1111171-1 10X	175279.55	107.2	162694.11	111.1	62130.90	100.4	96207.28	107.4
27	1111173-1 10X	176390.94	107.8	162831.72	111.2	63931.69	103.3	97170.38	108.5
28	1111174-1 10X	178789.22	109.3	162448.87	111.0	63135.80	102.0	98827.65	110.3
29	1111180-1 10X	176761.04	108.1	162710.60	111.1	63834.44	103.1	96163.90	107.3
30	1111181-1 10X	176045.86	107.6	162930.05	111.3	63222.25	102.1	96805.80	108.1
31	1111182-1 10X	176897.01	108.1	163914.60	112.0	63503.75	102.6	96117.54	107.3

ISTD Table

		103 Rh (ISTD) [1]		115 In (ISTD) [1]		195 Pt (ISTD) [1]		209 Bi (ISTD) [1]	
	Sample Name	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
32	CCV	175951.80	107.6	162794.73	111.2	61793.17	99.8	97489.59	108.8
33	CCB	158076.98	96.6	143314.95	97.9	55732.85	90.0	87290.05	97.4
34	1111183-1 10X	172757.89	105.6	159860.88	109.2	60731.77	98.1	97016.90	108.3
35	1111207-1 10X	172912.11	105.7	158366.05	108.2	61180.55	98.8	95735.18	106.9
36	1111209-1 10X	175655.47	107.4	158737.16	108.4	61351.77	99.1	95002.47	106.0
37	1111210-1 10X	174731.58	106.8	158912.23	108.5	61327.81	99.1	96650.65	107.9
38	1111232-1 10X	176832.62	108.1	161679.74	110.4	64400.47	104.0	98788.16	110.3
39	1111233-1 10X	176976.39	108.2	162910.48	111.3	63195.42	102.1	99556.83	111.1
40	1111234-1 10X	174362.03	106.6	163373.83	111.6	62201.14	100.5	97754.45	109.1
41	1111235-1 10X	174849.13	106.9	161380.74	110.2	63098.30	101.9	96412.94	107.6
42	1111261-1 10X	174731.36	106.8	159771.67	109.1	62238.75	100.5	95711.34	106.8
43	1111104-1 10X	168044.25	102.7	156378.82	106.8	60843.14	98.3	92833.65	103.6
44	CCV	173867.13	106.3	157626.89	107.7	61585.80	99.5	95566.93	106.7
45	CCB	156498.37	95.7	141509.06	96.7	55709.40	90.0	85986.03	96.0
46	IP111118-3MB ...	158632.97	97.0	144547.16	98.7	55940.59	90.4	86598.37	96.7
47	IM111118-3RVS...	170900.48	104.5	154965.12	105.8	61050.33	98.6	95282.65	106.4
48	IM111118-3LCS...	176191.26	107.7	159678.48	109.1	62925.18	101.6	97120.14	108.4
49	1111106-22 10X	172322.65	105.4	158819.83	108.5	61827.02	99.9	97076.80	108.4
50	1111106-22D 10X	172144.09	105.2	159932.26	109.2	61134.24	98.7	96563.16	107.8
51	1111106-22L 50X	170547.17	104.3	158244.08	108.1	60875.84	98.3	97140.50	108.4
52	1111106-22MS ...	170818.16	104.4	158752.32	108.4	61639.35	99.6	96190.91	107.4
53	1111106-22MSD...	172137.25	105.2	157474.18	107.6	62288.75	100.6	95633.93	106.8
54	1111172-1 10X	171470.52	104.8	157303.49	107.4	60149.27	97.2	93846.33	104.8
55	1111172-2 10X	171962.56	105.1	157260.01	107.4	62154.47	100.4	95451.96	106.6
56	CCV	173540.06	106.1	160375.58	109.5	61745.98	99.7	97335.92	108.7
57	CCB	157281.65	96.2	143142.40	97.8	57341.89	92.6	87195.70	97.3
58	1111172-3 10X	172292.51	105.3	161403.83	110.2	61441.45	99.2	96838.58	108.1
59	1111172-4 10X	176213.56	107.7	161408.07	110.2	61829.95	99.9	96634.25	107.9
60	1111172-6 10X	170412.12	104.2	159306.77	108.8	61575.10	99.5	93859.56	104.8
61	1111172-10 10X	175390.34	107.2	161246.69	110.1	61900.29	100.0	95674.93	106.8
62	1111172-5 10X	170833.86	104.4	161098.55	110.0	60832.73	98.3	93316.14	104.2

ISTD Table

		103 Rh (ISTD) [1]		115 In (ISTD) [1]		195 Pt (ISTD) [1]		209 Bi (ISTD) [1]	
	Sample Name	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
63	1111134-1 10X	169654.18	103.7	153692.23	105.0	59750.83	96.5	93362.66	104.2
64	1111134-2 10X	166993.76	102.1	152695.96	104.3	59754.96	96.5	93534.76	104.4
65	1111134-3 10X	166198.61	101.6	153104.24	104.6	59831.97	96.6	94117.53	105.1
66	1111161-1 10X	170214.25	104.1	158555.65	108.3	61542.45	99.4	95768.83	106.9
67	1111161-2 10X	174549.26	106.7	159810.84	109.2	62556.41	101.0	96905.61	108.2
68	CCV	172868.88	105.7	158928.69	108.6	60976.86	98.5	98133.82	109.5
69	CCB	153305.12	93.7	142513.73	97.3	54969.85	88.8	86666.14	96.7
70	1111161-3 10X	166797.71	102.0	152275.14	104.0	59182.30	95.6	94519.63	105.5
71	1111161-4 10X	168648.80	103.1	155352.29	106.1	59704.50	96.4	94335.98	105.3
72	IP111117-2MB ...	155216.41	94.9	139790.35	95.5	54859.29	88.6	84965.98	94.8
73	IM111117-2LCS...	169266.95	103.5	154875.70	105.8	60655.16	98.0	93269.10	104.1
74	1111162-1 10X	173175.37	105.9	159966.41	109.3	62833.64	101.5	100955.98	112.7
75	1111162-1D 10X	170748.76	104.4	158108.19	108.0	61270.87	99.0	100469.18	112.2
76	1111162-1L 50X	174359.36	106.6	160008.35	109.3	61003.77	98.5	101033.35	112.8
77	1111162-1MS 10X	168461.57	103.0	155880.35	106.5	60745.68	98.1	100529.90	112.2
78	1111162-1MSD ...	167228.68	102.2	155601.73	106.3	60059.32	97.0	101298.40	113.1
79	1111160-4 10X	170059.55	104.0	156438.62	106.9	60461.30	97.7	101922.79	113.8
80	CCV	169182.61	103.4	156979.08	107.2	60832.73	98.3	96368.86	107.6
81	CCB	152420.01	93.2	139776.96	95.5	54816.07	88.5	85874.70	95.9
82	1111160-5 10X	170028.35	103.9	157609.87	107.7	60939.23	98.4	103888.71	116.0
83	1111160-6 100X	161963.47	99.0	149650.61	102.2	57107.66	92.2	93473.67	104.3
84	1111160-7 100X	170390.20	104.2	156484.62	106.9	60367.03	97.5	96720.95	108.0
85	1111160-8 100X	170853.33	104.5	155891.22	106.5	61475.64	99.3	98181.63	109.6
86	1111160-9 200X	165081.01	100.9	152960.40	104.5	58944.70	95.2	94292.66	105.3
87	1111160-10 200X	164201.64	100.4	150375.31	102.7	57917.40	93.6	94962.35	106.0
88	1111160-11 200X	166629.86	101.9	152416.02	104.1	57844.05	93.4	93618.14	104.5
89	1111160-12 10...	158166.81	96.7	145464.83	99.4	56348.12	91.0	89820.20	100.3
90	1111160-13 100X	167232.48	102.2	151324.98	103.4	58566.91	94.6	93899.46	104.8
91	1111160-14 100X	166860.25	102.0	153050.51	104.5	58821.47	95.0	97221.08	108.5
92	CCV	170802.91	104.4	157314.58	107.5	61247.34	98.9	97201.31	108.5
93	CCB	153500.41	93.8	140007.93	95.6	55749.09	90.0	86521.99	96.6

ISTD Table

		103 Rh (ISTD) [1]		115 In (ISTD) [1]		195 Pt (ISTD) [1]		209 Bi (ISTD) [1]	
	Sample Name	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
94	1111160-15 100X	168902.97	103.3	154349.71	105.4	59340.24	95.8	96560.98	107.8
95	1111136-1 10X	167993.99	102.7	158791.81	108.5	59396.93	95.9	91860.20	102.5
96	1111136-1L 50X	172939.72	105.7	162244.03	110.8	61893.49	100.0	96368.62	107.6
97	1111136-1MS 10X	169840.09	103.8	161925.34	110.6	60257.07	97.3	92940.60	103.7
98	1111136-1MSD ...	167667.39	102.5	162075.36	110.7	60203.07	97.2	91290.13	101.9
99	1111136-2 10X	166524.69	101.8	156554.51	106.9	57519.25	92.9	85079.56	95.0
100	1111136-3 10X	180206.89	110.2	168414.00	115.0	62713.64	101.3	94409.55	105.4
101	1111136-4 10X	176138.22	107.7	166207.41	113.5	61133.94	98.7	93524.19	104.4
102	1111136-5 50X	175590.09	107.3	165785.02	113.2	60193.20	97.2	93732.51	104.6
103	1111136-6 10X	151941.16	92.9	148666.36	101.5	50467.08	81.5	72324.68	80.7
104	CCV	189639.42	115.9	175416.09	119.8	62978.07	101.7	101915.80	113.8
105	CCB	169334.01	103.5	153840.73	105.1	57827.28	93.4	89835.30	100.3
106	1111136-7 10X	181499.40	111.0	168556.35	115.1	62204.85	100.5	93282.44	104.1
107	1111136-8 10X	181631.78	111.0	170902.00	116.7	62810.56	101.5	94120.98	105.1
108	1111136-9 10X	154320.43	94.3	150453.90	102.8	49213.47	79.5	72855.01	81.3
109	1111136-10 10X	197433.27	120.7	186897.53	127.7	65428.83	105.7	98952.13	110.5
110	1111136-11 10X	187215.73	114.5	177805.45	121.4	62974.55	101.7	94956.19	106.0
111	1111136-12 10X	188496.48	115.2	176786.50	120.8	62713.22	101.3	98378.85	109.8
112	1111136-13 10X	190319.56	116.4	179436.73	122.6	63733.99	102.9	98351.74	109.8
113	1111136-14 10X	192186.51	117.5	181112.27	123.7	63988.49	103.4	99218.53	110.8
114	1111228-1 100X	193570.99	118.3	177177.21	121.0	64354.22	103.9	102932.80	114.9
115	1111228-2 10X	181606.80	111.0	170352.59	116.4	60859.01	98.3	93718.82	104.6
116	CCV	181937.02	111.2	166904.68	114.0	60996.53	98.5	98384.94	109.8
117	CCB	163773.66	100.1	149308.50	102.0	56632.52	91.5	88144.25	98.4
118	1111228-2L 50X	180616.69	110.4	166757.46	113.9	60899.15	98.4	95365.48	106.5
119	1111228-2MS 10X	174115.48	106.4	164296.97	112.2	60065.75	97.0	91390.05	102.0
120	1111228-2MSD ...	177685.15	108.6	167270.20	114.3	60691.61	98.0	91844.30	102.5
121	1111228-3 10X	180801.69	110.5	171502.23	117.1	61820.19	99.9	92028.89	102.7
122	1111228-4 200X	188983.12	115.5	173882.01	118.8	64698.85	104.5	99429.58	111.0
123	1111228-5 100X	186483.39	114.0	171797.49	117.3	61839.75	99.9	99053.83	110.6
124	1111228-6 10X	158733.73	97.0	151963.00	103.8	51035.96	82.4	75592.43	84.4

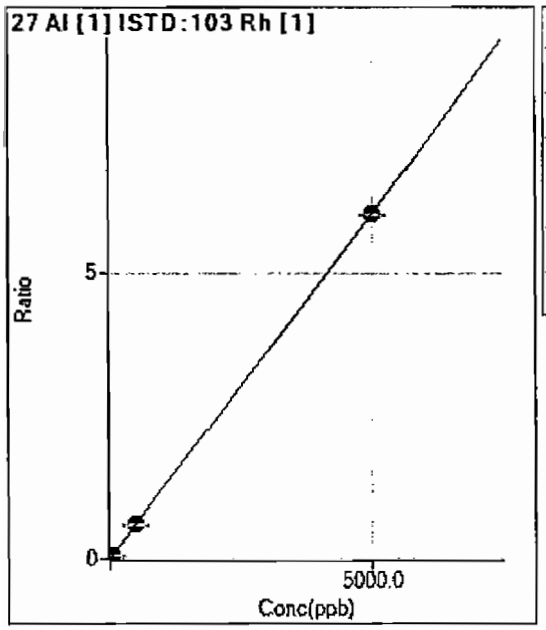
ISTD Table

		103 Rh (ISTD) [1]		115 In (ISTD) [1]		195 Pt (ISTD) [1]		209 Bi (ISTD) [1]	
	Sample Name	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
125	1111228-7 10X	190772.88	116.6	179941.38	122.9	62138.03	100.4	94651.55	105.7
126	1111228-8 50X	188264.86	115.1	174319.30	119.1	60527.80	97.8	90602.49	101.1
127	1111228-9 200X	193758.38	118.5	177211.58	121.0	61398.43	99.2	95891.84	107.0
128	CCV	185816.65	113.6	172718.57	118.0	64032.81	103.4	98556.66	110.0
129	CCB	165383.28	101.1	151207.80	103.3	55993.72	90.4	89094.25	99.5
130	1111228-10 10X	183947.51	112.5	172748.77	118.0	62078.00	100.3	96080.91	107.3
131	1111228-11 10X	179603.51	109.8	169013.96	115.4	59567.24	96.2	91953.89	102.6
132	1111228-12 10X	154956.13	94.7	151380.42	103.4	48069.06	77.6	72238.37	80.6
133	1111228-13 100X	205638.22	125.7	192656.18	131.6	65713.29	106.1	103095.45	115.1
134	1111228-14 200X	202641.01	123.9	191106.13	130.5	64008.69	103.4	100403.03	112.1
135	CCV	199054.03	121.7	184829.54	126.2	65077.61	105.1	102419.08	114.3
136	CCB	179534.67	109.8	165519.81	113.1	57519.18	92.9	91907.57	102.6

Calibration for 041SMPL_11K21o00.D

Batch Folder: C:¥ICPMH¥1¥DATA¥11K21k00.B¥
Analysis File: 11K21k00.batch.xml
DA Date-Time: 11/22/2011 9:07:21 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:
Tune Step: #1 hehe.u

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.D	blank	11/21/2011 10:54:20 AM
2	004CALS.D	H/1000	11/21/2011 10:56:30 AM
3	005CALS.D	H/100	11/21/2011 10:58:42 AM
4	006CALS.D	H/10	11/21/2011 11:00:53 AM
5	007CALS.D	HIGH	11/21/2011 11:03:03 AM
6			



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.34	0.0007	P	50.2
2	☐	5.000	5.413	1276.78	0.0072	P	2.1
3	☐	50.000	49.225	10887.37	0.0598	P	5.3
4	☐	500.000	491.862	103588.01	0.5916	P	1.1
5	☐	5000.000	5000.821	1051464.41	6.0081	P	0.7
6	☐	1000.000					

y = 0.0012 * x + 6.9391E-004

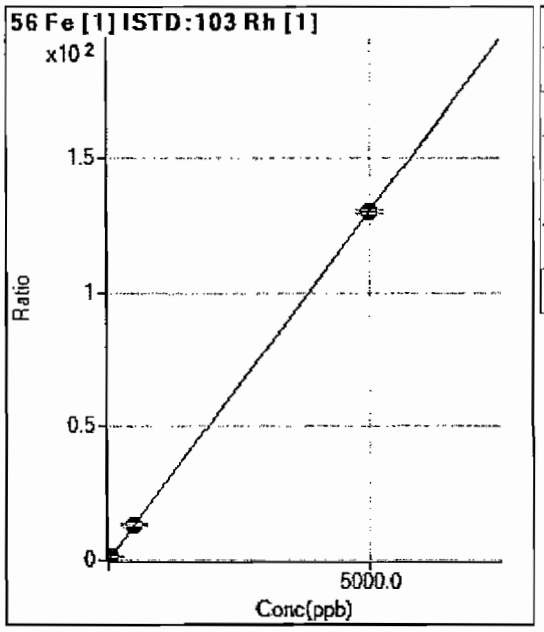
R = 1.0000

DL = 0.8695

BEC = 0.5776

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1646.83	0.0101	P	11.2
2	☐	5.000	7.361	35783.41	0.2017	P	1.6
3	☐	50.000	55.946	266808.82	1.4663	P	0.4
4	☐	500.000	515.667	2352162.67	13.4322	A	0.8
5	☐	5000.000	4998.371	22770419.66	130.1109	A	1.0
6	☐	1000.000					

y = 0.0260 * x + 0.0101

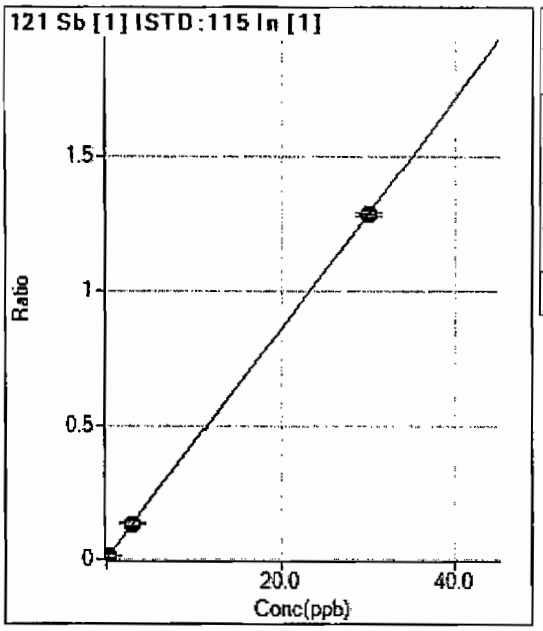
R = 1.0000

DL = 0.1304

BEC = 0.3871

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15.56	0.0001	P	32.0
2	☐	0.030	0.030	224.45	0.0014	P	9.1
3	☐	0.300	0.293	2101.28	0.0127	P	1.4
4	☐	3.000	3.058	20806.20	0.1309	P	3.4
5	☐	30.000	29.994	211496.47	1.2835	P	1.1
6	☐	6.000					

y = 0.0428 * x + 1.0610E-004

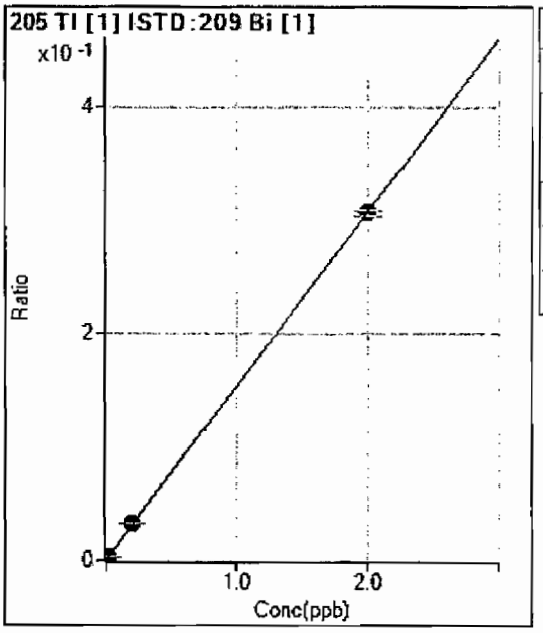
R = 1.0000

DL = 0.002379

BEC = 0.00248

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.76	0.0002	P	14.9
2	☐	0.002	0.003	54.28	0.0006	P	22.3
3	☐	0.020	0.022	346.20	0.0035	P	5.4
4	☐	0.200	0.207	3134.64	0.0319	P	1.5
5	☐	2.000	1.999	30372.42	0.3065	P	1.3
6	☐	0.400					

y = 0.1532 * x + 1.6482E-004

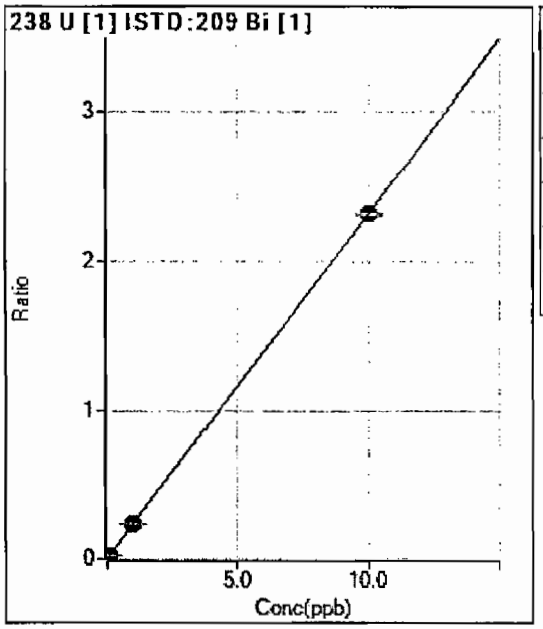
R = 1.0000

DL = 0.0004807

BEC = 0.001076

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0002	P	56.8
2	☐	0.010	0.013	312.23	0.0032	P	7.3
3	☐	0.100	0.104	2409.13	0.0242	P	1.9
4	☐	1.000	1.006	22884.62	0.2331	P	2.1
5	☐	10.000	9.999	229483.60	2.3156	P	0.4
6	☐	2.000					

y = 0.2315 * x + 2.4806E-004

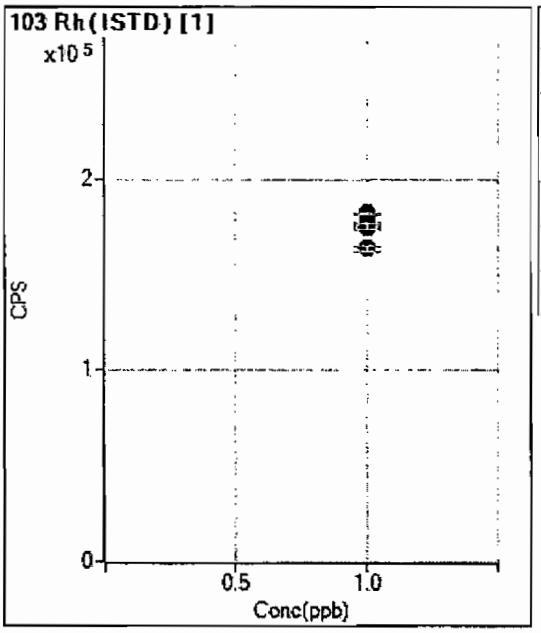
R = 1.0000

DL = 0.001826

BEC = 0.001071

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		163571.29		P	1.3
2	☐	1.000		177427.74		P	0.5
3	☐	1.000		181965.31		P	0.2
4	☐	1.000		175114.40		P	0.3
5	☐	1.000		175012.90		P	1.3
6	☐	1.000					

Header Information for Analytical Run: Hg111115-1

Analyst: Sheri Lafferty

Standards:

Stock A: 10ppm (ST110725-1)
Stock B: 10ppm (ST110725-2)
Daily standards made by diluting stock solution 100X

Reagents:

See digestion log

Pipettes Used:

M-57 ----- 0.01mL to 0.1mL
M-61 ----- 0.1mL to 1.0mL
M-1010---1.0mL to 5.0mL

Method of Dilution:

2X------Dilution made by diluting 5.0ml of sample to 10ml final volume.
5X-------Dilution made by diluting 2.0ml of sample to 10ml final volume
10X-----Dilution made by diluting 1.0ml of sample to 10ml final volume
20X-----Dilution made by diluting 0.5ml of sample to 10ml final volume
50X-----Dilution made by diluting 0.2ml of sample to 10ml final volume
100X---Dilution made by diluting 0.1ml of sample to 10ml final volume
500X---Dilution made by diluting a 5X dilution 100X
1000X-Dilution made by diluting a 10X dilution 100X

Daily Maintenance:

1. Check/ Change peristalic pump tubing
2. Check gas liquid seperator for deposits, clean if necessary
3. Check/ Refill rinse water & stannous chloride reservoirs

Daily Maintenance done by: SL

Monthly Maintenance:

1. Check/ Clean sample and reference cells
2. Check/ Change Nafion cartridge

Monthly Maintenance done by: SL 10/20/2011

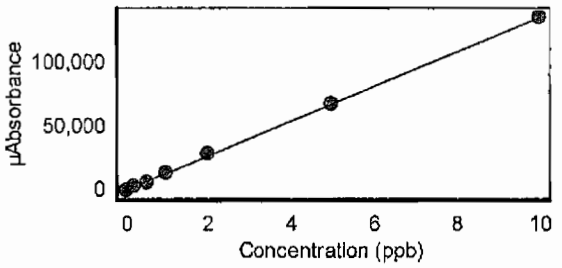
Report Generated By CETAC QuickTrace
Analyst: sheri.lafferty
Worksheet file: C:\Program Files\QuickTrace\Worksheets\HG111115-1.wsz
Date Started: 11/16/2011 10:40:36 AM
Comment:

Results

Sample Name					Type	Date/Time	Conc (ppb)	%RSD	Flags
Calibration Blank					STD	11/16/11 12:11:28 pm	0.00000	0.71	
Replicates	346.7	343.6	346.5	349.7					
Standard #1 (0.20 ppb)					STD	11/16/11 12:13:36 pm	0.20000	0.42	
Replicates	3016.9	3028.7	3037.9	3046.7					
Standard #2 (0.50 ppb)					STD	11/16/11 12:15:45 pm	0.50000	0.38	
Replicates	6810.1	6837.2	6857.1	6869.8					
Standard #3 (1.0 ppb)					STD	11/16/11 12:17:53 pm	1.00000	0.40	
Replicates	13390.6	13449.1	13490.0	13514.9					
Standard #4 (2.0 ppb)					STD	11/16/11 12:20:03 pm	2.00000	0.49	
Replicates	28154.9	28297.5	28402.1	28477.6					
Standard #5 (5.0 ppb)					STD	11/16/11 12:22:13 pm	5.00000	0.50	
Replicates	68063.0	68423.6	68679.4	68854.0					
Standard #6 (10.0 ppb)					STD	11/16/11 12:24:24 pm	10.00000	0.44	
Replicates	134749.9	135371.1	135801.1	136121.3					

Calibration

Equation: A = 401.984 + 13541.120C
R2: 0.99991
SEE: 513.7018
Flags:



~~ICV~~					~~ICV~~	~~11/16/11 12:26:35 pm~~	~~0.01130~~	~~2.19~~	~~Q~~
~~Replicates~~	~~250.0~~	~~249.6~~	~~245.6~~	~~243.8~~					
% Recovery	-1.13								

DO NOT USE
SL 11.16.11

Sample Name					Type	Date/Time	Conc (ppb)	%RSD	Flags
SV 11-16-11 ~~Single:~~ ICV					UNK	11/16/11 12:35:34 pm	1.03000	0.40	
	Replicates	14336.2	14401.5	14440.7	14468.2				
ICB					ICB	11/16/11 12:37:52 pm	-0.00030	0.59	
	Replicates	395.2	398.2	400.9	397.3				
CRA					UNK	11/16/11 12:39:59 pm	0.19900	0.38	
	Replicates	3078.1	3093.5	3100.2	3104.6				
HG111115-1MB					UNK	11/16/11 12:42:06 pm	-0.00166	0.55	
	Replicates	376.9	378.5	381.3	381.1				
HG111115-1LCS					UNK	11/16/11 12:44:14 pm	1.00000	0.47	
	Replicates	13872.5	13935.3	13985.0	14023.9				
1111094-1					UNK	11/16/11 12:46:22 pm	-0.00810	0.59	
	Replicates	291.3	290.9	292.3	294.8				
1111094-1D					UNK	11/16/11 12:48:31 pm	-0.00612	0.76	
	Replicates	317.8	316.7	319.5	322.3				
1111094-1L 5X					UNK	11/16/11 12:50:39 pm	-0.00383	0.47	
	Replicates	349.0	348.6	350.7	352.1				
1111094-1MS					UNK	11/16/11 12:52:48 pm	2.07000	0.45	
	Replicates	28248.5	28369.5	28469.3	28546.4				
1111094-1MSD					UNK	11/16/11 12:54:57 pm	2.03000	0.54	
	Replicates	27673.8	27823.9	27939.2	28020.6				
1111094-5					UNK	11/16/11 12:57:07 pm	-0.00943	1.19	
	Replicates	269.4	276.3	276.0	275.3				
1111094-8					UNK	11/16/11 12:59:16 pm	-0.00752	0.85	
	Replicates	297.0	301.0	299.7	303.1				

Sample Name					Type	Date/Time	Conc (ppb)	%RSD	Flags
CCV					UNK	11/16/11 01:01:27 pm	2.08000	0.46	
	Replicates	28456.8	28595.1	28695.9	28760.1				
CCB					UNK	11/16/11 01:03:37 pm	-0.00431	0.68	
	Replicates	341.9	342.0	343.5	346.9				
1111094-11					UNK	11/16/11 01:05:44 pm	-0.00718	2.41	
	Replicates	297.8	299.6	308.3	313.3				
1111094-13					UNK	11/16/11 01:07:51 pm	-0.00743	1.05	
	Replicates	305.9	301.0	298.5	300.3				
1111094-14					UNK	11/16/11 01:09:58 pm	-0.00767	1.08	
	Replicates	294.4	299.5	301.8	296.8				
1111162-16					UNK	11/16/11 01:12:06 pm	0.00039	0.45	
	Replicates	404.9	408.7	408.7	407.0				
1111017-1					UNK	11/16/11 01:14:14 pm	-0.01620	1.77	
	Replicates	179.9	179.8	185.1	185.8				
1111017-3					UNK	11/16/11 01:16:22 pm	0.00942	0.18	
	Replicates	528.8	528.6	530.1	530.6				
1111017-4					UNK	11/16/11 01:18:30 pm	0.02190	0.84	
	Replicates	692.9	696.6	699.5	706.8				
1111017-6					UNK	11/16/11 01:20:39 pm	0.05990	0.53	
	Replicates	1206.0	1210.1	1217.8	1219.6				
1111017-8					UNK	11/16/11 01:22:48 pm	-0.02360	1.75	
	Replicates	80.4	83.5	82.8	81.1				
1111040-1					UNK	11/16/11 01:24:58 pm	0.04350	0.50	
	Replicates	986.5	989.4	992.7	998.1				

Sample Name					Type	Date/Time	Conc (ppb)	%RSD	Flags
CCV					UNK	11/16/11 01:27:07 pm	1.92000	0.64	
	Replicates	26176.0	26342.7	26467.5	26567.7				
CCB					UNK	11/16/11 01:29:17 pm	-0.01680	1.27	
	Replicates	175.4	176.7	172.2	172.4				
1111040-3					UNK	11/16/11 01:31:24 pm	-0.01150	2.16	
	Replicates	240.1	242.4	250.3	250.2				
1111040-4					UNK	11/16/11 01:33:31 pm	-0.01020	1.52	
	Replicates	260.8	261.2	267.7	268.2				
1111040-5					UNK	11/16/11 01:35:39 pm	-0.00532	0.87	
	Replicates	326.8	328.8	330.9	333.5				
1111040-7					UNK	11/16/11 01:37:46 pm	0.10000	0.72	
	Replicates	1743.2	1751.3	1765.1	1770.9				
1111051-1					UNK	11/16/11 01:39:54 pm	-0.02180	2.46	
	Replicates	103.3	108.4	108.3	104.6				
1111051-2					UNK	11/16/11 01:42:02 pm	-0.03280	6.18	
	Replicates	-38.4	-41.5	-44.7	-42.2				
1111104-1					UNK	11/16/11 01:44:11 pm	-0.02750	2.80	
	Replicates	29.9	30.9	29.0	30.6				
CRA					UNK	11/16/11 01:46:20 pm	0.17900	0.60	
	Replicates	2806.2	2823.3	2833.5	2846.2				
CCV					UNK	11/16/11 01:48:29 pm	1.97000	0.64	
	Replicates	26865.9	27034.9	27168.3	27262.0				
CCB					UNK	11/16/11 01:50:38 pm	-0.01350	2.33	
	Replicates	225.9	221.5	217.0	214.2				

Header Information for Analytical Run: Hg111118-1

Analyst: Sheri Lafferty

Standards:

Stock A: 10ppm (ST110725-1)
Stock B: 10ppm (ST110725-2)
Daily standards made by diluting stock solution 100X

Reagents:

See digestion log

Pipettes Used:

M-57 ---- 0.01mL to 0.1mL
M-61 ----- 0.1mL to 1.0mL
M-1010---1.0mL to 5.0mL

Method of Dilution:

2X-------Dilution made by diluting 5.0ml of sample to 10ml final volume.
5X------Dilution made by diluting 2.0ml of sample to 10ml final volume
10X----Dilution made by diluting 1.0ml of sample to 10ml final volume
20X----Dilution made by diluting 0.5ml of sample to 10ml final volume
50X----Dilution made by diluting 0.2ml of sample to 10ml final volume
100X---Dilution made by diluting 0.1ml of sample to 10ml final volume
500X---Dilution made by diluting a 5X dilution 100X
1000X-Dilution made by diluting a 10X dilution 100X

Daily Maintenance:

1. Check/ Change peristalic pump tubing
2. Check gas liquid seperator for deposits, clean if necessary
3. Check/ Refill rinse water & stannous chloride reservoirs

Daily Maintenance done by: SL

Monthly Maintenance:

1. Check/ Clean sample and reference cells
2. Check/ Change Nafion cartridge

Monthly Maintenance done by: SL 10/20/2011

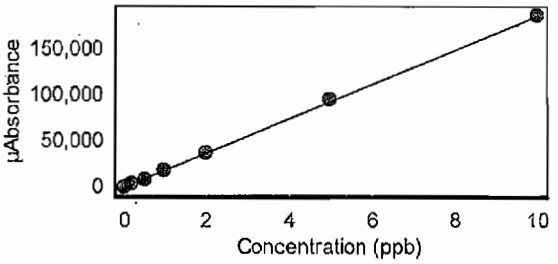
Report Generated By CETAC QuickTrace
Analyst: sheri.lafferty
Worksheet file: C:\Program Files\QuickTrace\Worksheets\HG111118-1.wsz
Date Started: 11/18/2011 9:20:46 AM
Comment:

Results

Sample Name					Type	Date/Time	Conc (ppb)	%RSD	Flags
Calibration Blank					STD	11/22/11 08:23:43 am	0.00000	11.04	
Replicates	16.7	18.9	21.6	18.0					
Standard #1 (0.20 ppb)					STD	11/22/11 08:25:51 am	0.20000	0.34	
Replicates	3613.5	3625.1	3634.0	3642.7					
Standard #2 (0.50 ppb)					STD	11/22/11 08:27:59 am	0.50000	0.34	
Replicates	8730.7	8764.3	8784.8	8800.2					
Standard #3 (1.0 ppb)					STD	11/22/11 08:30:08 am	1.00000	0.41	
Replicates	18348.2	18431.6	18486.8	18519.9					
Standard #4 (2.0 ppb)					STD	11/22/11 08:32:18 am	2.00000	0.43	
Replicates	37462.1	37622.1	37755.2	37836.6					
Standard #5 (5.0 ppb)					STD	11/22/11 08:34:28 am	5.00000	0.40	
Replicates	95038.2	95457.9	95744.4	95920.3					
Standard #6 (10.0 ppb)					STD	11/22/11 08:36:38 am	10.00000	0.42	
Replicates	185560.0	186391.2	186961.5	187345.3					

Calibration

Equation: A = 26.143 + 18740.900C
R2: 0.99984
SEE: 956.5662
Flags:



ICV					ICV	11/22/11 08:38:49 am	1.01000	0.41	
Replicates	18873.7	18950.0	19012.7	19050.9					
% Recovery	101.09								

Sample Name					Type	Date/Time	Conc (ppb)	%RSD	Flags
ICB					ICB	11/22/11 08:41:01 am	-0.00149	207.01	
	Replicates	3.3	-2.0	-2.9	-5.3				
CRA					UNK	11/22/11 08:43:08 am	0.19500	0.40	
	Replicates	3655.9	3677.6	3683.5	3689.8				
HG111118-1MB					UNK	11/22/11 08:45:16 am	-0.00009	2.80	
	Replicates	24.2	23.9	24.3	25.4				
HG111118-1LCS					UNK	11/22/11 08:47:23 am	0.96100	0.40	
	Replicates	17945.0	18022.4	18074.0	18111.3				
HG111118-2MB					UNK	11/22/11 08:49:31 am	-0.00015	8.64	
	Replicates	26.0	22.4	21.3	23.8				
HG111118-2LCS					UNK	11/22/11 08:51:40 am	0.90800	0.40	
	Replicates	16964.8	17034.6	17085.5	17119.9				
1111160-2					UNK	11/22/11 08:53:48 am	0.14500	0.43	
	Replicates	2734.8	2744.3	2757.9	2760.1				
1111160-3					UNK	11/22/11 08:55:57 am	0.15200	0.46	
	Replicates	2857.5	2867.3	2881.4	2886.8				
1111160-3D					UNK	11/22/11 08:58:06 am	0.15500	0.34	
	Replicates	2915.3	2929.0	2935.4	2937.0				
1111160-3L 5X					UNK	11/22/11 09:00:16 am	0.03130	0.40	
	Replicates	611.6	609.1	611.5	615.1				
1111160-3MS					UNK	11/22/11 09:02:25 am	2.13000	0.43	
	Replicates	39787.7	39969.9	40096.4	40179.5				
CCV					UNK	11/22/11 09:04:35 am	2.01000	0.45	
	Replicates	37430.8	37610.8	37732.8	37818.4				

11-22-11 JS

Sample Name					Type	Date/Time	Conc (ppb)	%RSD	Flags
CCB					UNK	11/22/11 09:06:46 am	-0.00211	29.50	
	Replicates	-9.3	-12.2	-13.5	-18.8				
1111160-3MSD					UNK	11/22/11 09:08:53 am	2.11000	0.49	
	Replicates	39379.7	39577.3	39729.3	39826.8				
1111160-4					UNK	11/22/11 09:11:00 am	0.15700	0.41	
	Replicates	2955.4	2967.5	2974.7	2984.6				
1111160-5					UNK	11/22/11 09:13:07 am	0.19600	0.46	
	Replicates	3678.8	3691.5	3704.7	3718.3				
1111160-6					UNK	11/22/11 09:15:15 am	0.20800	0.46	
	Replicates	3898.0	3917.0	3928.4	3940.8				
1111160-7					UNK	11/22/11 09:17:23 am	0.45000	0.50	
	Replicates	8403.0	8445.0	8479.0	8500.4				
1111160-8					UNK	11/22/11 09:19:31 am	0.45400	0.40	
	Replicates	8497.5	8533.8	8560.4	8576.6				
1111160-9					UNK	11/22/11 09:21:39 am	0.42700	0.41	
	Replicates	7996.4	8024.5	8049.2	8073.9				
1111160-10					UNK	11/22/11 09:23:48 am	0.53100	0.53	
	Replicates	9907.0	9962.5	10002.3	10028.9				
1111160-11					UNK	11/22/11 09:25:57 am	0.56200	0.45	
	Replicates	10499.6	10548.9	10584.3	10608.8				
1111160-12					UNK	11/22/11 09:28:07 am	0.46600	0.44	
	Replicates	8711.6	8752.7	8783.0	8800.0				
CCV					UNK	11/22/11 09:30:16 am	2.01000	0.48	
	Replicates	37475.3	37657.6	37792.7	37896.1				

SL 11-22-11

Sample Name					Type	Date/Time	Conc (ppb)	%RSD	Flags
CCB					UNK	11/22/11 09:32:26 am	-0.00192	20.11	
	Replicates	-7.1	-9.5	-11.1	-11.5				
1111160-13					UNK	11/22/11 09:34:33 am	0.31100	0.52	
	Replicates	5812.7	5844.7	5866.2	5882.7				
1111160-14					UNK	11/22/11 09:36:40 am	0.87100	0.45	
	Replicates	16257.4	16330.5	16384.6	16430.0				
1111160-15					UNK	11/22/11 09:38:48 am	0.17800	0.41	
	Replicates	3349.9	3364.2	3373.9	3381.8				
1111162-1					UNK	11/22/11 09:40:55 am	0.16600	0.47	
	Replicates	3114.3	3128.7	3139.9	3148.2				
1111162-1D					UNK	11/22/11 09:43:03 am	0.16300	0.39	
	Replicates	3069.0	3081.6	3090.5	3097.0				
1111162-1L 5X					UNK	11/22/11 09:45:11 am	0.03430	0.74	
	Replicates	661.1	668.0	671.1	671.9				
1111162-1MS					UNK	11/22/11 09:47:20 am	2.11000	0.49	
	Replicates	39235.3	39429.7	39577.2	39683.5				
1111162-1MSD					UNK	11/22/11 09:49:29 am	2.12000	0.47	
	Replicates	39501.9	39696.7	39835.0	39931.9				
1111162-2					UNK	11/22/11 09:51:38 am	0.17300	0.49	
	Replicates	3256.9	3271.9	3283.6	3293.9				
1111162-3					UNK	11/22/11 09:53:47 am	0.20300	0.48	
	Replicates	3803.2	3825.1	3838.0	3844.6				
CCV					UNK	11/22/11 09:55:57 am	2.01000	0.57	
	Replicates	37411.5	37645.2	37815.5	37893.3				

11-22-11

Sample Name					Type	Date/Time	Conc (ppb)	%RSD	Flags
CCB					UNK	11/22/11 09:58:07 am	-0.00244	31.58	
	Replicates	-14.7	-15.1	-20.6	-27.9				
1111162-4					UNK	11/22/11 10:00:14 am	0.40900	0.53	
	Replicates	7638.6	7682.8	7714.4	7730.6				
1111162-5					UNK	11/22/11 10:02:21 am	0.43700	0.46	
	Replicates	8173.8	8214.7	8238.6	8263.2				
1111162-6					UNK	11/22/11 10:04:29 am	0.58600	0.52	
	Replicates	10940.2	10996.3	11035.4	11074.1				
1111162-7					UNK	11/22/11 10:06:36 am	0.34400	0.55	
	Replicates	6426.7	6463.3	6491.5	6508.7				
1111162-8					UNK	11/22/11 10:08:44 am	0.08900	0.41	
	Replicates	1684.2	1694.0	1699.6	1698.5				
1111162-9					UNK	11/22/11 10:10:52 am	0.09960	0.55	
	Replicates	1878.2	1891.2	1897.5	1901.9				
1111162-10					UNK	11/22/11 10:13:01 am	0.15900	0.51	
	Replicates	2994.8	3008.7	3021.3	3030.1				
1111162-11					UNK	11/22/11 10:15:10 am	0.06780	0.47	
	Replicates	1289.6	1296.3	1298.2	1304.4				
1111162-12					UNK	11/22/11 10:17:19 am	0.09160	0.42	
	Replicates	1732.8	1741.2	1746.9	1749.4				
1111162-13					UNK	11/22/11 10:19:28 am	0.11900	0.49	
	Replicates	2244.5	2254.8	2261.6	2270.6				
CCV					UNK	11/22/11 10:21:38 am	2.00000	0.60	
	Replicates	37273.5	37518.2	37679.0	37796.4				

11-22-11 SL

Sample Name					Type	Date/Time	Conc (ppb)	%RSD	Flags
CCB					UNK	11/22/11 10:23:48 am	-0.00116	80.18	
	Replicates	7.8	6.2	3.8	-0.3				
1111162-14					UNK	11/22/11 10:25:55 am	0.16000	0.54	
	Replicates	3007.6	3026.3	3036.4	3045.6				
1111162-15					UNK	11/22/11 10:28:03 am	0.22200	0.57	
	Replicates	4150.5	4176.8	4194.4	4204.9				
CRA					UNK	11/22/11 10:30:11 am	0.19300	0.68	
	Replicates	3620.7	3643.5	3665.5	3676.5				
CCV					UNK	11/22/11 10:32:18 am	2.00000	0.55	
	Replicates	37225.9	37335.8	37488.5	37700.8				
CCB					UNK	11/22/11 10:34:26 am	-0.00233	15.98	
	Replicates	-13.5	-18.4	-18.0	-20.0				

11-22-11 JS

Miscellaneous

METALS DIGESTION WORKSHEET

ALS Laboratory Group

Digestion Date 11/16/11 | HCl Lot No. K29026 | Method: 3005 | Beaker Lot No. 10/2120 | Initial Prep BAS | Final Prep BAS

Digestion Batch IP111116-4 | HNO_3 Lot No. K23022 | SOP/Rev: SOP 015 | Avg. Beaker Wt. (g) 9.3 | Prep Start Time 1400 | Prep End Time 1800

Temp 95 °C | Peroxide Lot No. — | Balance(s): 30 | Pipet(s): M-70 | Digestate Wt. (g) 57.18

Form 805r20.xls (02/10/11)

Note: Each Page is copied as completed and included with the workorder/run documentation; reviewed subsequently

QC Grp	Lab Sample ID	Instrument	Init Vol/Wt (mL / g)	Final Vol. (mL)	Final Wt. (g)	pH	Comments, including metals list
	111137-1	TX/MS	50.0	50.0	60.5	<2	137, 138, 140 - MS: Al, Sb, Tl
	111138-1	↓	↓	↓	↓	↓	- TK: 19 Targets
	111140-1						
	111160-1						160, 162 - MS 14
	111162-16	↓					- TK: 24 Targets
	111185-13	TK					
	-13D	TX/MS					185 - TK: TAL
	-13MS	↓					
	-13MSD	↓					205 - MS: Cu, Ag
	-24	TK					- TK: 15 Targets
	-25	↓					
	-26						
	-27						
	-28						
	-29						
	-30						
	-31						
	-32						
	-33						
	-34						
	↓ -35	↓					
	111205-1	TX/MS					
	↓ -2	↓					
	IP111116-4MB						
	-4LCS						
	↓ -4RVS						
	IM111116-4LCS						
	↓ -4RVS	↓	↓	↓	↓	↓	

QC Grp	Lab Sample ID	Init Vol/Wt (mL / g)	Final Vol. (mL)	Final Wt. (g)

Spiking Information

QC	Amount
ST110727-2	.5mL RVS MS
ST111006-1	.5mL MS
ST110103-9	.5mL RVS TR
ST110902-2	.5mL C
ST110916-7	1mL Z
ST111116-1	1mL Cal

411699

METALS DIGESTION WORKSHEET

ALS Laboratory Group

Digestion Date 11-17-11 | HCl Lot No. K29026 | Method: 3050 | Beaker Lot No. 110533 | Initial Prep BAS | Final Prep BAS

Digestion Batch IP111117-2 | HNO_3 Lot No. K23022 | SOP/Rev: 806R15 | Avg. Beaker Wt. (g) 20.9 | Prep Start Time 0900 | Prep End Time 1700

Temp 95 °C | Peroxide Lot No. H12J004 | Balance(s): 30 | Pipet(s): M-70 | Digestate Wt. (g) 105.11

Form 805r20.xls (02/10/11)

Note: Each Page is copied as completed and included with the workorder/run documentation; reviewed subsequently

QC Grp	Lab Sample ID	Instrument	Init Vol/Wt (mL / g)	Final Vol. (mL)	Final Wt. (g)	pH	Comments, including metals list
	1110371-1	MS	50.0	100.0	126.6	NA	0371 & 1008 - MS: As, Ba, Cd, Cr, Pb, Se, Ag
	1111008-1		Lims				
	-2						1162-MS; 4
	1111162-1	TR/MS					- TR: 24 Targets
	-1D						
	-1MS						
	-1MSD						
	-2						
	-3						
	-4						
	-5						
	-6						
	-7						
	-8						
	-9						
	-10						
	-11						
	-12						
	-13						
	-14						
	-15						
	IP111117-2MB						
	-2LCS						
	-2RVS						
	IM111117-2LCS						
	-2RVS						

QC Grp	Lab Sample ID	Init Vol/Wt. (mL / g)	Final Vol. (mL)	Final Wt. (g)

Spiking Information

QC	Amount
ST110727-2	1 mL RVS MS
ST111006-1	1 mL MS
ST110103-9	1 mL RVS TR
ST110902-2	1 mL C
ST110916-7	2 mL Z
ST111116-1	2 mL Cat

MERCURY DIGESTION - WATER/TCLP

Method 7470 SOP 812/Rev 15 Date Analyzed 11-16-11 File HG111115-1 *** Init. AA (prep.) AA (analysis)

Digestion Date 11-15-11 Spike Witness N/A Time Start 0930 Time Finish 1000 Bath Temp 95 °C

Tube #	Solution ID	Spike * Solution	Spike Volume (mL)	Final ** Volume (mL)	Comments
STD 1	0 ppb	-	-	20.0	
2	0.2 ppb	A	0.04	20.0	
3	0.5 ppb	A	0.1	20.0	
4	1.0 ppb	A	0.2	20.0	
5	2.0 ppb	A	0.4	20.0	
6	5.0 ppb	A	1.0	20.0	
7	10.0 ppb	A	2.0	20.0	
	ICV	B	0.2	20.0	
	ICB	-	-	20.0	
	CRA-0.2 ppb	A	0.04	20.0	
	IPC (245.1 only)	A	0.4	20.0	
	SAMPLES – **Prep. Batch ID(s)** HG111115-1				(see LIMs Prep. Batch report for sample info. (IDs, Aliquots, etc.)
	CCVs	A	0.4	20.0	3 # prepared
	CCBs	-	-	20.0	3 # prepared

*** See run report for run log information.

** Laboratory DI water used to make-up to final volume.

*A: 100 ppb Hg solution made from 100x dilution (1 mL/100 mL) of ST110725-1 ID

*B: 100 ppb Hg solution made from 100x dilution (1 mL/100 mL) of ST110725-2 ID (2nd source)

See run header for maintenance performed.

Digestion Cups: 1107181

Reagents: H_2SO_4 51144 HNO_3 K23022 $KMnO_4$- RG111114-1 $K_2S_2O_8$- RG111014-1

SnCl- RG111114-7 Hydroxylamine RG111114-2

Balance(s) Used: SL 11-16-11 MAS 29

Pipet(s) Used: M57 M61

Note: Each page is copied as completed and included with the workorder/run documentation; reviewed subsequently.

407975

MERCURY DIGESTION - SOIL

Method 7471 SOP 812/Rev 5 Date Analyzed 11.22.11 File HG111118-1 *** Init. AJ (prep.) AJ (analysis)

Digestion Date 11.18.11 Spike Witness N/A Time Start 0900 Time Finish ~~1400~~ 0930 BL 11.18.11 Bath Temp 95 °C

Tube #	Solution ID	Spike * Solution	Spike Volume (mL)	Sample **** Aliquot (g)	Final ** Volume (mL)	Comments
STD 1	0 ppb	-	-	-	100.0	
2	0.2 ppb	A	0.2	-	100.0	
3	0.5 ppb	A	0.5	-	100.0	
4	1.0 ppb	A	1.0	-	100.0	
5	2.0 ppb	A	2.0	-	100.0	
6	5.0 ppb	A	5.0	-	100.0	
7	10.0 ppb	A	10.0	-	100.0	
	ICV	B	1.0	-	100.0	
	ICB	-	-	-	100.0	
	CRA-0.2 ppb	A	0.2	-	100.0	
	SAMPLES -- **Prep. Batch ID(s)** HG111118-1					(see LIMs Prep. Batch report for sample info. (IDs, Aliquots, etc.)
	CCVs	A	2.0	-	100.0	3 # prepared
	CCBs	-	-	-	100.0	3 # prepared

**** Automated balance entry into LIMS.

*** See run report for run log information.

** Laboratory DI water used to make-up to final volume.

*A: 100 ppb Hg solution made from 100x dilution (1 mL/100 mL) of ST110725-1 ID

*B: 100 ppb Hg solution made from 100x dilution (1 mL/100 mL) of ST110725-2 ID (2nd source)

See run header for maintenance performed.

Digestion Cups: 1105331

Reagents: HNO_3 K23022 HCl K29026 SnCl- R611114-7 $KMnO_4$- R611114-1 Hydroxylamine R611114-2

Balance(s) Used: 29

Pipet(s) Used: M57 M61 M1010

Note: Each page is copied as completed and included with the workorder/run documentation; reviewed subsequently

Percent Moisture

Method SOP642 Revision 9

Lab Name: ALS Environmental -- FC

Balance ID: 31

Date Extracted: 11/30/2011 **Oven ID:** 17 **Validated By:** tdc

Date Analyzed: 11/30/2011 **In Oven:** 11/29/2011 15:28 **Validation Date:** 11/30/2011

Analyst: Tanya D. Cleveland **Out of Oven:** 11/30/2011 8:55 **Validation Time:** 9:14:05 AM

Run ID	Prep Batch ID	QC Batch ID	Lab ID	QC Type	Dish Wt	Wet Wt	Dry Wt	Dry Wt-Dish Wt	Percent Moisture	Percent Solids	RPD
EX111129-4a	EX111129-4	EX111129-4-1	1111162-1	DUP	1.304	10.36	10.81	9.51	8.2	91.8	1
EX111129-4a	EX111129-4	EX111129-4-1	1111162-1	SMP	1.298	10.53	10.98	9.68	8.1	91.9	
EX111129-4a	EX111129-4	EX111129-4-1	1111162-10	SMP	1.286	10.45	10.7	9.41	9.9	90.1	
EX111129-4a	EX111129-4	EX111129-4-2	1111162-11	DUP	1.306	10.55	11.25	9.95	5.7	94.3	2
EX111129-4a	EX111129-4	EX111129-4-2	1111162-11	SMP	1.307	10.53	11.22	9.91	5.9	94.1	
EX111129-4a	EX111129-4	EX111129-4-2	1111162-12	SMP	1.303	10.71	11.31	10.01	6.5	93.5	
EX111129-4a	EX111129-4	EX111129-4-2	1111162-13	SMP	1.313	10.03	10.35	9.03	10.0	90.0	
EX111129-4a	EX111129-4	EX111129-4-2	1111162-14	SMP	1.31	10.49	10.75	9.44	10.0	90.0	
EX111129-4a	EX111129-4	EX111129-4-2	1111162-15	SMP	1.3	10.42	11.03	9.73	6.5	93.5	
EX111129-4a	EX111129-4	EX111129-4-1	1111162-2	SMP	1.31	10.11	10.48	9.17	9.3	90.7	
EX111129-4a	EX111129-4	EX111129-4-1	1111162-3	SMP	1.307	10.06	10.45	9.14	9.2	90.8	
EX111129-4a	EX111129-4	EX111129-4-1	1111162-4	SMP	1.311	10.29	11.01	9.70	5.8	94.2	
EX111129-4a	EX111129-4	EX111129-4-1	1111162-5	SMP	1.304	10.14	11.03	9.72	4.1	95.9	
EX111129-4a	EX111129-4	EX111129-4-1	1111162-6	SMP	1.307	10.06	10.97	9.66	4.0	96.0	
EX111129-4a	EX111129-4	EX111129-4-1	1111162-7	SMP	1.302	10.34	11.3	9.99	3.3	96.7	
EX111129-4a	EX111129-4	EX111129-4-1	1111162-8	SMP	1.313	10.03	10.83	9.52	5.1	94.9	
EX111129-4a	EX111129-4	EX111129-4-1	1111162-9	SMP	1.301	10.29	10.61	9.31	9.5	90.5	
EX111129-4a	EX111129-4	EX111129-4-1	EX111129-4	MB	1.306	1.306	1.306	0.00	100.0	0.0	
EX111129-4a	EX111129-4	EX111129-4-2	EX111129-4	MB	1.306	1.306	1.306	0.00	100.0	0.0	

QC Types

CAR	Carrier reference sample
LCS	Laboratory Control Sample
MB	Method Blank
MSD	Laboratory Matrix Spike Duplicate
RVS	Reporting Level Verification Standar
SYS	Sample Yield Spike

DUP	Laboratory Duplicate
LCSD	Laboratory Control Sample Duplicat
MS	Laboratory Matrix Spike
REP	Sample replicate
SMP	Field Sample

Comments:

DUP = Sample Duplicate
Wet Wt = Sample Wet Wt - Dish Wt
Dry Wt = Sample Dry Wt + Dish Wt
Dry Wt - Dish Wt = Sample Dry Wt - Dish Wt
All weight values shown above are expressed in grams.

$$RPD = \frac{(\text{Sample Value - Duplicate Value})}{2} \times 100$$

$$\%\ Solids = \frac{\text{Dry Weight}}{\text{Wet Weight}} \times 100$$

$$\%\ Moisture = \frac{(\text{Wet Weight - Dry Weight})}{\text{Wet Weight}} \times 100$$

APPENDIX E

LABORATORY DATA VALIDATION PACKAGES

Review of Dysart # 2 site analytical data (Eberline Analytical Data Package 11-11065)

Data Validation

The subject data package was reviewed and the data appear valid.
The data package contained analytical results for 16 soil samples including one lab duplicate. The lab blanks and spikes for the data package were within tolerances, and MDA's for all results were acceptable. The data package indicated a minimum 21 day holding time to allow for the ingrowth of radon daughters, and analytical results were reported for daughters of U-238 (Ra-226), Th-232, and K-40.

Data Description

The data package contained ten samples from the mine site including one field duplicate identified as DY2 samples, and one sample from a location identified as MD.
The data package also contained samples from four background locations; east, north, south, and west. Background concentrations for Ra-226, U-238, and Th-232 in all three samples appeared to be similar to that expected for background concentrations in this area, with the Ra-226 ranging from 2.0 to 3.3 pCi/g. The average Ra-226 concentration was 2.4 pCi/g, and the standard deviation of these four results was 0.6 pCi/g. Three times the average concentration is then 7.2 pCi/g. The average concentration plus 2 standard deviations is then 3.6 pCi/g. Therefore, the criteria to which the site samples will be compared is the lessor of these values or 3.6 pCi/g.

Data Interpretation

Ra-226 concentrations in samples collected from this site ranged from 5.9 to 149 pCi/g, and therefore all exceeded the criteria. U-238 concentrations in all samples appeared to be at concentrations indicative of uranium ore, and not tailings.
Th-232concentrations in all samples were indicative of normal background levels.

Note that Ra-226 concentrations are based on laboratory analytical results for Bi-214, U-234 concentrations are based on analytical results for Th-234, and Th-232 concentrations are based on analytical results for Ac-228.

Conclusion

Based on gamma isotopic analytical results of Ra-226, it can be concluded that an Observed Release was identified on the Dysart # 2 site. There is no apparent need to perform alpha spectrometry analyses on these samples.

DATA QUALITY ASSURANCE REVIEW

SITE NAME	Dysart #2 Uranium Mine ORS		
WORK ORDER NUMBER	20406.012.035.0672.01	TDD NUMBER	TO-0035-11-09-01
PROJECT NUMBER		SDG NUMBER	1111162

Weston Solutions, Inc. (WESTON®) has completed a QA review for Work Order Number 20406.012.035.0672.01, SDG No. 1111162, Dysart #2 Uranium Mine ORS. Sixteen samples were analyzed for metals by ALS Environmental, Inc. Sample numbers are listed below.

SAMPLE NUMBERS

DY2-11-31-111109	DY2-17-31-111109	DY2-17-32-111109
DY2-32-31-111109	DY2-33-31-111109	DY2-41-31-111109
DY2-44-31-111109	DY2-48-31-111109	DY2-65-31-111109
DY2-77-31-111109	DY2-BKGD-E-31-111109	DY2-BKGD-N-31-111109
DY2-BKGD-S-31-111109	DY2-BKGD-W-31-111109	MD-01-31-111109
ST1-01-111108		

This data package was validated to determine if Quality Control (QC) specifications were achieved, following *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (October, 1999), *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (July, 2002), *USEPA Contract Laboratory Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Review* (August, 2002), *Quality Assurance/Quality Control Guidance for Removal Activities* (April, 1990), and the Regional Protocol for Holding Times, Blanks, and VOA Preservation (April 13, 1989). Specific data qualifications are listed in the following discussion.

REVIEWER	Gloria J. Switalski	DATE	January 26, 2012

Data Qualifiers

Data Qualifier Definitions were supplied by the Office of Solid Waste and Emergency Response (September 1989) and are included in the Functional Guidelines. Data qualifiers may be combined (UJ, QJ) with the corresponding combination of meanings. Additional qualifier may be added to provide additional, more specific information (JL, UB, QJK), modifying the meaning of the primary qualifier. Addition qualifiers utilized by WESTON are H, L, K, B, Q, and D.

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation or detection limit, which has been adjusted for sample weight/sample volume, extraction volume, percent solids, sample dilution or other analysis specific parameters.

An additional qualifier, "B", may be appended to indicate that while the analyte was detected in the sample, the presence of the analyte may be attributable to blank contamination and the analyte is therefore considered undetected with the sample detection or quantitation limit for the analyte being elevated.

J - The analyte was analyzed for, but the associated numerical value may not be consistent with the amount actually present in the environmental sample or may not be consistent with the sample detection or quantitation limit. The value is an estimated quantity. The data should be seriously considered for decision-making and are usable for many purposes.

An additional qualifier will be appended to the "J" qualifier that indicates the bias in the reported results:

L Low bias

H High bias

K Unknown bias

Q The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

The L and H qualifier will only be employed when a single qualification is required. When more than one quality control parameter affects the analytical result and a conflict results in assigning a bias, the result will be flagged JK.

R - Quality Control indicates that data are unusable for all purposes. The analyte was analyzed for, but the presence or absence of the analyte has not been verified. Resampling and reanalysis are necessary for verification to confirm or deny the presence of an analyte.

N - The analysis indicates the presence of analyte for which there is presumptive evidence to make a "tentative identification."

D - The concentration reported was determined in the re-analysis of the sample at a secondary dilution.

METALS DATA EVALUATION

1. Analytical Method:

Samples were prepared and analyzed for ICP metals using the procedures specified in **SW-846 Methods 3005A or 3050B/6010B or 6020A.** Samples were prepared and analyzed for mercury using the procedures specified in **SW-846 Methods 7470A or 7471A.**

2. Holding Times and Preservation:

All samples met established holding time criteria of 180 days for ICP metals and 28 days for mercury. Samples were received within 4°C±2°C. No qualifications are placed on the data.

3. Initial Calibration:

ICP initial calibration included a blank and one or more standards and initial calibration verification results fell within the control limits of 90 to 110 percent of the true values. Mercury initial calibration included a blank and six standard and initial calibration verification results fell within the control limits of 80-120 percent of the true values. No qualifications are placed on the data.

4. Continuing Calibration:

All ICP results fell within the control limits of 90% to 110% of the true values. All mercury results fell within the control limits of 80% to 120% of the true values. No qualifications are placed on the data.

5. CRDL Standard:

All results for the CRDL standard were within the control limits of 70% to 130% of the true values or the sample results were greater than the CRDL action level. No qualifications are placed on the data.

6. Blanks:

A. Laboratory Blanks:

No target analytes were detected in the calibration and preparation blanks at concentrations that warrant blank action. No qualifications are placed on the data.

B. Field Blanks:

No field blank samples were submitted with this analytical package. No qualifications are placed on the data.

7. ICP Interference Check:

All results for the Interference Check Sample were within the control limits of 80% to 120% of the true values. No qualifications are placed on the data.

8. Laboratory Control Sample (LCS):

The recoveries for the LCS were within the established control limits. No qualifications are placed on the data.

9. Duplicate Sample Analysis:

A. Laboratory Duplicate Analysis:

Sample DY2-11-31-111109 underwent matrix spike/matrix spike duplicate (MS/MSD) analysis for the soil matrix for ICP metals and mercury. QC criteria are that the Relative Percent Difference (RPD) values for the duplicate sample analysis be less than 20% for aqueous samples and less than 35% for soil samples for concentrations greater than five times the reporting limit (RL). For sample concentrations less than five times the RL, the QC criteria are within ± the RL for the aqueous matrix or ± two times the RL for the soil matrix. QC criteria were met for all analytes. No qualifications are placed on the data.

B. Field Duplicate Analysis:

The following sample pair was submitted as field duplicates for the soil matrix: DY2-17-31-111109/DY2-17-32-111109. QC criteria are that the RPD values for the field duplicate sample analysis be less than 30% for aqueous samples and less than 50% for soil samples for concentrations greater than five times the RL. For sample concentrations less than five times the RL, the QC criteria is that the absolute difference between the samples is less than two times the RL for aqueous samples or 3.5 times the RL for the soil matrix. QC criteria were met for all analytes. No qualifications are placed on the data.

10. Spiked Sample Analysis:

Sample DY2-11-31-111109 underwent MS/MSD analysis for the soil matrix for ICP metals and mercury. The spike recoveries for the following analyte were outside of the 75%-125% QC recovery limits for analytes whose sample concentration did not exceed the spike concentration by a factor of 4 times or more:

SAMPLE ID	ANALYTE	%R/%R	AFFECTED SAMPLES	QUALIFIER FLAG
DY2-11-31-111109	Antimony	60/61	All Soils	UJL

Post digestion spike recovery for antimony was acceptable indicating a possible digestion problem.

11. ICP Serial Dilution:

Sample DY2-11-31-111109 underwent serial dilution. The Percent Difference (%D) value for the following analyte exceeded QC limits of 10% for analytes with concentrations greater than 50 times their method detection limit (MDL):

SAMPLE ID	ANALYTE	%D	AFFECTED SAMPLES	QUALIFIER FLAG
DY2-11-31-111109	Potassium	27	All Soils	JK

12. Sample Quantitation and Reporting Limits:

Concentrations of all reported analytes were correctly calculated.

Some analytes in some samples were analyzed at a dilution. RL for these analytes are elevated as a result of the dilution performed.

13. Laboratory Contact

No laboratory contact was required.

14. Overall Assessment:

The antimony results in all soil samples were estimated due to low MS/MSD recoveries.

The potassium results in all soil samples were estimated due to high serial dilution %D.

The analytical data is acceptable for use with the qualifications listed above.

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental – FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-11-31-111109
Lab ID: 1111162-1

Sample Matrix: SOIL
% Moisture: 8.1
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.008 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8600	22		
7440-36-0	ANTIMONY	1	2.2	2.2	~~U~~ UJL	~~N~~
7440-38-2	ARSENIC	1	5.9	1.1		
7440-39-3	BARIUM	1	110	11		
7440-41-7	BERYLLIUM	1	0.76	0.54		
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	19000	110		
7440-47-3	CHROMIUM	1	7.4	1.1		
7440-48-4	COBALT	1	6.3	1.1		
7440-50-8	COPPER	1	11	1.1		
7439-89-6	IRON	1	19000	11		
7439-92-1	LEAD	1	12	0.32		
7439-95-4	MAGNESIUM	1	5000	110		
7439-96-5	MANGANESE	1	210	1.1		~~N~~
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	10	2.2		
7440-09-7	POTASSIUM	1	1800	110	JK	~~E~~
7782-49-2	SELENIUM	1	0.89	0.54		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	150	110		
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	17	1.1		
7440-66-6	ZINC	1	41	2.2		

Data Package ID: *IT1111162-1*

AB 1/26/12

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-17-31-111109
Lab ID: 1111162-2

Sample Matrix: SOIL
% Moisture: 9.3
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.029 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5200	21		
7440-36-0	ANTIMONY	1	2.1	2.1	~~U~~ UJL	
7440-38-2	ARSENIC	1	4.2	1.1		
7440-39-3	BARIUM	1	70	11		
7440-41-7	BERYLLIUM	1	0.54	0.54	U	
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	13000	110		
7440-47-3	CHROMIUM	1	4.5	1.1		
7440-48-4	COBALT	1	3.6	1.1		
7440-50-8	COPPER	1	6.2	1.1		
7439-89-6	IRON	1	12000	11		
7439-92-1	LEAD	1	8.6	0.32		
7439-95-4	MAGNESIUM	1	4100	110		
7439-96-5	MANGANESE	1	180	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	5.9	2.1		
7440-09-7	POTASSIUM	1	1600	110	JK	
7782-49-2	SELENIUM	1	3.1	0.54		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	21	1.1		
7440-66-6	ZINC	1	27	2.1		

Data Package ID: *IT1111162-1*

8/ 1/30/12

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-17-32-111109
Lab ID: 1111162-3

Sample Matrix: SOIL
% Moisture: 9.2
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.044 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5400	21		
7440-36-0	ANTIMONY	1	2.1	2.1	~~U~~ UJL	
7440-38-2	ARSENIC	1	4	1.1		
7440-39-3	BARIUM	1	69	11		
7440-41-7	BERYLLIUM	1	0.54	0.53		
7440-43-9	CADMIUM	1	0.53	0.53	U	
7440-70-2	CALCIUM	1	13000	110		
7440-47-3	CHROMIUM	1	4.6	1.1		
7440-48-4	COBALT	1	3.8	1.1		
7440-50-8	COPPER	1	6.4	1.1		
7439-89-6	IRON	1	12000	11		
7439-92-1	LEAD	1	8.8	0.32		
7439-95-4	MAGNESIUM	1	4300	110		
7439-96-5	MANGANESE	1	170	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	6	2.1		
7440-09-7	POTASSIUM	1	1700	110	JK	
7782-49-2	SELENIUM	1	2.1	0.53		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.3	5.3	U	
7440-62-2	VANADIUM	1	21	1.1		
7440-66-6	ZINC	1	28	2.1		

Data Package ID: *IT1111162-1*

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Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-32-31-111109
Lab ID: 1111162-4

Sample Matrix: SOIL
% Moisture: 5.8
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.029 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	4100	21		
7440-36-0	ANTIMONY	1	2.1	2.1	~~U~~ UJL	
7440-38-2	ARSENIC	1	2.3	1		
7440-39-3	BARIUM	1	18	10		
7440-41-7	BERYLLIUM	1	0.52	0.52	U	
7440-43-9	CADMIUM	1	0.52	0.52	U	
7440-70-2	CALCIUM	1	5900	100		
7440-47-3	CHROMIUM	1	1.7	1		
7440-48-4	COBALT	1	1.6	1		
7440-50-8	COPPER	1	3.2	1		
7439-89-6	IRON	1	8300	10		
7439-92-1	LEAD	1	11	0.31		
7439-95-4	MAGNESIUM	1	1600	100		
7439-96-5	MANGANESE	1	140	1		
7439-98-7	MOLYBDENUM	1	1.9	1		
7440-02-0	NICKEL	1	2.1	2.1	U	
7440-09-7	POTASSIUM	1	700	100	JK	
7782-49-2	SELENIUM	1	10	0.52		
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5.2	5.2	U	
7440-62-2	VANADIUM	1	45	1		
7440-66-6	ZINC	1	16	2.1		

Data Package ID: *IT1111162-1*

1/26/12

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-33-31-111109
Lab ID: 1111162-5

Sample Matrix: SOIL
% Moisture: 4.1
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.026G
Final Volume: 100ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	3200	20		
7440-36-0	ANTIMONY	1	2	2	~~U~~ UJL	
7440-38-2	ARSENIC	1	2.5	1		
7440-39-3	BARIUM	1	16	10		
7440-41-7	BERYLLIUM	1	0.51	0.51	U	
7440-43-9	CADMIUM	1	0.51	0.51	U	
7440-70-2	CALCIUM	1	8100	100		
7440-47-3	CHROMIUM	1	1.7	1		
7440-48-4	COBALT	1	1.5	1		
7440-50-8	COPPER	1	2.6	1		
7439-89-6	IRON	1	7300	10		
7439-92-1	LEAD	1	9.2	0.3		
7439-95-4	MAGNESIUM	1	1400	100		
7439-96-5	MANGANESE	1	150	1		
7439-98-7	MOLYBDENUM	1	1	1	U	
7440-02-0	NICKEL	1	2	2	U	
7440-09-7	POTASSIUM	1	690	100	JK	
7782-49-2	SELENIUM	1	20	0.51		
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5.1	5.1	U	
7440-62-2	VANADIUM	1	41	1		
7440-66-6	ZINC	1	14	2		

Data Package ID: *IT1111162-1*

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Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-41-31-111109
Lab ID: 1111162-6

Sample Matrix: SOIL
% Moisture: 4.0
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.014 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	4700	21		
7440-36-0	ANTIMONY	1	2.1	2.1	~~U~~ UJL	
7440-38-2	ARSENIC	1	5.5	1		
7440-39-3	BARIUM	1	24	10		
7440-41-7	BERYLLIUM	1	0.51	0.51	U	
7440-43-9	CADMIUM	1	0.51	0.51	U	
7440-70-2	CALCIUM	1	10000	100		
7440-47-3	CHROMIUM	1	3.6	1		
7440-48-4	COBALT	1	2.4	1		
7440-50-8	COPPER	1	3.4	1		
7439-89-6	IRON	1	9900	10		
7439-92-1	LEAD	1	14	0.31		
7439-95-4	MAGNESIUM	1	1800	100		
7439-96-5	MANGANESE	1	190	1		
7439-98-7	MOLYBDENUM	1	7.8	1		
7440-02-0	NICKEL	1	3.5	2.1		
7440-09-7	POTASSIUM	1	830	100	JK	
7782-49-2	SELENIUM	1	21	0.51		
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5.1	5.1	U	
7440-62-2	VANADIUM	1	53	1		
7440-66-6	ZINC	1	20	2.1		

Data Package ID: *IT1111162-1*

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Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-44-31-111109
Lab ID: 1111162-7

Sample Matrix: SOIL
% Moisture: 3.3
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.03 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	3800	20		
7440-36-0	ANTIMONY	1	2	2	~~U~~ UJL	
7440-38-2	ARSENIC	1	2.9	1		
7440-39-3	BARIUM	1	15	10		
7440-41-7	BERYLLIUM	1	0.5	0.5	U	
7440-43-9	CADMIUM	1	0.5	0.5	U	
7440-70-2	CALCIUM	1	4500	100		
7440-47-3	CHROMIUM	1	1.7	1		
7440-48-4	COBALT	1	1.3	1		
7440-50-8	COPPER	1	2.1	1		
7439-89-6	IRON	1	8700	10		
7439-92-1	LEAD	1	11	0.3		
7439-95-4	MAGNESIUM	1	1600	100		
7439-96-5	MANGANESE	1	110	1		
7439-98-7	MOLYBDENUM	1	1	1	U	
7440-02-0	NICKEL	1	2	2	U	
7440-09-7	POTASSIUM	1	690	100	JK	
7782-49-2	SELENIUM	1	13	0.5		
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5	5	U	
7440-62-2	VANADIUM	1	67	1		
7440-66-6	ZINC	1	16	2		

Data Package ID: *IT1111162-1*

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Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-48-31-111109
Lab ID: 1111162-8

Sample Matrix: SOIL
% Moisture: 5.1
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.01 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	3800	21		
7440-36-0	ANTIMONY	1	2.1	2.1	~~U~~ UJL	
7440-38-2	ARSENIC	1	4	1		
7440-39-3	BARIUM	1	62	10		
7440-41-7	BERYLLIUM	1	0.52	0.52	U	
7440-43-9	CADMIUM	1	0.52	0.52	U	
7440-70-2	CALCIUM	1	11000	100		
7440-47-3	CHROMIUM	1	3.6	1		
7440-48-4	COBALT	1	4.1	1		
7440-50-8	COPPER	1	5.5	1		
7439-89-6	IRON	1	12000	10		
7439-92-1	LEAD	1	6.9	0.31		
7439-95-4	MAGNESIUM	1	3700	100		
7439-96-5	MANGANESE	1	150	1		
7439-98-7	MOLYBDENUM	1	1	1	U	
7440-02-0	NICKEL	1	5.6	2.1		
7440-09-7	POTASSIUM	1	770	100	JK	
7782-49-2	SELENIUM	1	0.52	0.52	U	
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5.2	5.2	U	
7440-62-2	VANADIUM	1	11	1		
7440-66-6	ZINC	1	24	2.1		

Data Package ID: *IT1111162-1*

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Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-65-31-111109
Lab ID: 1111162-9

Sample Matrix: SOIL
% Moisture: 9.5
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.016 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	6100	22		
7440-36-0	ANTIMONY	1	2.2	2.2	~~U~~ VJL	
7440-38-2	ARSENIC	1	4.3	1.1		
7440-39-3	BARIUM	1	85	11		
7440-41-7	BERYLLIUM	1	0.6	0.54		
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	13000	110		
7440-47-3	CHROMIUM	1	5.4	1.1		
7440-48-4	COBALT	1	4.5	1.1		
7440-50-8	COPPER	1	8.2	1.1		
7439-89-6	IRON	1	14000	11		
7439-92-1	LEAD	1	9.4	0.33		
7439-95-4	MAGNESIUM	1	4700	110		
7439-96-5	MANGANESE	1	170	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	7.2	2.2		
7440-09-7	POTASSIUM	1	2400	110	JL	
7782-49-2	SELENIUM	1	0.68	0.54		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	15	1.1		
7440-66-6	ZINC	1	33	2.2		

Data Package ID: *IT1111162-1*

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-77-31-111109
Lab ID: 1111162-10

Sample Matrix: SOIL
% Moisture: 9.9
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.005 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	3900	22		
7440-36-0	ANTIMONY	1	2.2	2.2	~~U~~ UJL	
7440-38-2	ARSENIC	1	2.4	1.1		
7440-39-3	BARIUM	1	42	11		
7440-41-7	BERYLLIUM	1	0.55	0.55	U	
7440-43-9	CADMIUM	1	0.55	0.55	U	
7440-70-2	CALCIUM	1	8500	110		
7440-47-3	CHROMIUM	1	3.2	1.1		
7440-48-4	COBALT	1	2.4	1.1		
7440-50-8	COPPER	1	4.1	1.1		
7439-89-6	IRON	1	9100	11		
7439-92-1	LEAD	1	6.4	0.33		
7439-95-4	MAGNESIUM	1	2700	110		
7439-96-5	MANGANESE	1	150	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	3.5	2.2		
7440-09-7	POTASSIUM	1	990	110	JK	
7782-49-2	SELENIUM	1	2.1	0.55		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.5	5.5	U	
7440-62-2	VANADIUM	1	23	1.1		
7440-66-6	ZINC	1	20	2.2		

Data Package ID: *IT1111162-1*

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Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-BKGD-E-31-111109
Lab ID: 1111162-11

Sample Matrix: SOIL
% Moisture: 5.9
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A

Sample Aliquot: 1.043 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	4200	20		
7440-36-0	ANTIMONY	1	2	2	~~U~~ UJL	
7440-38-2	ARSENIC	1	3.2	1		
7440-39-3	BARIUM	1	48	10		
7440-41-7	BERYLLIUM	1	0.51	0.51	U	
7440-43-9	CADMIUM	1	0.51	0.51	U	
7440-70-2	CALCIUM	1	15000	100		
7440-47-3	CHROMIUM	1	3.6	1		
7440-48-4	COBALT	1	3.4	1		
7440-50-8	COPPER	1	4.4	1		
7439-89-6	IRON	1	9600	10		
7439-92-1	LEAD	1	6.9	0.31		
7439-95-4	MAGNESIUM	1	3900	100		
7439-96-5	MANGANESE	1	170	1		
7439-98-7	MOLYBDENUM	1	1	1	U	
7440-02-0	NICKEL	1	4.9	2		
7440-09-7	POTASSIUM	1	1300	100	JK	
7782-49-2	SELENIUM	1	0.51	0.51	U	
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-31-5	TIN	1	5.1	5.1	U	
7440-62-2	VANADIUM	1	9.5	1		
7440-66-6	ZINC	1	21	2		

Data Package ID: *IT1111162-1*

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Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-BKGD-N-31-111109
Lab ID: 1111162-12

Sample Matrix: SOIL
% Moisture: 6.5
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.003 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	6500	21		
7440-36-0	ANTIMONY	1	2.1	2.1	~~U~~ UJL	
7440-38-2	ARSENIC	1	3.8	1.1		
7440-39-3	BARIUM	1	66	11		
7440-41-7	BERYLLIUM	1	0.53	0.53	U	
7440-43-9	CADMIUM	1	0.53	0.53	U	
7440-70-2	CALCIUM	1	13000	110		
7440-47-3	CHROMIUM	1	5.4	1.1		
7440-48-4	COBALT	1	3.8	1.1		
7440-50-8	COPPER	1	6.6	1.1		
7439-89-6	IRON	1	12000	11		
7439-92-1	LEAD	1	8.8	0.32		
7439-95-4	MAGNESIUM	1	4400	110		
7439-96-5	MANGANESE	1	150	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	6.2	2.1		
7440-09-7	POTASSIUM	1	2100	110	JK	
7782-49-2	SELENIUM	1	0.53	0.53	U	
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.3	5.3	U	
7440-62-2	VANADIUM	1	13	1.1		
7440-66-6	ZINC	1	26	2.1		

Data Package ID: *IT1111162-1*

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Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-BKGD-S-31-111109
Lab ID: 1111162-13

Sample Matrix: SOIL
% Moisture: 10.0
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.028 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	12000	22		
7440-36-0	ANTIMONY	1	2.2	2.2	~~U~~ UJL	
7440-38-2	ARSENIC	1	5.9	1.1		
7440-39-3	BARIUM	1	100	11		
7440-41-7	BERYLLIUM	1	0.91	0.54		
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	12000	110		
7440-47-3	CHROMIUM	1	9.4	1.1		
7440-48-4	COBALT	1	6.6	1.1		
7440-50-8	COPPER	1	13	1.1		
7439-89-6	IRON	1	20000	11		
7439-92-1	LEAD	1	14	0.32		
7439-95-4	MAGNESIUM	1	4400	110		
7439-96-5	MANGANESE	1	220	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	11	2.2		
7440-09-7	POTASSIUM	1	3600	110	JK	
7782-49-2	SELENIUM	1	0.54	0.54	U	
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	20	1.1		
7440-66-6	ZINC	1	46	2.2		

Data Package ID: *IT1111162-1*

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Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: DY2-BKGD-W-31-111109
Lab ID: 1111162-14

Sample Matrix: SOIL
% Moisture: 10.0
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 1.02 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	12000	22		
7440-36-0	ANTIMONY	1	2.2	2.2	~~U~~ UJL	
7440-38-2	ARSENIC	1	6.5	1.1		
7440-39-3	BARIUM	1	120	11		
7440-41-7	BERYLLIUM	1	0.94	0.54		
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	23000	110		
7440-47-3	CHROMIUM	1	9.6	1.1		
7440-48-4	COBALT	1	7	1.1		
7440-50-8	COPPER	1	14	1.1		
7439-89-6	IRON	1	21000	11		
7439-92-1	LEAD	1	15	0.33		
7439-95-4	MAGNESIUM	1	5600	110		
7439-96-5	MANGANESE	1	270	1.1		
7439-98-7	MOLYBDENUM	1	1.1	1.1	U	
7440-02-0	NICKEL	1	11	2.2		
7440-09-7	POTASSIUM	1	3200	110	JK	
7782-49-2	SELENIUM	1	0.54	0.54	U	
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	20	1.1		
7440-66-6	ZINC	1	49	2.2		

Data Package ID: *IT1111162-1*

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Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: MD-01-31-111109
Lab ID: 1111162-15

Sample Matrix: SOIL
% Moisture: 6.5
Date Collected: 09-Nov-11
Date Extracted: 17-Nov-11
Date Analyzed: 18-Nov-11
Prep Method: SW3050 Rev B

Prep Batch: IP111117-2
QCBatchID: IP111117-2-1
Run ID: IT111118-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 111118A.

Sample Aliquot: 0.996 G
Final Volume: 100 ML
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5500	21		
7440-36-0	ANTIMONY	1	2.1	2.1	~~U~~ UJL	
7440-38-2	ARSENIC	1	4.7	1.1		
7440-39-3	BARIUM	1	55	11		
7440-41-7	BERYLLIUM	1	0.55	0.54		
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	10000	110		
7440-47-3	CHROMIUM	1	7.5	1.1		
7440-48-4	COBALT	1	3.6	1.1		
7440-50-8	COPPER	1	6.5	1.1		
7439-89-6	IRON	1	12000	11		
7439-92-1	LEAD	1	9.6	0.32		
7439-95-4	MAGNESIUM	1	3000	110		
7439-96-5	MANGANESE	1	150	1.1		
7439-98-7	MOLYBDENUM	1	1.7	1.1		
7440-02-0	NICKEL	1	59	2.1		
7440-09-7	POTASSIUM	1	1500	110	JK	
7782-49-2	SELENIUM	1	2.7	0.54		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-31-5	TIN	1	5.4	5.4	U	
7440-62-2	VANADIUM	1	28	1.1		
7440-66-6	ZINC	1	28	2.1		

Data Package ID: *IT1111162-1*

KS 1/26/12

Total Recoverable ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1111162
Client Name: Weston Solutions, Inc.
ClientProject ID: Dysart #2 Uranium Mine TO0035110902-111110-0001

Field ID: ST1-01-111108
Lab ID: 1111162-16

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 08-Nov-11
Date Extracted: 16-Nov-11
Date Analyzed: 17-Nov-11
Prep Method: SW3005 Rev A

Prep Batch: IP111116-4
QCBatchID: IP111116-4-5
Run ID: IT111117-2A1
Cleanup: NONE
Basis: As Received
File Name: 111117A.

Sample Aliquot: 50G
Final Volume: 50G
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	2.6	0.2		
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	45	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	3.1	0.1		
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	7	1		
7439-96-5	MANGANESE	1	0.05	0.01		
7439-98-7	MOLYBDENUM	1	0.01	0.01	U	
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	10	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	1.9	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-31-5	TIN	1	0.05	0.05	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

Data Package ID: *IT1111162-1*

Total URANIUM

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: Weston Solutions, Inc.
Client Project ID: Dysart #2 Uranium Mine TO0035110902-111110-0001
Work Order Number: 1111162 **Final Volume:** 100 ml
Reporting Basis: Dry Weight **Matrix:** SOIL
Prep Method: SW3050B **Result Units:** UG/KG

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
DY2-11-31-111109	1111162-1	11/09/2011	11/17/2011	11/21/2011	8.1	10	14000	11		1.008 g
DY2-17-31-111109	1111162-2	11/09/2011	11/17/2011	11/18/2011	9.3	10	29000	11		1.029 g
DY2-17-32-111109	1111162-3	11/09/2011	11/17/2011	11/18/2011	9.2	10	27000	11		1.044 g
DY2-32-31-111109	1111162-4	11/09/2011	11/17/2011	11/18/2011	5.8	10	170000	10		1.029 g
DY2-33-31-111109	1111162-5	11/09/2011	11/17/2011	11/18/2011	4.1	10	120000	10		1.026 g
DY2-41-31-111109	1111162-6	11/09/2011	11/17/2011	11/18/2011	4.0	10	360000	10		1.014 g
DY2-44-31-111109	1111162-7	11/09/2011	11/17/2011	11/18/2011	3.3	10	130000	10		1.03 g
DY2-48-31-111109	1111162-8	11/09/2011	11/17/2011	11/18/2011	5.1	10	10000	10		1.01 g
DY2-65-31-111109	1111162-9	11/09/2011	11/17/2011	11/18/2011	9.5	10	8800	11		1.016 g
DY2-77-31-111109	1111162-10	11/09/2011	11/17/2011	11/18/2011	9.9	10	14000	11		1.005 g
DY2-BKGD-E-31-111109	1111162-11	11/09/2011	11/17/2011	11/18/2011	5.9	10	1100	10		1.043 g
DY2-BKGD-N-31-111109	1111162-12	11/09/2011	11/17/2011	11/18/2011	6.5	10	2400	11		1.003 g
DY2-BKGD-S-31-111109	1111162-13	11/09/2011	11/17/2011	11/18/2011	10.0	10	1800	11		1.028 g
DY2-BKGD-W-31-111109	1111162-14	11/09/2011	11/17/2011	11/18/2011	10.0	10	1800	11		1.02 g
MD-01-31-111109	1111162-15	11/09/2011	11/17/2011	11/18/2011	6.5	10	66000	11		0.996 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *IM1111162-1*

1/26/12

Total Recoverable URANIUM

Method SW6020A

Sample Results

Lab Name: ALS Environmental – FC
Client Name: Weston Solutions, Inc.
Client Project ID: Dysart #2 Uranium Mine TO0035110902-111110-0001
Work Order Number: 1111162 **Final Volume:** 50 g
Reporting Basis: As Received **Matrix:** WATER
Prep Method: SW3005A **Result Units:** UG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
ST1-01-111108	1111162-16	11/08/2011	11/16/2011	11/18/2011	N/A	10	3.7	0.1		50 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *IM1111162-1*

SB 1/30/12

Total MERCURY

Method SW7471A

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: Weston Solutions, Inc.
Client Project ID: Dysart #2 Uranium Mine TO0035110902-111110-0001
Work Order Number: 1111162 **Final Volume:** 100 g ML
Reporting Basis: Dry Weight **Matrix:** SOIL
Prep Method: METHOD **Result Units:** MG/KG

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
DY2-11-31-111109	1111162-1	11/09/2011	11/18/2011	11/22/2011	8.1	1	0.036	0.036	U	0.609 g
DY2-17-31-111109	1111162-2	11/09/2011	11/18/2011	11/22/2011	9.3	1	0.037	0.037	U	0.604 g
DY2-17-32-111109	1111162-3	11/09/2011	11/18/2011	11/22/2011	9.2	1	0.037	0.037		0.6 g
DY2-32-31-111109	1111162-4	11/09/2011	11/18/2011	11/22/2011	5.8	1	0.071	0.035		0.613 g
DY2-33-31-111109	1111162-5	11/09/2011	11/18/2011	11/22/2011	4.1	1	0.075	0.034		0.609 g
DY2-41-31-111109	1111162-6	11/09/2011	11/18/2011	11/22/2011	4.0	1	0.099	0.034		0.614 g
DY2-44-31-111109	1111162-7	11/09/2011	11/18/2011	11/22/2011	3.3	1	0.059	0.034		0.604 g
DY2-48-31-111109	1111162-8	11/09/2011	11/18/2011	11/22/2011	5.1	1	0.035	0.035	U	0.602 g
DY2-65-31-111109	1111162-9	11/09/2011	11/18/2011	11/22/2011	9.5	1	0.037	0.037	U	0.603 g
DY2-77-31-111109	1111162-10	11/09/2011	11/18/2011	11/22/2011	9.9	1	0.036	0.036	U	0.613 g
DY2-BKGD-E-31-111109	1111162-11	11/09/2011	11/18/2011	11/22/2011	5.9	1	0.035	0.035	U	0.607 g
DY2-BKGD-N-31-111109	1111162-12	11/09/2011	11/18/2011	11/22/2011	6.5	1	0.035	0.035	U	0.614 g
DY2-BKGD-S-31-111109	1111162-13	11/09/2011	11/18/2011	11/22/2011	10.0	1	0.036	0.036	U	0.609 g
DY2-BKGD-W-31-111109	1111162-14	11/09/2011	11/18/2011	11/22/2011	10.0	1	0.036	0.036	U	0.614 g
MD-01-31-111109	1111162-15	11/09/2011	11/18/2011	11/22/2011	6.5	1	0.04	0.036		0.601 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *HG1111162-1*

1/20/12

Total MERCURY

Method SW7470A

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: Weston Solutions, Inc.
Client Project ID: Dysart #2 Uranium Mine TO0035110902-111110-0001
Work Order Number: 1111162 **Final Volume:** 20 g
Reporting Basis: As Received **Matrix:** WATER
Prep Method: METHOD **Result Units:** MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
ST1-01-111108	1111162-16	11/08/2011	11/15/2011	11/16/2011	N/A	1	0.0002	0.0002	U	20 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *HG1111162-1*

BS 1/26/12

APPENDIX F

REFERENCE DOCUMENTATION

NEW MEXICO
ENVIRONMENT DEPARTMENT

Ground Water Quality Bureau

Harold Runnels Building
1190 St. Francis Drive, P.O. Box 5469
Santa Fe, NM 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.nmenv.state.nm.us

BILL RICHARDSON
Governor
DIANE DENISH
Lieutenant Governor

RON CURRY
Secretary
SARAH COTTRELL
Deputy Secretary

Memorandum

To: **LaDonna Turner, Site Assessment Manager**
Technical and Enforcement Branch
U.S. Environmental Protection Agency, Region 6

From: **Dana Bahar, Manager, Superfund Oversight Section**
Ground Water Quality Bureau, New Mexico Environment Department

Date: **August 17, 2010**

Subject: **Pre-CERCLIS screening assessment of the Dysart #2 mine (Grants Mining District), McKinley County, New Mexico: Further action under CERCLA recommended**

Site name Dysart #2 **Alternative names** Section 11 mine, Section 11 SE shaft
Street address not applicable **City** not applicable **State** New Mexico
Zip code not applicable **County** McKinley
Latitude 35.454 **Longitude** -107.859 **TRS** 14N, 10W, s. 11 SE, 12 SW

Site physical description:
The Dysart #2 minesite ("Site") currently comprises an approximately 700-foot deep mineshaft with headframe and operational hoist (see P1). The mineshaft is reported in literature to have been 450 (Ref. 1), 490 or 550 feet (ft) deep (Ref. 2). Near to the mine shaft is a collapse crater, which marks the location of a ventilation shaft (see P2). Another ventilation shaft structure is visible at some distance from the location of the main shaft (see P3). In a 1980 inspection, two ventilation shafts existed, which were located 100 ft west and 800 ft north of the headframe respectively (Ref. 1). Additionally, an unused substation is near to the main shaft, which currently is outfitted with a generator that is used to run the hoist. A1980 inspection (Ref. 1) describes sprawling mine dumps comprising clusters of conical piles and elongate ridges that extended for over 500 ft; however no piles were noted in the most recent Site reconnaissance.

Martin Draw is located approximately 200 ft east of the Site, and Ambrosia Lake is located approximately 1200 ft east of the Site.

Site identification:
The site is one of numerous legacy uranium sites within the Grants Mining District.

Site summary:
Underground mining from the ore deposit accessed through the Dysart #2 mine occurred between 1959 and 1962, during which over 894,000 pounds of U_3O_8 was produced from the Westwater Canyon member of the Morrison Formation at an average grade of 0.18% (Ref. 3). The mine was dry during operation (Ref. 4). In 1980, scintillometer readings of 1500 cps (20 times background) were recorded along a prominent 200 ft long waste dump ridge at the intersection with the access road. Another compact dump area immediately northeast of the ridge, which was 3 to 5 ft high and 250 ft long, had a maximum scintillometer reading of 1100 cps; this site was then partially revegetated, and cattle were noted to be grazing in the area (Ref. 1).

The mineshaft and hoist currently is used to access the Section 12 mine, which is located approximately 0.4 miles to the east. In 1980, the shaft had been leased from Homestake-Sapin Partners for use as a ventilation and escape-way for this mine (Ref. 1). To date, the Site has not yet been fully reclaimed (Ref. 5). The minesite currently is involved with permitting through the Mining Act Reclamation Program (Ref. 6).

Targets:
The Site is located in close proximity to both the ephemeral Martin Draw and Ambrosia Lake, which had water at the time of the Site reconnaissance. Ground water is reportedly encountered at a depth of 550 ft (Ref. 4, p. 8). Well records from the New Mexico Office of the State Engineer that are located within a four-mile radius of the Site are shown in the table following (Ref. 7).

Site ownership and Potential Responsible Parties:
Southwest Resources Inc. currently owns the surface and mineral rights to the Site; Mr. Lotspeich is president of Southwest Resources, Inc. (Ref. 4, p. 5, 10). Ownership of the property was quitclaimed to Southwest Resources, Inc. either in 1973 by Hydro Nuclear Corporation (Ref. 8, p. 14) or in 1994 by Cobb Resources Corporation (Ref. 8, p. 13).

Rio de Oro operated the mine between 1959 and 1961; Mid-Continent Uranium Corporation also operated in 1959. Between 1961 and 1962, the Dysart #2 was operated by Homestake-Sapin Partners (Ref. 3, Ref. 2). Alternatively, Sabre-Pinon Corporation may have operated the mine between 1959 and 1963. As of 1980, the last registration with the State Mine Inspector's office was dated September 1961 (Ref. 1). United Nuclear-Homestake Partners owned the mine by 1980, but did not conduct active mining. Between 1980 and 1983, Cobb Resources Corporation (or Cobb Nuclear Corporation) used the shaft for ventilation of the Section 12 mine (Ref. 1, Ref. 2). Southwest Resources Inc. submitted a permit for exploration at the Site (Ref. 4), which was subsequently withdrawn by late 2007 (Ref. 8).

Distance from Site (miles)	OSE record number	Owner's last name	use	finish date	depth well (ft)	depth to water (ft)	casing diameter (in.)	yield (gpm)
1.0 – 2.0	B 00366	RIO ALGOM MINING LLC	MIN	12/31/1955	760	0	4.5	10.0
	B 00372	SABRE-PINON CORPORATION	MIN	09/12/1956	796	0	8.63	75.0
	B 00373	RIO ALGOM MINING LLC	MIN	12/31/1956	1003	0	13.38	90.0
	B 00994	RIO ALGOM MINING LLC	MIN	01/02/1958	827	0		
2.0 – 3.0	B 00143	ANDREWS	DOM	07/18/1960	90	60		
	B 00362	RIO ALGOM MINING LLC	MIN	11/30/1956	3093	0	10.75	475.0
	B 00363	RIO ALGOM MINING LLC	MIN	04/30/1956	745	0	4.5	20.0
	B 00371	SABRE-PINON CORPORATION	MIN	08/25/1956	752	0	8.63	100.0
	B 00522	UNITED NUCLEAR-HOMESTAKE PTNRS	MON	02/07/1978	70	0		
	B 00522	UNITED NUCLEAR-HOMESTAKE PTNRS	MON	02/07/1978	70	0	5.0	0.0
	B 00994	RIO ALGOM MINING LLC	MIN	09/18/1958	857	0		
3.0 – 4.0	B 01087	ALBERS BROTHERS	STK	05/25/1985	651	566	5.0	6.0
	B 01246	ELKINS	STK	04/29/1992	1200	700	6.63	100.0

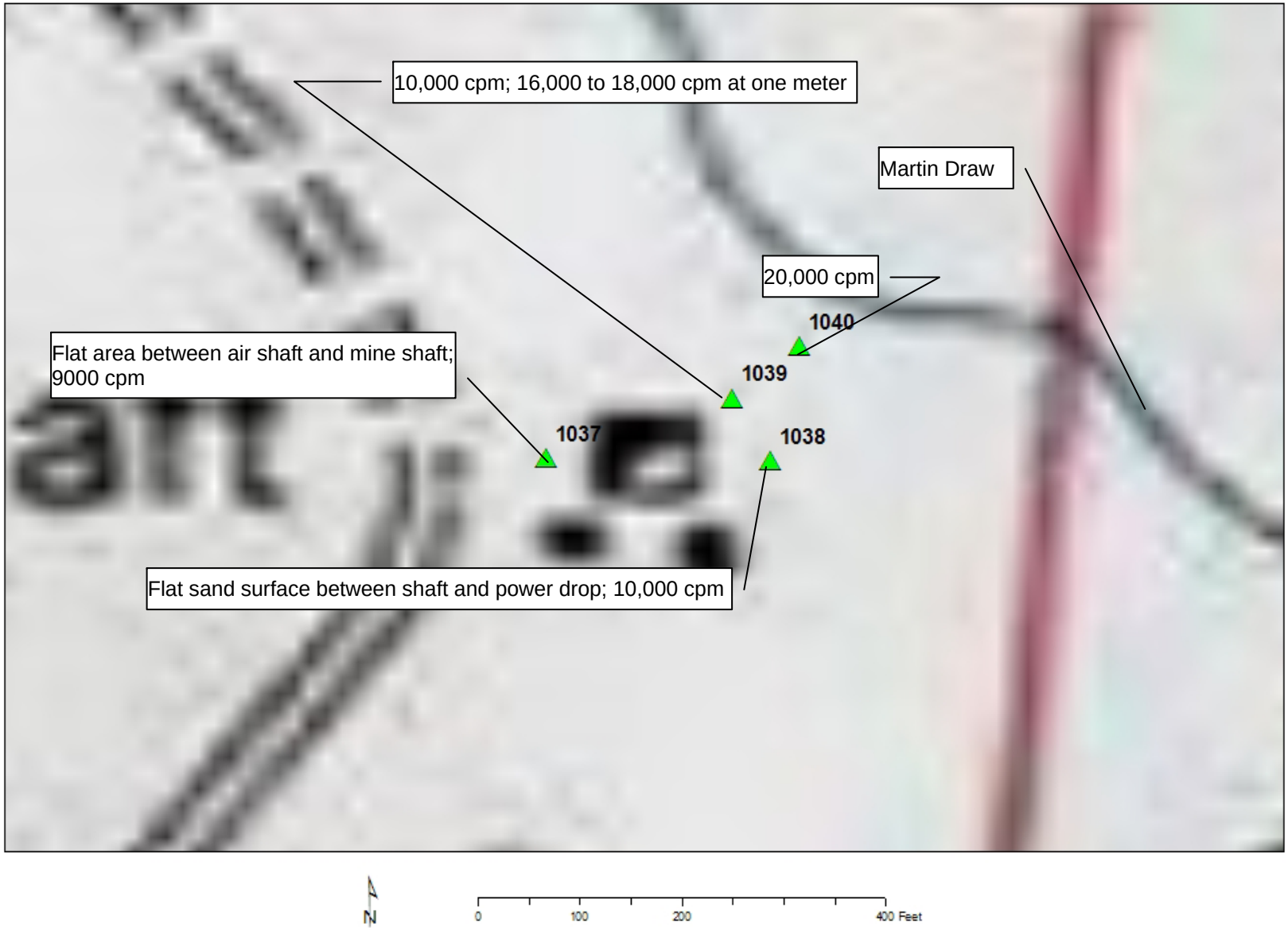
DOM -- 72-12-1 DOMESTIC ONE HOUSEHOLD
MIN -- MINING OR MILLING OR OIL
MON -- MONITORING WELL
STK -- 72-12-1 LIVESTOCK WATERING

File review:
Files that were reviewed for this assessment are listed below.

Site reconnaissance:
Personnel from NMED and New Mexico Energy, Minerals, and Natural Resources visited the Site on July 29, 2010 in the company of Mr. George Lotspeich (president of Southwest Resources, Inc.) and personnel from Neutron Energy, Inc. All gamma readings shown on the figure accompanying this report were made with a Ludlum 14-C analog scintillometer (serial number 194209) with an uncollimated Ludlum 44-2 gamma detector (serial number PR241278), for which readings are recorded in counts per minute ("cpm"). Contact readings from this instrument ranged from 9000 to 20,000 cpm.

Recommendation:
Site reconnaissance and characterization under CERCLA is recommended to determine the existence and extent of elevated radiological readings to assess threats to human health and the environment; background gamma radiation at other sites that have been assessed in the area generally ranges between 2000 and 5000 cpm. Additionally, the Site reconnaissance should assess physical features, such as debris, other unmarked shafts, or exploration drillholes that may pose safety hazards to human trespassers or livestock. Investigation of sediments in Martin Draw in the vicinity of erosional features originating or crossing this Site also is recommended to assess the potential occurrence of impacts from dispersal of waste materials that have been left on-Site.

Currently, the existence of regional impacts from legacy uranium sites to the ground water system has not been determined. Ground water impacts from "dry" mines such as this Site initially would impact the alluvial ground water system through leaching of on-site waste materials and ore stockpiles. Such impacts, if they exist, predominantly may be localized to alluvial ground water in the vicinity of the Site. Alternatively ground water impacts may be more widespread, contributing to the overall potential degradation of the alluvial ground water regionally, as well as potentially to impacts to ground water in underlying bedrock aquifers. A generalized investigation of "dry" former uranium mines within the Grants Mining District is recommended as part of the characterization of ground water quality in the Grants Mining District.



Observation from 7/29/2010 reconnaissance of Dysart #2 minesite
(all gamma readings represent surface contact unless otherwise noted)

P1: Operational hoist over mineshaft

P2: Collapse crater marking location of ventilation shaft

P3: A ventilation shaft distant from main shaft

1. Anderson, Orin J., undated (reporting investigations between August 1979 and May 1980) "Abandoned or inactive uranium mines in New Mexico." New Mexico Bureau of Mines and Mineral Resources Open-file report 148.
2. New Mexico Energy, Minerals, and Natural Resources Department, undated. "2007-07-20 to NMED-GWQ-Sfund.xls." Spreadsheet excerpt.
3. McLemore, Virginia T. and William L. Chenoweth, revised December 1991. "Uranium mines and deposits in the Grants district, Cibola and McKinley counties, New Mexico." New Mexico Bureau of Mines and Mineral Resources Open-file report 353.
4. New Mexico Energy, Mineral and Natural Resources Department, date illegible. "Subpart 3: Minimal impact exploration permit application." Submitted for Section 11 mine.
5. Ennis, David (New Mexico Energy, Minerals, and Natural Resources Department), June 16, 2010. "RE: Request for information on the Dysart #2 mine." Email to David L. Mayerson, NMED.
6. Pfeil, John (New Mexico Energy, Minerals, and Natural Resources Department), July 20, 2010. "RE: Request for update." Email to David L. Mayerson (New Mexico Environment Department).
7. New Mexico Office of the State Engineer. "May_06_wells." Shapefile.
8. New Mexico Energy, Minerals, and Natural Resources Department, November 20, 2007. "RE: Exploration application, Section 11 Mine MK021EM." Letter to George Lotspeich, Southwest Resources, Inc..

APPENDIX G

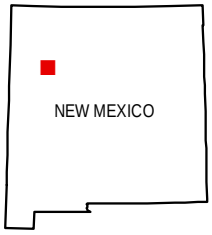
TDD NO. TO-0035-11-09-01 AND AMENDMENTS A&B

0 2.5 5

SCALE IN MILES

Legend

DYSART #2 URANIUM MINE



N

TDD NO: TO-0035-11-09-01
CERCLIS NO.: NMN000607186

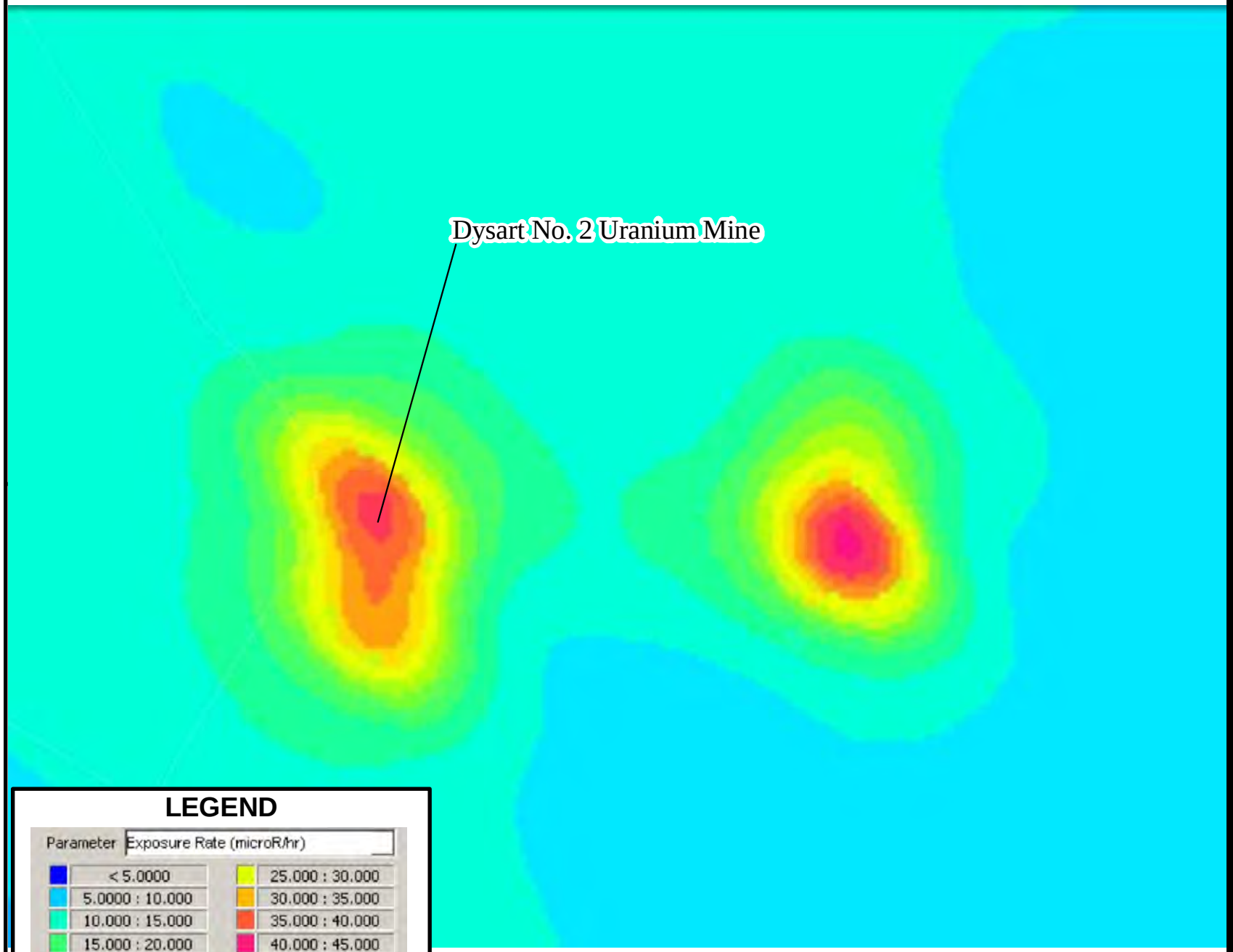
SOURCE: ESRI STREETMAP USA

US EPA REGION 6
START- 3

FIGURE 1-1
SITE LOCATION MAP
DYSART #2 URANIUM MINE
AMBROSIA LAKE AREA
MCKINLEY COUNTY, NEW MEXICO

DATE	PROJECT NO	SCALE
OCT 2011	20406.012.035.0672.01	AS SHOWN

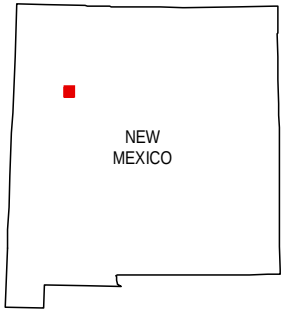
File: L:\20406_START3_R6\DYSART_2_MINE\GIS\FIGURE_1-1_SITE_LOCATION_MAP-DYSART.mxd 5/7/2012 9:09:18 AM bondp



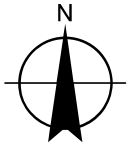
LEGEND

Parameter: Exposure Rate (microR/hr)

< 5.0000	25.000 : 30.000
5.0000 : 10.000	30.000 : 35.000
10.000 : 15.000	35.000 : 40.000
15.000 : 20.000	40.000 : 45.000
20.000 : 25.000	> 45.000



*Units are in microroentgen per hour (uR/hr)

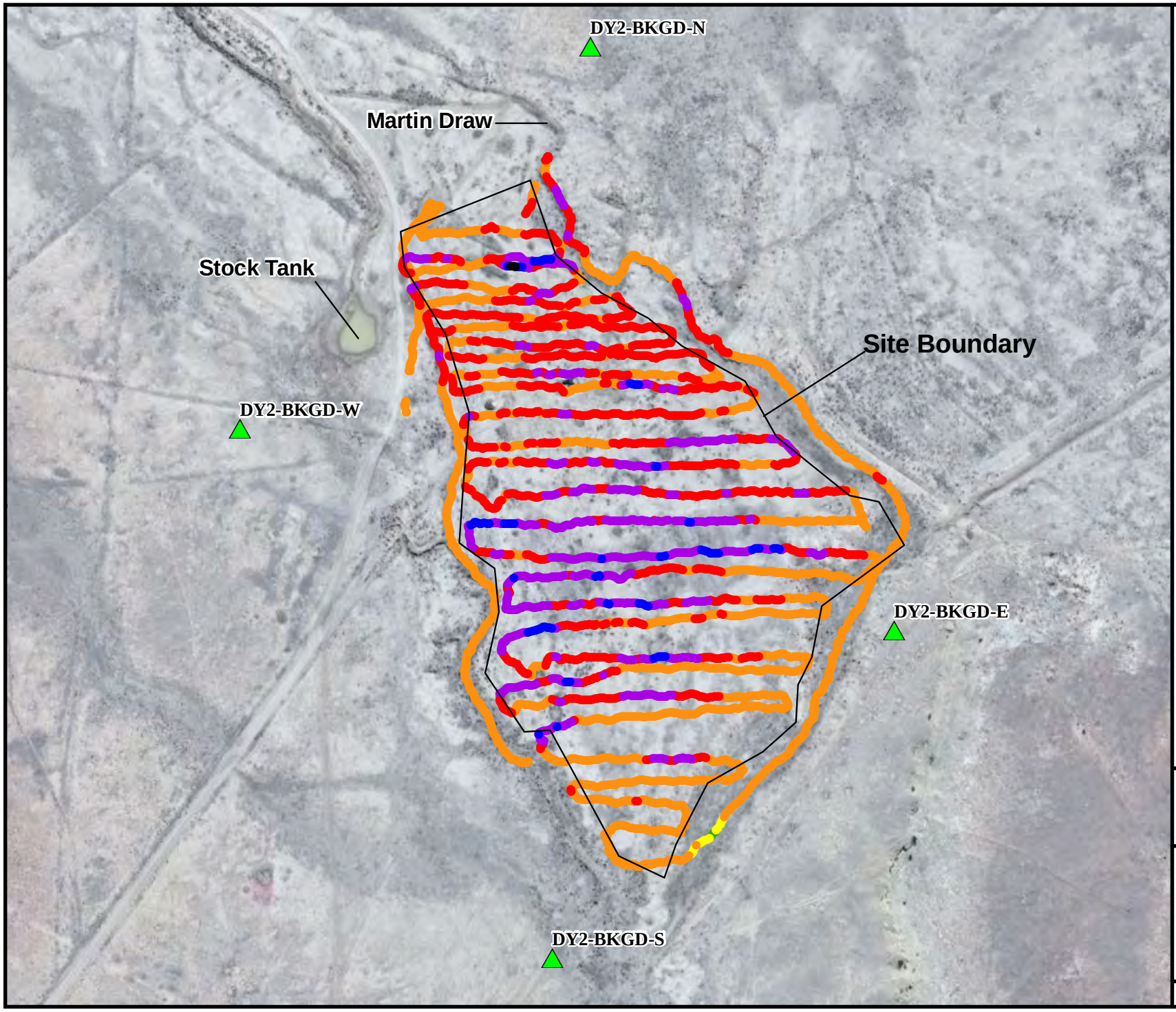


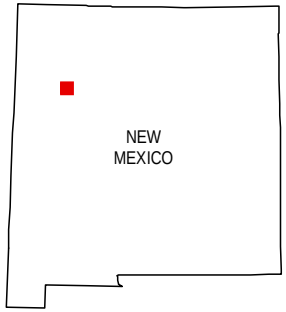
TDD NO: TO-0035-11-09-01
CERCLIS: NMN000607186
SOURCE: GOOGLE EARTH

US EPA REGION 6
START- 3

FIGURE 1-2
DYSART No. 2 URANIUM MINE
EXPOSURE RATE MAP
EPA ASPECT OVERFLIGHT
DATE: 08/23/2011
AMBROSIA LAKE, McKINLEY COUNTY
NEW MEXICO

DATE	PROJECT NO	SCALE
MAY 2012	20406.012.035.0672.01	N/A





Legend

- Mine Boundary
- Background Locations

Gamma Scan Results

- 0 - 18120
- 18121 - 19999
- 20000 - 49999
- 50000 - 99999
- 100000 - 199999
- 200000 - 399999
- 400000 - 442508

N

0 200 400

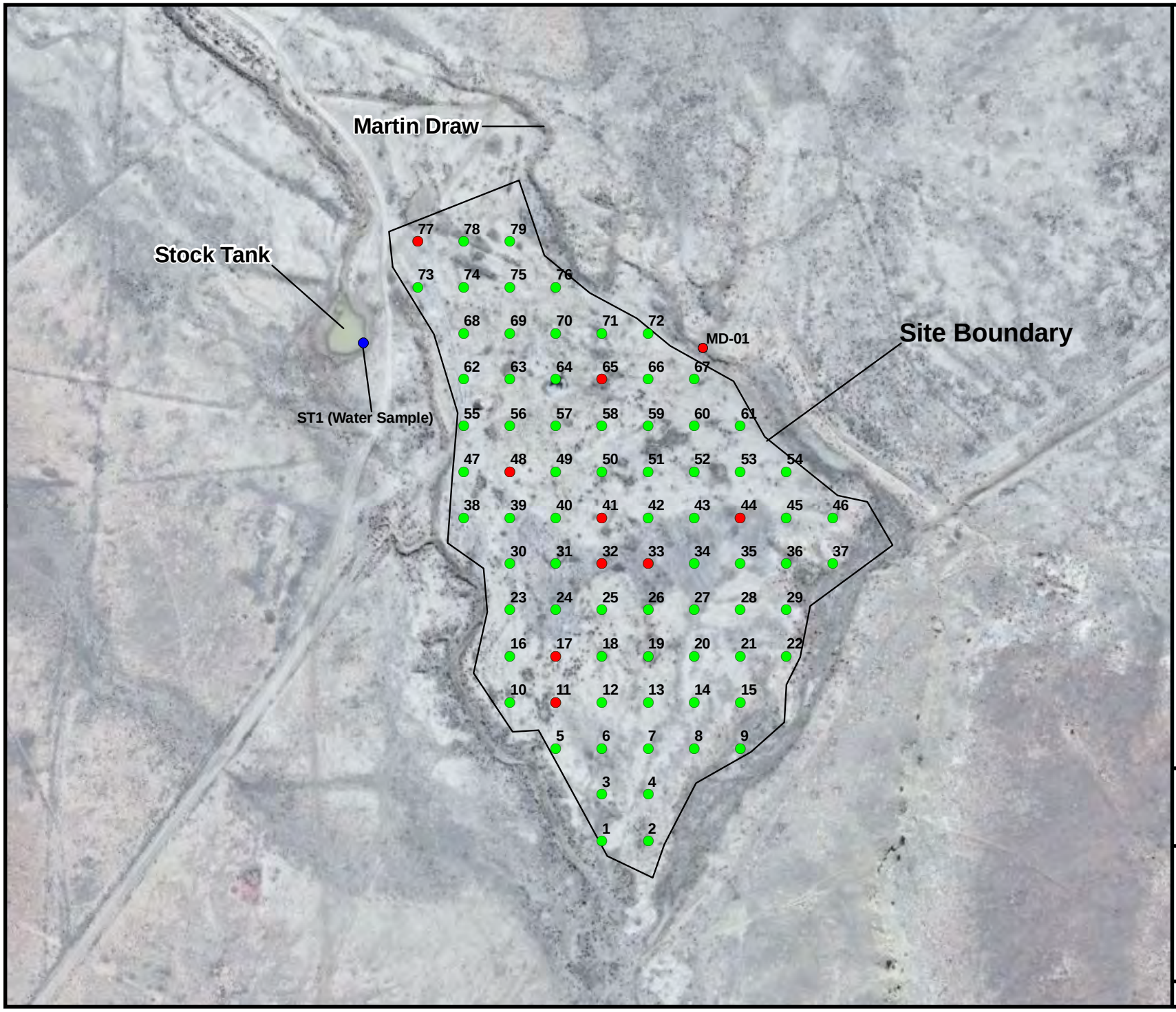
SCALE IN FEET

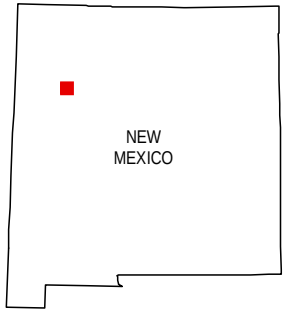
TDD NO: TO-0035-11-09-01
CERCLIS: NMN000607186
SOURCE: BING AERIAL MAPS

US EPA REGION 6
START- 3

FIGURE 3-1
ASSESSMENT AREA MAP
DYSART No. 2 URANIUM MINE
AMBROSIA LAKE AREA
MCKINLEY COUNTY, NEW MEXICO

DATE	PROJECT NO	SCALE
MAY 2012	20406.012.035.0672.01	AS SHOWN





LEGEND

STATIONARY READING LOCATIONS

- Sampled Locations (Soil)
- Remaining Locations
- Mine Boundary

N

0 200 400

SCALE IN FEET

TDD NO: TO-0035-11-09-01
CERCLIS: NMN000607186
SOURCE: BING AERIAL MAPS

US EPA REGION 6
START- 3

FIGURE 3-2
STATIONARY READINGS MAP
DYSART No. 2 URANIUM MINE
AMBROSIA LAKE AREA
MCKINLEY COUNTY, NEW MEXICO

DATE	PROJECT NO	SCALE
MAY 2012	20406.012.035.0672.01	AS SHOWN

File: \\fsnm01\data\Temp\DYSART #2\Figure 3-2 Stationary Readings Map.mxd, 09-May-12 09:41, STARTGIS

Table 3-1
Site Gamma Radiation Distribution
Dysart No. 2 Uranium Mine
Grants Legacy Mine Sites
Grants, McKinley County, New Mexico

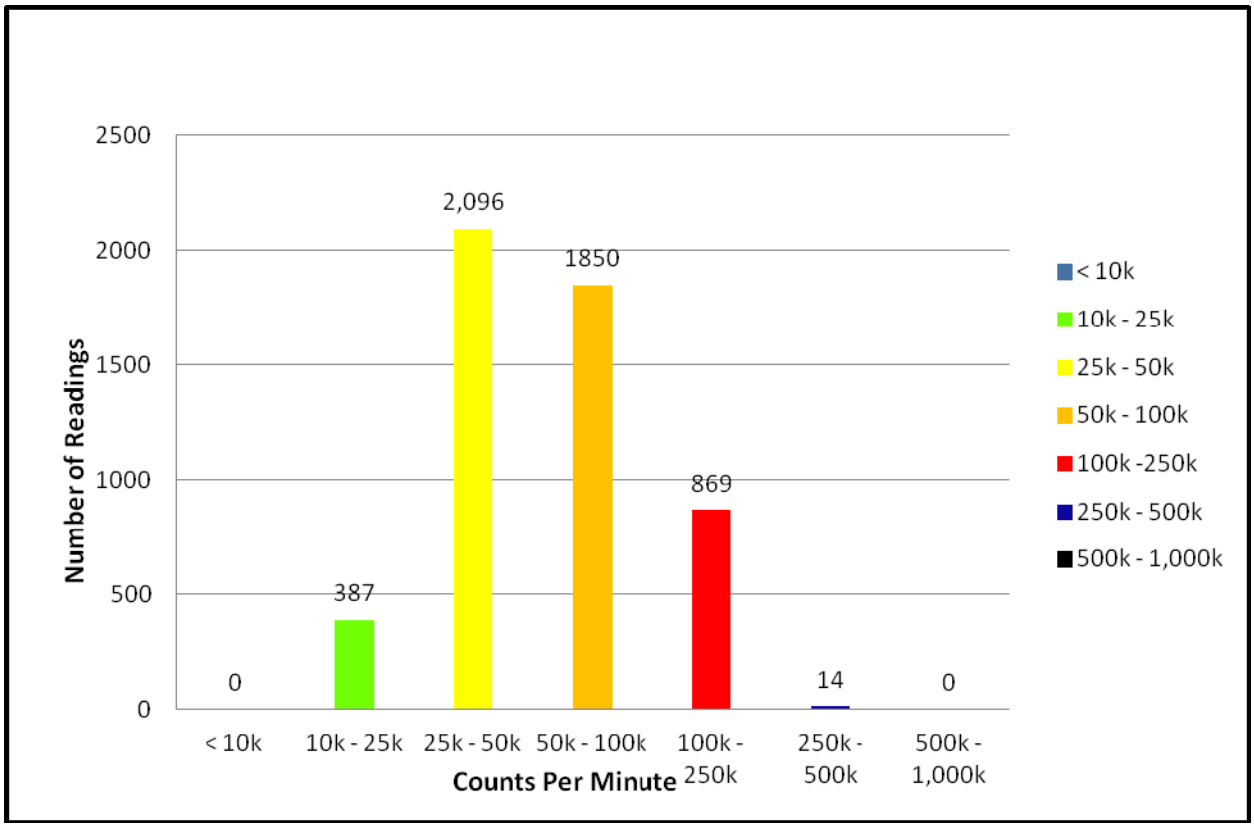


Table 3-2
Stationary Gamma Measurements Summary
Dysart No. 2 Uranium Mine
Grants Legacy Mine Sites
Grants, McKinley County, New Mexico

Stationary Location ID	Gamma Activity (Counts Per Minute)	Remark
DY2-01-21-111108	20,380	
DY2-02-21-111108	21,324	
DY2-03-21-111108	32,925	
DY2-04-21-111108	25,377	
DY2-05-21-111108	**50,686**	>2X Background
DY2-06-21-111108	**138,004**	>2X Background
DY2-07-21-111108	32,322	
DY2-08-21-111108	29,974	
DY2-09-21-111108	34,988	
DY2-10-21-111108	**63,509**	>2X Background
DY2-11-21-111108	**143,634**	Sample Collected; >2X Background
DY2-12-21-111108	**64,485**	>2X Background
DY2-13-21-111108	**37,322**	>2X Background
DY2-14-21-111108	31,775	
DY2-15-21-111108	24,942	
DY2-16-21-111108	**40,553**	>2X Background
DY2-17-21-111108	**198,698**	Sample Collected; >2X Background
DY2-18-21-111108	**65,053**	>2X Background
DY2-19-21-111108	**43,690**	>2X Background
DY2-20-21-111108	**39,497**	>2X Background
DY2-21-21-111108	32,693	
DY2-22-21-111108	24,024	
DY2-23-21-111108	**64,240**	>2X Background
DY2-24-21-111108	**129,398**	>2X Background
DY2-25-21-111108	**81,568**	>2X Background
DY2-26-21-111108	**44,328**	>2X Background
DY2-27-21-111108	**66,056**	>2X Background
DY2-28-21-111108	33,158	
DY2-29-21-111108	**42,156**	>2X Background
DY2-30-21-111108	**106,290**	>2X Background
DY2-31-21-111108	**116,885**	>2X Background
DY2-32-21-111108	**190,346**	Sample Collected; >2X Background
DY2-33-21-111108	**149,740**	Sample Collected; >2X Background
DY2-34-21-111108	**83,940**	>2X Background
DY2-35-21-111108	**43,552**	>2X Background
DY2-36-21-111108	**45,317**	>2X Background
DY2-37-21-111108	30,261	
DY2-38-21-111108	**88,803**	>2X Background
DY2-39-21-111108	**128,221**	>2X Background
DY2-40-21-111108	**156,821**	>2X Background

Table 3-2
Stationary Gamma Measurements Summary
Dysart No. 2 Uranium Mine
Grants Legacy Mine Sites
Grants, McKinley County, New Mexico
(Continued)

Stationary Location ID	Gamma Activity (Counts Per Minute)	Remark
DY2-41-21-111108	**145,036**	Sample Collected; >2X Background
DY2-42-21-111108	**79,835**	>2X Background
DY2-43-21-111108	**114,881**	>2X Background
DY2-44-21-111108	**139,861**	Sample Collected; >2X Background
DY2-45-21-111108	**113,661**	>2X Background
DY2-46-21-111108	24,285	
DY2-47-21-111108	**42,935**	>2X Background
DY2-48-21-111108	**123,889**	Sample Collected; >2X Background
DY2-49-21-111108	**56,278**	>2X Background
DY2-50-21-111108	**107,295**	>2X Background
DY2-51-21-111108	**90,025**	>2X Background
DY2-52-21-111108	**94,686**	>2X Background
DY2-53-21-111108	**76,770**	>2X Background
DY2-54-21-111108	**55,969**	>2X Background
DY2-55-21-111108	**38,383**	>2X Background
DY2-56-21-111108	**49,922**	>2X Background
DY2-57-21-111108	**55,260**	>2X Background
DY2-58-21-111108	**57,940**	>2X Background
DY2-59-21-111108	**78,554**	>2X Background
DY2-60-21-111108	**60,863**	>2X Background
DY2-61-21-111108	**52,190**	>2X Background
DY2-62-21-111108	**53,159**	>2X Background
DY2-63-21-111108	**37,523**	>2X Background
DY2-64-21-111108	**101,946**	>2X Background
DY2-65-21-111108	**104,090**	Sample Collected; >2X Background
DY2-66-21-111108	**51,895**	>2X Background
DY2-67-21-111108	**39,134**	>2X Background
DY2-68-21-111108	**53,545**	>2X Background
DY2-69-21-111108	**45,625**	>2X Background
DY2-70-21-111108	**89,078**	>2X Background
DY2-71-21-111108	**69,613**	>2X Background
DY2-72-21-111108	**52,242**	>2X Background
DY2-73-21-111108	**40,562**	>2X Background
DY2-74-21-111108	**54,075**	>2X Background
DY2-75-21-111108	**49,208**	>2X Background
DY2-76-21-111108	**45,658**	>2X Background
DY2-77-21-111108	**70,936**	Sample Collected; >2X Background
DY2-78-21-111108	**53,042**	>2X Background
DY2-79-21-111108	**45,603**	>2X Background

Table 3-2
Stationary Gamma Measurements Summary
Dysart No. 2 Uranium Mine
Grants Legacy Mine Sites
Grants, McKinley County, New Mexico
(Continued)

Stationary Location ID	Gamma Activity (Counts Per Minute)	Remark
MD-01-21-111108	**104,285**	Martin Draw; Sample Collected; >2X Background
ST1-01-21-111109	18,500	Stock Pond; Water Sample Collected
DY2-BKGD-E-21-111108	17,123	Background Sample Collected
DY2-BKGD-N-21-111108	18,478	Background Sample Collected
DY2-BKGD-S-21-111108	17,866	Background Sample Collected
DY2-BKGD-W-21-111108	19,017	Background Sample Collected

Table 3-3
Laboratory Results for Radioisotopes
Dysart No. 2 Uranium Mine
Grants Legacy Mine Sites
Grants, McKinley County, New Mexico

Location	Description	Ac^{228}	Bi^{214}	Pb^{212}	Pb^{214}	K^{40}	Pa^{234m}	Ra^{226}	Tl^{208}	Th^{234}	Gross Alpha	Gross Beta
Soil		**pCi/g**	**pCi/g**	**pCi/g**	**pCi/g**	**pCi/g**	**pCi/g**	**pCi/g**	**pCi/g**	**pCi/g**	**pCi/l**	**pCi/l**
DY2-BKGD-E-31-111109	Background	1.03	1.98	1.17	1.94	21.1	0.132	1.98	0.821	0.283		
DY2-BKGD-N-31-111109	Background	1.37	3.32	1.24	3.62	21.8	2.52	3.32	1.09	4.6		
DY2-BKGD-S-31-111109	Background	1.97	1.97	2.07	2.4	26.1	0.644	1.97	1.85	2.32		
DY2-BKGD-W-31-111109	Background	2.4	2.37	2.37	2.15	31.6	3.81	2.37	1.87	2.37		
Background Average	Average Background Concentration	1.69	2.41	1.71	2.53	25.15	1.78	2.41	1.41	2.39		
DY2-11-31-111109	On-Site	2.18	6.45	0.778	6.61	23.6	**8.76**	6.45	1.58	**9.73**		
DY2-17-31-111109	On-Site	1.21	**30.9**	0.961	6.31	30.4	**23**	**30.9**	1.08	**19.9**		
DY2-17-32-111109	On-Site	1.75	**33.4**	0.785	**33.3**	26.4	**17.2**	**33.4**	1.15	**17.8**		
DY2-32-31-111109	On-Site	2.73	**149**	**12.1**	**34.3**	30.2	**70**	**149**	0.503	**86.7**		
DY2-33-31-111109	On-Site	0.671	**111**	0.885	**154**	29.7	**69.5**	**111**	0.562	**59.2**		
DY2-41-31-111109	On-Site	1.26	**127**	2.48	**115**	27.1	**161**	**127**	0.702	**137**		
DY2-44-31-111109	On-Site	0.309	**139**	**10.8**	**130**	27.2	**46.2**	**139**	0.752	**56.4**		
DY2-48-31-111109	On-Site	1.16	5.93	1.41	**137**	23.6	**11.1**	5.93	1.16	6.57		
DY2-65-31-111109	On-Site	1.77	**10.2**	1.73	5.97	28.5	**25.9**	**10.2**	1.48	6.43		
DY2-77-31-111109	On-Site	1.22	**17**	0.8	**10.6**	29.1	**17.8**	**17**	0.804	6.38		
MD-01-31-111109	Martin Draw	1.4	**67.2**	0.533	**71**	28.8	**37.7**	**67.2**	1.09	**43.8**		
Location	**Description**	Ac^{228}	Bi^{214}	Pb^{212}	Pb^{214}	K^{40}	Pa^{234m}	Ra^{226}	Tl^{208}	Th^{234}	**Gross Alpha**	**Gross Beta**
Water		**pCi/l**	**pCi/l**	**pCi/l**	**pCi/l**	**pCi/l**	**pCi/l**	**pCi/l**	**pCi/l**	**pCi/l**	**pCi/l**	**pCi/l**
ST1-01-111109	Stock Tank Water Sample	0.033	11.06	1.647	0.63	38.75	40.95	11.06	-3.988	-24.23	2.82	16.17

pCi/g: picoCuries per gram
pCi/l: picoCuries per liter
bold and highlighted values are greater than or equal to 3x the background average concentration
negative results are achieved because the difference between the sample and lab background standard derive a negative number. This is due to lab counting error, ultimately indicating a "non detect" result.

Table 3-4
Laboratory Results for Metals
Dysart No. 2 Uranium Mine
Grants Legacy Mine Sites
Grants, McKinley County, New Mexico

Location	Designation	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	Ag	Na	Tl	Sn	U	V	Zn
Soil		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
DY2-BKGD-E-31-111109	Background	4200	2 U	3.2	48	0.51 U	0.51	15000	3.6	3.4	4.4	9600	6.9	3900	170	0.035 U	1	4.9	1300	0.51 U	1 U	100 U	1 U	5.1 U	1.1	9.5	21
DY2-BKGD-N-31-111109	Background	6500	2.1 U	3.8	66	0.53 U	0.53	13000	5.4	3.8	6.6	12000	8.8	4400	150	0.035 U	1.1	6.2	2100	0.53 U	1.1 U	110 U	1.1 U	5.3 U	2.4	13	26
DY2-BKGD-S-31-111109	Background	12000	2.2 U	5.9	100	0.91	0.54	12000	9.4	6.6	13	20000	14	4400	220	0.036 U	1.1	11	3600	0.54 U	1.1 U	110 U	1.1 U	5.4 U	1.80	20	46
DY2-BKGD-W-31-111109	Background	12000	2.2 U	6.5	120	0.94	0.54	23000	9.6	7	14	21000	15	5600	270	0.036 U	1.1	11	3200	0.54 U	1.1 U	110 U	1.1 U	5.4 U	1.80	20	49
Background Average	Average Background Concentration	8675	2.125	4.85	83.5	0.723	0.53	15750	7	5.2	9.5	15650	11.175	4575	202.5	0.0355	1.075	8.275	2550	0.53	1.075	107.5	1.075	5.3	1.775	15.625	35.5
DY2-11-31-111109	On-Site	8600	2.2 U	5.9	110	0.76	0.54 U	19000	7.4	6.3	11	19000	12	5000	210	0.036 U	1.1 U	10	1800	0.89	1.1 U	150	1.1 U	5.4 U	0.014	17	41
DY2-17-31-111109	On-Site	5200	2.1 U	4.2	70	0.54 U	0.54 U	13000	4.5	3.6	6.2	12000	8.6	4100	180	0.037 U	1.1 U	5.9	1600	3.1	1.1 U	110 U	1.1 U	5.4 U	**29**	21	27
DY2-17-32-111109	On-Site	5400	2.1 U	4	69	0.54	0.53 U	13000	4.6	3.8	6.4	12000	8.8	4300	170	0.037	1.1 U	6	1700	2.1	1 U	110 U	1.1 U	5.3 U	**27**	21	28
DY2-32-31-111109	On-Site	4100	2.1 U	2.3	18	0.52 U	0.52 U	5900	1.7	1.6	3.2	8300	11	1600	140	0.071	1.9	2.1 U	700	10	1 U	100 U	1 U	5.2 U	**170**	45	16
DY2-33-31-111109	On-Site	3200	2 U	2.5	16	0.51 U	0.51 U	8100	1.7	1.5	2.6	7300	9.2	1400	150	0.075	1 U	2 U	690	20	1 U	100 U	1 U	5.1 U	**120**	41	14
DY2-41-31-111109	On-Site	4700	2.1 U	5.5	24	0.51 U	0.51 U	10000	3.6	2.4	3.4	9900	14	1800	190	0.099	**7.8**	3.5	830	21	1 U	100 U	1 U	5.1 U	**360**	**53**	20
DY2-44-31-111109	On-Site	3800	2 U	2.9	15	0.5 U	0.5 U	4500	1.7	1.3	2.1	8700	11	1600	110	0.059	1 U	2 U	690	13	1 U	100 U	1 U	5 U	**130**	**67**	16
DY2-48-31-111109	On-Site	3800	2.1 U	4	62	0.52 U	0.52 U	11000	3.6	4.1	5.5	12000	6.9	3700	150	0.035 U	1 U	5.6	77	0.52 U	1 U	100 U	1 U	5.2 U	**10**	11	24
DY2-65-31-111109	On-Site	6100	2.2 U	4.3	85	0.6	0.54 U	13000	5.4	4.5	8.2	14000	9.4	4700	170	0.037 U	1.1 U	7.2	2400	0.68	1.1 U	110 U	1.1 U	5.4 U	**8.8**	15	33
DY2-77-31-111109	On-Site	3900	2.2 U	2.4	42	0.55	0.55 U	8500	3.2	2.4	4.1	9100	6.4	2700	150	0.036 U	1.1 U	3.5	990	2.1	1.1 U	110 U	1.1 U	5.5 U	**14**	23	20
MD-01-31-111109	Martin Draw Soil Sample	5500	2.1 U	4.7	55	0.55	0.54 U	10000	7.5	3.6	6.5	12000	9.6	3000	150	0.04	1.7	**59**	1500	2.7	1.1 U	110 U	1.1 U	5.4 U	**66**	28	28
Location	**Designation**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**K**	**Se**	**Ag**	**Na**	**Tl**	**Sn**	**U**	**V**	**Zn**
Water		**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**
ST1-01-111108	Stock Tank Water Sample	2.6	0.02 U	0.01 U	0.1 U	0.005 U	0.005 U	45	0.01 U	0.01 U	0.01 U	3.1	0.003 U	7	0.05	0.0002 U	0.01 U	0.02 U	10	0.005 U	0.01 U	1.9	0.01 U	0.05 U	0.0037	0.01 U	0.02 U

mg/kg: milligrams per kilogram
mg/l: milligrams per liter
U - Sample was analyzed for but not detected
bold and highlighted values are greater than or equal to 3x the background average concentration